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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  
AS DRILLED

## WELL LOCATION AND ACREAGE DEDICATION PLAT

|  |  |  |
|--|--|--|
| <sup>1</sup> API Number<br><b>30-025-45569</b> | <sup>2</sup> Pool Code<br><b>55610</b>                             | <sup>3</sup> Pool Name<br><b>Scharb; Bone Spring</b> |
| <sup>4</sup> Property Code<br><b>328886</b>    | <sup>5</sup> Property Name<br><b>HEREFORD 29/20 BIPA STATE COM</b> |  |
| <sup>7</sup> GRID NO.<br><b>14744</b>          | <sup>8</sup> Operator Name<br><b>MEWBOURNE OIL COMPANY</b>         | <sup>6</sup> Well Number<br><b>1H</b>                |
|  |  | <sup>9</sup> Elevation<br><b>3744'</b>               |

<sup>10</sup> Surface Location

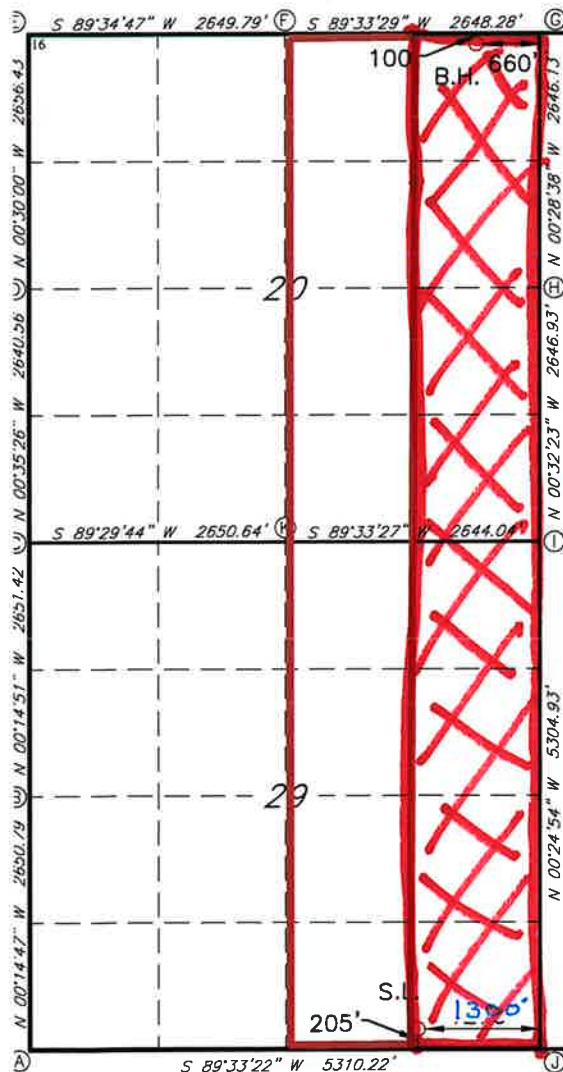
| UL or lot no. | Section   | Township   | Range      | Lot Idn | Feet from the | North/South line | Feet From the | East/West line | County     |
|---------------|-----------|------------|------------|---------|---------------|------------------|---------------|----------------|------------|
| <b>P</b>      | <b>29</b> | <b>19S</b> | <b>35E</b> |         | <b>205</b>    | <b>SOUTH</b>     | <b>1300</b>   | <b>EAST</b>    | <b>LEA</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>A</b>      | <b>20</b> | <b>19S</b> | <b>35E</b> |         | <b>89</b>     | <b>NORTH</b>     | <b>678</b>    | <b>EAST</b>    | <b>LEA</b> |

|   |                               |                                  |                         |
|---|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br><b>320</b> | <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.



**GEODETIC DATA**  
NAD 83 GRID - NM EAST  
**SURFACE LOCATION**  
N 592072.0 - E 805600.5  
LAT: 32.6247222° N  
LONG: 103.4749819° W  
**BOTTOM HOLE**  
N 602367.4 - E 806127.3  
LAT: 32.6530064° N  
LONG: 103.4730001° W  
**CORNER DATA**  
NAD 83 GRID - NM EAST  
A: FOUND 2" STEEL PIPE  
N 591835.8 - E 801562.7  
B: FOUND 1/2" REBAR  
N 594486.0 - E 801551.3  
C: FOUND 5/8" REBAR  
N 597136.9 - E 801539.8  
D: FOUND 8"x4"x4" LIMESTONE ROCK  
N 599776.8 - E 801512.6  
E: FOUND LIMESTONE ROCK  
N 602432.6 - E 801489.4  
F: FOUND 1/2" REBAR  
N 602452.0 - E 804138.6  
G: FOUND 5/8" REBAR  
N 602472.4 - E 806786.3  
H: FOUND 6"x4"x4" LIMESTONE ROCK  
N 599826.9 - E 806808.3  
I: FOUND 1/2" REBAR  
N 597180.6 - E 806833.3  
J: FOUND 1" REBAR  
N 591876.9 - E 806871.7  
K: FOUND 8"x2"x4" LIMESTONE ROCK  
N 597160.2 - E 804189.8

<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.

Signature: Jackie Lathan Date: 8/7/20

Printed Name: Jackie Lathan

E-mail Address: jlathan@mewbourne.com

<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.

**1-17-19**

Date of Survey

Signature and Seal of Professional Surveyor



**19680**

Certificate Number

1/22/19 NAME, S.L. & B.H CHANGE

Intent ☐ As Drilled ☒

Rec'd 8/25/2020 - NMOCD

|   |   |                    |
|---|---|--------------------|
| API #<br>30-025-45569                   |   |                    |
| Operator Name:<br>Mewbourne Oil Company | Property Name:<br>Hereford 29/20 B1PA State Com | Well Number<br>#1H |

Kick Off Point (KOP)

|                        |               |                 |              |     |                           |               |             |               |               |
|------------------------|---------------|-----------------|--------------|-----|---------------------------|---------------|-------------|---------------|---------------|
| UL<br>P                | Section<br>29 | Township<br>19S | Range<br>35E | Lot | Feet<br>14                | From N/S<br>S | Feet<br>683 | From E/W<br>E | County<br>Lea |
| Latitude<br>32.6241992 |               |                 |              |     | Longitude<br>-103.4730750 |               |             |               | NAD<br>83     |

First Take Point (FTP)

|                        |               |                 |              |     |                           |               |             |               |               |
|------------------------|---------------|-----------------|--------------|-----|---------------------------|---------------|-------------|---------------|---------------|
| UL<br>P                | Section<br>29 | Township<br>19S | Range<br>35E | Lot | Feet<br>410               | From N/S<br>S | Feet<br>659 | From E/W<br>E | County<br>Lea |
| Latitude<br>32.6252846 |               |                 |              |     | Longitude<br>-103.4729972 |               |             |               | NAD<br>83     |

Last Take Point (LTP)

|                        |               |                 |              |     |                           |               |             |               |               |
|------------------------|---------------|-----------------|--------------|-----|---------------------------|---------------|-------------|---------------|---------------|
| UL<br>A                | Section<br>20 | Township<br>19S | Range<br>35E | Lot | Feet<br>145               | From N/S<br>N | Feet<br>675 | From E/W<br>E | County<br>Lea |
| Latitude<br>32.6528828 |               |                 |              |     | Longitude<br>-103.4730503 |               |             |               | 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 |

KZ 06/29/2018



COMPANY: Mewbourne Oil Company  
WELL: Hereford 29/20 B1PA St Com #1H  
COUNTY: Lea County N. M. Nad (83)  
DATUM: North American Datum 1983  
RIG: Patterson 217



GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.23°

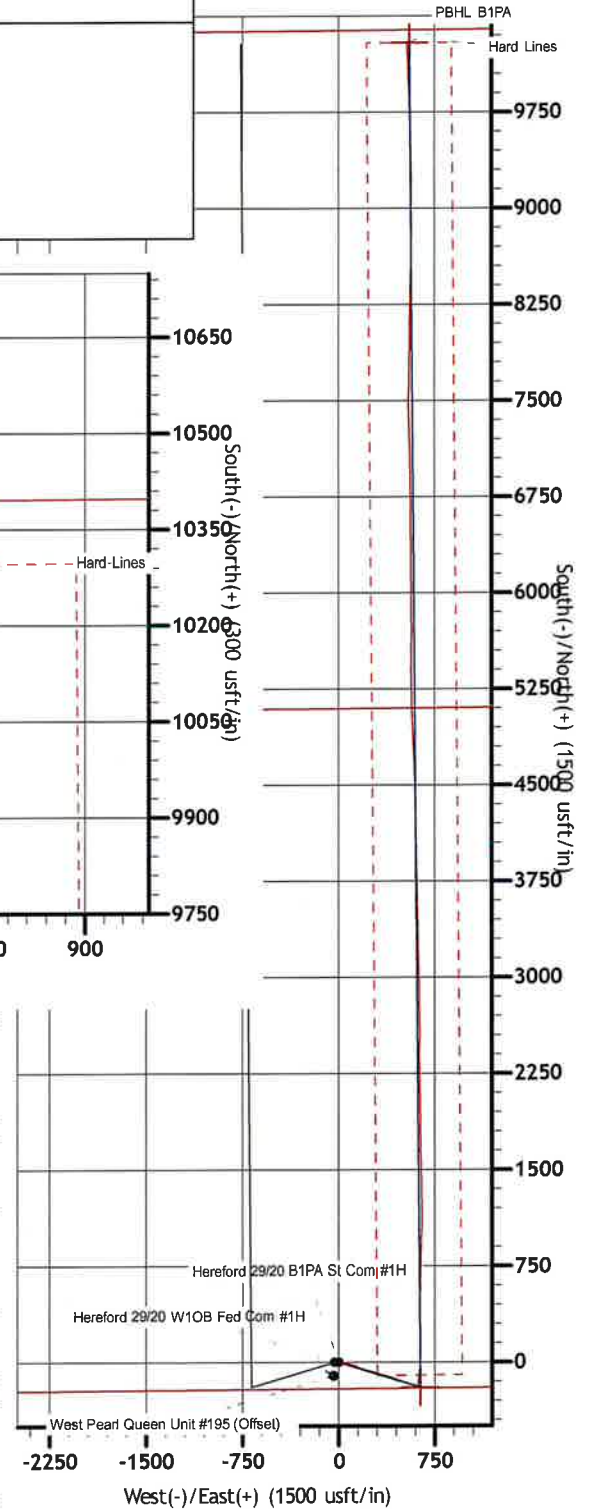
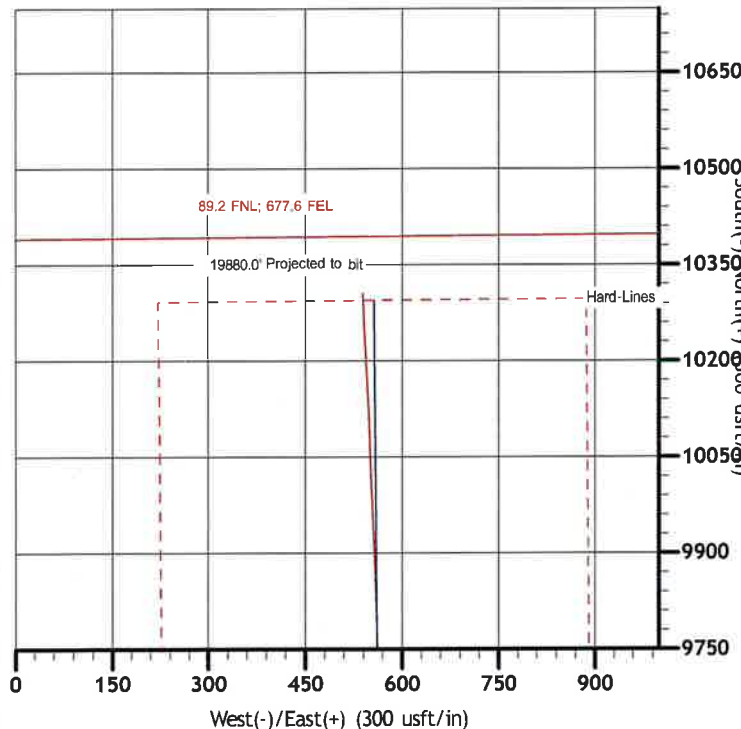
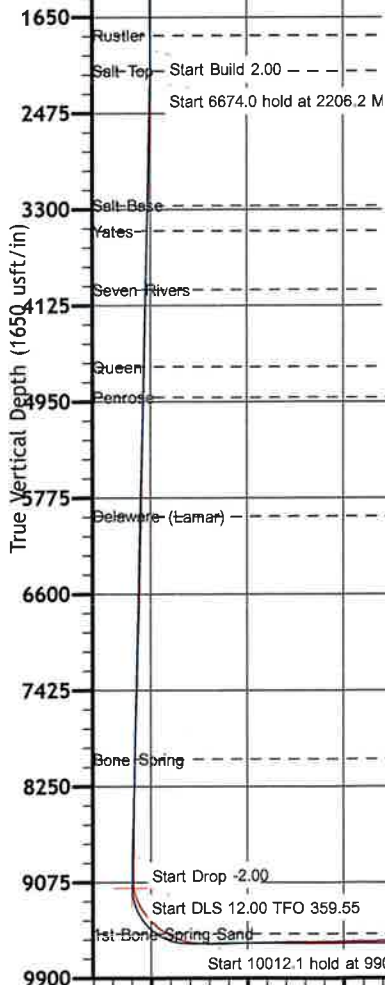
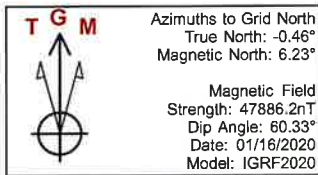
GEODETIC ZONE: New Mexico Eastern Zone  
3744+28 @ 3772.0usft (Patterson 217)  
GROUND ELEVATION: 3744.0

| +N/-S | +E/-W | Northing  | Easting   | Latitude         | Longitude         | Slot |
|-------|-------|-----------|-----------|------------------|-------------------|------|
| 0.0   | 0.0   | 592071.80 | 805570.40 | 32° 37' 29.000 N | 103° 28' 30.286 W |      |

PLAN SECTIONS

| Sec | MD      | Inc   | Azi    | TVD    | +N/-S   | +E/-W | Dleg  | TFace  | Vsect   | Target    |
|-----|---------|-------|--------|--------|---------|-------|-------|--------|---------|-----------|
| 1   | 0.0     | 0.00  | 0.00   | 0.0    | 0.0     | 0.0   | 0.00  | 0.00   | 0.0     |           |
| 2   | 1930.0  | 0.00  | 0.00   | 1930.0 | 0.0     | 0.0   | 0.00  | 0.00   | 0.0     |           |
| 3   | 2206.2  | 5.52  | 106.95 | 2205.8 | -3.9    | 12.7  | 2.00  | 106.95 | -3.2    |           |
| 4   | 8880.2  | 5.52  | 106.95 | 8848.7 | -191.1  | 627.3 | 0.00  | 0.00   | -157.0  |           |
| 5   | 9156.3  | 0.00  | 0.00   | 9124.5 | -195.0  | 640.0 | 2.00  | 180.00 | -160.1  | BB B1PA   |
| 6   | 9907.8  | 90.17 | 359.55 | 9602.0 | 283.9   | 636.2 | 12.00 | 359.55 | 317.8   |           |
| 7   | 19919.9 | 90.17 | 359.55 | 9572.0 | 10295.6 | 556.9 | 0.00  | 0.00   | 10310.7 | PBHL B1PA |

SHL: 205' FSL; 1300' FEL  
Section 29-19S-35E  
PBHL: 100 FNL; 660' FEL  
Section 20-19S-35E



Vertical Section at 3.10° (1650 usft/in)



# **Mewbourne Oil Company**

**Lea County N. M. Nad (83)  
Section 29 20-19S-35E Hereford  
Hereford 29/20 B1PA St Com #1H**

**Original Hole**

**Design: As Drilled**

## **Standard Survey Report**

**24 March, 2020**







# Stryker Energy Directional Services

## Survey Report



|                  |                                |                                     |                                      |
|------------------|--------------------------------|-------------------------------------|--------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company          | <b>Local Co-ordinate Reference:</b> | Well Hereford 29/20 B1PA St Com #1H  |
| <b>Project:</b>  | Lea County N. M. Nad (83)      | <b>TVD Reference:</b>               | 3744+28 @ 3772.0usft (Patterson 217) |
| <b>Site:</b>     | Section 29 20-19S-35E Hereford | <b>MD Reference:</b>                | 3744+28 @ 3772.0usft (Patterson 217) |
| <b>Well:</b>     | Hereford 29/20 B1PA St Com #1H | <b>North Reference:</b>             | Grid                                 |
| <b>Wellbore:</b> | Original Hole                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Design:</b>   | As Drilled                     | <b>Database:</b>                    | EDM5000                              |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County N. M. Nad (83) |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | New Mexico Eastern Zone   |                      |                |

|                              |                                |                     |                 |                                     |
|------------------------------|--------------------------------|---------------------|-----------------|-------------------------------------|
| <b>Site</b>                  | Section 29 20-19S-35E Hereford |                     |                 |                                     |
| <b>Site Position:</b>        |                                | <b>Northing:</b>    | 592,071.80 usft | <b>Latitude:</b> 32° 37' 29.000 N   |
| <b>From:</b>                 | Map                            | <b>Easting:</b>     | 805,570.40 usft | <b>Longitude:</b> 103° 28' 30.286 W |
| <b>Position Uncertainty:</b> | 0.0 usft                       | <b>Slot Radius:</b> | 13-3/16 "       | <b>Grid Convergence:</b> 0.46 °     |

|                             |                                |          |                            |                 |
|-----------------------------|--------------------------------|----------|----------------------------|-----------------|
| <b>Well</b>                 | Hereford 29/20 B1PA St Com #1H |          |                            |                 |
| <b>Well Position</b>        | <b>+N/-S</b>                   | 0.0 usft | <b>Northing:</b>           | 592,071.80 usft |
|                             | <b>+E/-W</b>                   | 0.0 usft | <b>Easting:</b>            | 805,570.40 usft |
| <b>Position Uncertainty</b> | 0.0 usft                       |          | <b>Wellhead Elevation:</b> | 28.0 usft       |
|                             |                                |          | <b>Ground Level:</b>       | 3,744.0 usft    |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Original Hole     |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2020          | 01/16/20           | 6.70                   | 60.33                | 47,886.16580613            |

|                          |                                |                     |                     |                          |
|--------------------------|--------------------------------|---------------------|---------------------|--------------------------|
| <b>Design</b>            | As Drilled                     |                     |                     |                          |
| <b>Audit Notes:</b>      |                                |                     |                     |                          |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>       | ACTUAL              | <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                 | 3.00                     |

|                       |                      |                                  |                  |                                |
|-----------------------|----------------------|----------------------------------|------------------|--------------------------------|
| <b>Survey Program</b> | <b>Date</b> 03/24/20 |                                  |                  |                                |
| <b>From (usft)</b>    | <b>To (usft)</b>     | <b>Survey (Wellbore)</b>         | <b>Tool Name</b> | <b>Description</b>             |
| 117.0                 | 1,871.0              | Invictus Surveys (Original Hole) | SRG-GYRO-MS      | surface readout gyro multishot |
| 2,055.0               | 19,880.0             | Stryker Surveys (Original Hole)  | MWD              | MWD v3:standard declination    |

|                              |                        |                    |                              |                     |                     |                                |                                |                               |                              |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|
| <b>Survey</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>Vertical Section (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> |
| 0.0                          | 0.00                   | 0.00               | 0.0                          | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |
| 117.0                        | 1.00                   | 212.70             | 117.0                        | -0.9                | -0.6                | -0.9                           | 0.85                           | 0.85                          | 0.00                         |
| 294.0                        | 0.60                   | 109.70             | 294.0                        | -2.5                | -0.5                | -2.5                           | 0.72                           | -0.23                         | -58.19                       |
| 419.0                        | 0.90                   | 37.70              | 419.0                        | -1.9                | 0.7                 | -1.9                           | 0.73                           | 0.24                          | -57.60                       |
| 495.0                        | 0.40                   | 57.70              | 495.0                        | -1.3                | 1.3                 | -1.2                           | 0.71                           | -0.66                         | 26.32                        |
| 590.0                        | 0.70                   | 95.70              | 590.0                        | -1.2                | 2.2                 | -1.1                           | 0.48                           | 0.32                          | 40.00                        |
| 740.0                        | 0.90                   | 101.70             | 740.0                        | -1.5                | 4.2                 | -1.3                           | 0.14                           | 0.13                          | 4.00                         |
| 837.0                        | 1.10                   | 109.70             | 836.9                        | -2.0                | 5.8                 | -1.7                           | 0.25                           | 0.21                          | 8.25                         |
| 928.0                        | 0.70                   | 96.70              | 927.9                        | -2.3                | 7.2                 | -2.0                           | 0.49                           | -0.44                         | -14.29                       |
| 1,116.0                      | 0.70                   | 114.70             | 1,115.9                      | -3.0                | 9.4                 | -2.5                           | 0.12                           | 0.00                          | 9.57                         |



# Stryker Energy Directional Services

## Survey Report



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:** Well Hereford 29/20 B1PA St Com #1H  
**TVD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**MD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000

### 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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 1,305.0               | 0.90            | 121.70      | 1,304.9               | -4.2         | 11.7         | -3.6                    | 0.12                    | 0.11                   | 3.70                  |
| 1,495.0               | 0.10            | 315.70      | 1,494.9               | -4.9         | 12.9         | -4.2                    | 0.52                    | -0.42                  | -87.37                |
| 1,593.0               | 0.40            | 39.70       | 1,592.9               | -4.6         | 13.0         | -3.9                    | 0.41                    | 0.31                   | 85.71                 |
| 1,683.0               | 0.20            | 21.70       | 1,682.9               | -4.2         | 13.3         | -3.5                    | 0.24                    | -0.22                  | -20.00                |
| 1,871.0               | 0.50            | 65.70       | 1,870.9               | -3.5         | 14.1         | -2.8                    | 0.20                    | 0.16                   | 23.40                 |
| First Stryker Surveys |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,055.0               | 1.90            | 60.40       | 2,054.8               | -1.7         | 17.5         | -0.8                    | 0.76                    | 0.76                   | -2.88                 |
| 2,145.0               | 4.10            | 82.00       | 2,144.7               | -0.5         | 22.0         | 0.6                     | 2.71                    | 2.44                   | 24.00                 |
| 2,236.0               | 6.60            | 90.50       | 2,235.3               | -0.1         | 30.5         | 1.5                     | 2.87                    | 2.75                   | 9.34                  |
| 2,422.0               | 6.70            | 105.50      | 2,420.1               | -3.1         | 51.6         | -0.4                    | 0.93                    | 0.05                   | 8.06                  |
| 2,610.0               | 6.30            | 107.80      | 2,606.9               | -9.2         | 72.0         | -5.4                    | 0.25                    | -0.21                  | 1.22                  |
| 2,800.0               | 5.50            | 106.80      | 2,795.9               | -15.0        | 90.6         | -10.2                   | 0.42                    | -0.42                  | -0.53                 |
| 2,990.0               | 5.70            | 102.00      | 2,984.9               | -19.6        | 108.6        | -13.9                   | 0.27                    | 0.11                   | -2.53                 |
| 3,179.0               | 5.70            | 115.50      | 3,173.0               | -25.6        | 126.2        | -18.9                   | 0.71                    | 0.00                   | 7.14                  |
| 3,368.0               | 5.10            | 118.60      | 3,361.2               | -33.6        | 142.1        | -26.2                   | 0.35                    | -0.32                  | 1.64                  |
| 3,554.0               | 3.90            | 115.10      | 3,546.6               | -40.3        | 155.1        | -32.1                   | 0.66                    | -0.65                  | -1.88                 |
| 3,596.0               | 3.70            | 113.60      | 3,588.5               | -41.4        | 157.6        | -33.1                   | 0.53                    | -0.48                  | -3.57                 |
| 3,663.0               | 3.50            | 112.50      | 3,655.4               | -43.1        | 161.5        | -34.6                   | 0.32                    | -0.30                  | -1.64                 |
| 3,789.0               | 5.10            | 108.30      | 3,781.0               | -46.3        | 170.4        | -37.3                   | 1.29                    | 1.27                   | -3.33                 |
| 3,979.0               | 4.60            | 109.80      | 3,970.3               | -51.5        | 185.5        | -41.8                   | 0.27                    | -0.26                  | 0.79                  |
| 4,168.0               | 4.60            | 104.50      | 4,158.7               | -56.0        | 200.0        | -45.5                   | 0.22                    | 0.00                   | -2.80                 |
| 4,357.0               | 5.60            | 105.50      | 4,347.0               | -60.4        | 216.2        | -49.0                   | 0.53                    | 0.53                   | 0.53                  |
| 4,544.0               | 5.80            | 101.20      | 4,533.1               | -64.6        | 234.3        | -52.3                   | 0.25                    | 0.11                   | -2.30                 |
| 4,731.0               | 6.00            | 108.70      | 4,719.1               | -69.6        | 252.8        | -56.3                   | 0.43                    | 0.11                   | 4.01                  |
| 4,920.0               | 5.90            | 105.30      | 4,907.1               | -75.3        | 271.5        | -61.0                   | 0.19                    | -0.05                  | -1.80                 |
| 5,109.0               | 6.00            | 108.30      | 5,095.0               | -81.0        | 290.3        | -65.7                   | 0.17                    | 0.05                   | 1.59                  |
| 5,298.0               | 5.80            | 109.70      | 5,283.0               | -87.3        | 308.7        | -71.1                   | 0.13                    | -0.11                  | 0.74                  |
| 5,487.0               | 5.80            | 105.50      | 5,471.1               | -93.1        | 326.9        | -75.9                   | 0.22                    | 0.00                   | -2.22                 |
| 5,677.0               | 5.50            | 105.80      | 5,660.1               | -98.1        | 344.9        | -80.0                   | 0.16                    | -0.16                  | 0.16                  |
| 5,865.0               | 5.20            | 106.30      | 5,847.3               | -103.0       | 361.7        | -83.9                   | 0.16                    | -0.16                  | 0.27                  |
| 6,053.0               | 4.90            | 101.90      | 6,034.6               | -107.0       | 377.8        | -87.1                   | 0.26                    | -0.16                  | -2.34                 |
| 6,242.0               | 4.20            | 103.60      | 6,223.0               | -110.3       | 392.4        | -89.7                   | 0.38                    | -0.37                  | 0.90                  |
| 6,429.0               | 4.80            | 102.40      | 6,409.4               | -113.6       | 406.7        | -92.2                   | 0.32                    | 0.32                   | -0.64                 |
| 6,617.0               | 5.10            | 112.10      | 6,596.7               | -118.4       | 422.1        | -96.2                   | 0.47                    | 0.16                   | 5.16                  |
| 6,806.0               | 5.30            | 113.20      | 6,784.9               | -125.0       | 437.9        | -102.0                  | 0.12                    | 0.11                   | 0.58                  |
| 6,995.0               | 4.90            | 118.80      | 6,973.2               | -132.4       | 453.0        | -108.5                  | 0.34                    | -0.21                  | 2.96                  |
| 7,185.0               | 5.30            | 108.10      | 7,162.5               | -139.0       | 468.5        | -114.3                  | 0.54                    | 0.21                   | -5.63                 |
| 7,373.0               | 5.10            | 105.00      | 7,349.7               | -143.9       | 484.8        | -118.3                  | 0.18                    | -0.11                  | -1.65                 |
| 7,563.0               | 5.90            | 115.70      | 7,538.8               | -150.3       | 501.7        | -123.9                  | 0.68                    | 0.42                   | 5.63                  |
| 7,752.0               | 5.80            | 116.20      | 7,726.8               | -158.7       | 519.1        | -131.4                  | 0.06                    | -0.05                  | 0.26                  |
| 7,939.0               | 5.50            | 107.50      | 7,912.9               | -165.6       | 536.1        | -137.4                  | 0.48                    | -0.16                  | -4.65                 |
| 8,126.0               | 5.00            | 105.70      | 8,099.1               | -170.5       | 552.5        | -141.4                  | 0.28                    | -0.27                  | -0.96                 |
| 8,313.0               | 4.60            | 101.50      | 8,285.5               | -174.2       | 567.7        | -144.3                  | 0.28                    | -0.21                  | -2.25                 |



# Stryker Energy Directional Services

## Survey Report



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:** Well Hereford 29/20 B1PA St Com #1H  
**TVD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**MD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000

### 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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 8,501.0               | 5.50            | 104.80      | 8,472.7               | -178.0       | 583.8        | -147.2                  | 0.50                    | 0.48                   | 1.76                  |
| 8,690.0               | 4.40            | 104.80      | 8,661.0               | -182.2       | 599.5        | -150.6                  | 0.58                    | -0.58                  | 0.00                  |
| 8,878.0               | 3.30            | 101.40      | 8,848.6               | -185.1       | 611.8        | -152.8                  | 0.60                    | -0.59                  | -1.81                 |
| 9,066.0               | 1.10            | 64.50       | 9,036.5               | -185.4       | 618.7        | -152.8                  | 1.33                    | -1.17                  | -19.63                |
| 9,138.0               | 3.60            | 17.60       | 9,108.4               | -182.9       | 620.1        | -150.3                  | 4.11                    | 3.47                   | -65.14                |
| 9,185.0               | 11.50           | 9.40        | 9,155.0               | -176.9       | 621.3        | -144.2                  | 16.92                   | 16.81                  | -17.45                |
| 9,232.0               | 18.20           | 5.00        | 9,200.4               | -164.9       | 622.7        | -132.2                  | 14.45                   | 14.26                  | -9.36                 |
| 9,279.0               | 24.40           | 7.40        | 9,244.1               | -148.0       | 624.6        | -115.1                  | 13.32                   | 13.19                  | 5.11                  |
| 9,322.0               | 30.20           | 8.80        | 9,282.3               | -128.5       | 627.4        | -95.5                   | 13.57                   | 13.49                  | 3.26                  |
| 9,374.0               | 35.00           | 7.70        | 9,326.1               | -100.7       | 631.4        | -67.6                   | 9.30                    | 9.23                   | -2.12                 |
| 9,421.0               | 38.90           | 5.10        | 9,363.7               | -72.7        | 634.5        | -39.4                   | 8.94                    | 8.30                   | -5.53                 |
| 9,468.0               | 42.90           | 2.60        | 9,399.2               | -42.0        | 636.5        | -8.7                    | 9.19                    | 8.51                   | -5.32                 |
| 9,515.0               | 46.20           | 2.20        | 9,432.7               | -9.0         | 637.9        | 24.3                    | 7.05                    | 7.02                   | -0.85                 |
| 9,561.0               | 50.30           | 1.80        | 9,463.3               | 25.3         | 639.1        | 58.6                    | 8.94                    | 8.91                   | -0.87                 |
| 9,608.0               | 54.50           | 1.00        | 9,492.0               | 62.5         | 640.0        | 95.8                    | 9.04                    | 8.94                   | -1.70                 |
| 9,656.0               | 58.80           | 359.90      | 9,518.4               | 102.6        | 640.3        | 135.9                   | 9.16                    | 8.96                   | -2.29                 |
| 9,703.0               | 63.80           | 359.20      | 9,540.9               | 143.8        | 640.0        | 177.0                   | 10.72                   | 10.64                  | -1.49                 |
| 9,751.0               | 68.30           | 359.70      | 9,560.4               | 187.6        | 639.6        | 220.8                   | 9.42                    | 9.38                   | 1.04                  |
| 9,798.0               | 73.10           | 0.00        | 9,575.9               | 232.0        | 639.4        | 265.1                   | 10.23                   | 10.21                  | 0.64                  |
| 9,845.0               | 77.30           | 359.60      | 9,587.9               | 277.4        | 639.3        | 310.4                   | 8.97                    | 8.94                   | -0.85                 |
| 9,892.0               | 81.50           | 359.90      | 9,596.6               | 323.6        | 639.1        | 356.5                   | 8.96                    | 8.94                   | 0.64                  |
| 9,908.0               | 83.00           | 359.90      | 9,598.7               | 339.4        | 639.1        | 372.4                   | 9.38                    | 9.38                   | 0.00                  |
| 9,963.0               | 89.10           | 0.30        | 9,602.5               | 394.3        | 639.1        | 427.1                   | 11.11                   | 11.09                  | 0.73                  |
| 10,057.0              | 89.40           | 359.60      | 9,603.8               | 488.3        | 639.1        | 521.0                   | 0.81                    | 0.32                   | -0.74                 |
| 10,152.0              | 90.10           | 1.80        | 9,604.2               | 583.3        | 640.2        | 615.9                   | 2.43                    | 0.74                   | 2.32                  |
| 10,247.0              | 92.40           | 1.40        | 9,602.1               | 678.2        | 642.9        | 710.9                   | 2.46                    | 2.42                   | -0.42                 |
| 10,341.0              | 92.30           | 1.30        | 9,598.3               | 772.1        | 645.1        | 804.7                   | 0.15                    | -0.11                  | -0.11                 |
| 10,435.0              | 91.30           | 1.00        | 9,595.3               | 866.0        | 647.0        | 898.6                   | 1.11                    | -1.06                  | -0.32                 |
| 10,530.0              | 91.60           | 1.70        | 9,592.9               | 961.0        | 649.2        | 993.6                   | 0.80                    | 0.32                   | 0.74                  |
| 10,625.0              | 91.60           | 1.70        | 9,590.2               | 1,055.9      | 652.0        | 1,088.5                 | 0.00                    | 0.00                   | 0.00                  |
| 10,719.0              | 90.70           | 0.50        | 9,588.4               | 1,149.8      | 653.8        | 1,182.4                 | 1.60                    | -0.96                  | -1.28                 |
| 10,814.0              | 90.90           | 359.60      | 9,587.0               | 1,244.8      | 653.9        | 1,277.3                 | 0.97                    | 0.21                   | -0.95                 |
| 10,906.0              | 90.60           | 358.00      | 9,585.8               | 1,336.8      | 652.0        | 1,369.0                 | 1.77                    | -0.33                  | -1.74                 |
| 11,000.0              | 90.60           | 357.80      | 9,584.8               | 1,430.7      | 648.5        | 1,462.7                 | 0.21                    | 0.00                   | -0.21                 |
| 11,095.0              | 90.70           | 358.90      | 9,583.8               | 1,525.7      | 645.8        | 1,557.3                 | 1.16                    | 0.11                   | 1.16                  |
| 11,190.0              | 90.20           | 359.10      | 9,583.0               | 1,620.7      | 644.2        | 1,652.1                 | 0.57                    | -0.53                  | 0.21                  |
| 11,284.0              | 90.10           | 1.80        | 9,582.8               | 1,714.7      | 644.9        | 1,746.0                 | 2.87                    | -0.11                  | 2.87                  |
| 11,379.0              | 90.60           | 358.90      | 9,582.2               | 1,809.6      | 645.5        | 1,840.9                 | 3.10                    | 0.53                   | -3.05                 |
| 11,473.0              | 90.90           | 358.70      | 9,581.0               | 1,903.6      | 643.5        | 1,934.6                 | 0.38                    | 0.32                   | -0.21                 |
| 11,567.0              | 91.70           | 358.60      | 9,578.8               | 1,997.6      | 641.3        | 2,028.3                 | 0.86                    | 0.85                   | -0.11                 |
| 11,658.0              | 91.00           | 358.70      | 9,576.7               | 2,088.5      | 639.1        | 2,119.1                 | 0.78                    | -0.77                  | 0.11                  |
| 11,753.0              | 90.60           | 359.60      | 9,575.4               | 2,183.5      | 637.7        | 2,213.8                 | 1.04                    | -0.42                  | 0.95                  |
| 11,849.0              | 90.90           | 357.18      | 9,574.1               | 2,279.4      | 635.0        | 2,309.5                 | 2.54                    | 0.31                   | -2.52                 |





# Stryker Energy Directional Services

## Survey Report



|                  |                                |                                     |                                      |
|------------------|--------------------------------|-------------------------------------|--------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company          | <b>Local Co-ordinate Reference:</b> | Well Hereford 29/20 B1PA St Com #1H  |
| <b>Project:</b>  | Lea County N. M. Nad (83)      | <b>TVD Reference:</b>               | 3744+28 @ 3772.0usft (Patterson 217) |
| <b>Site:</b>     | Section 29 20-19S-35E Hereford | <b>MD Reference:</b>                | 3744+28 @ 3772.0usft (Patterson 217) |
| <b>Well:</b>     | Hereford 29/20 B1PA St Com #1H | <b>North Reference:</b>             | Grid                                 |
| <b>Wellbore:</b> | Original Hole                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Design:</b>   | As Drilled                     | <b>Database:</b>                    | EDM5000                              |

| 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) |
| 11,944.0              | 91.20           | 359.99      | 9,572.4               | 2,374.4      | 632.7        | 2,404.2                 | 2.97                    | 0.32                   | 2.96                  |
| 11,987.0              | 91.40           | 2.10        | 9,571.4               | 2,417.4      | 633.5        | 2,447.2                 | 4.93                    | 0.47                   | 4.91                  |
| 12,050.0              | 93.10           | 1.60        | 9,568.9               | 2,480.3      | 635.5        | 2,510.1                 | 2.81                    | 2.70                   | -0.79                 |
| 12,145.0              | 88.80           | 0.25        | 9,567.3               | 2,575.2      | 637.0        | 2,605.0                 | 4.74                    | -4.53                  | -1.42                 |
| 12,239.0              | 89.40           | 359.29      | 9,568.8               | 2,669.2      | 636.7        | 2,698.8                 | 1.20                    | 0.64                   | -1.02                 |
| 12,333.0              | 90.20           | 359.20      | 9,569.1               | 2,763.2      | 635.4        | 2,792.6                 | 0.86                    | 0.85                   | -0.10                 |
| 12,427.0              | 91.60           | 359.02      | 9,567.7               | 2,857.2      | 634.0        | 2,886.4                 | 1.50                    | 1.49                   | -0.19                 |
| 12,522.0              | 89.50           | 359.11      | 9,566.8               | 2,952.2      | 632.4        | 2,981.2                 | 2.21                    | -2.21                  | 0.09                  |
| 12,616.0              | 87.40           | 358.85      | 9,569.3               | 3,046.1      | 630.7        | 3,074.9                 | 2.25                    | -2.23                  | -0.28                 |
| 12,711.0              | 90.80           | 358.50      | 9,570.8               | 3,141.1      | 628.6        | 3,169.6                 | 3.60                    | 3.58                   | -0.37                 |
| 12,806.0              | 91.20           | 358.94      | 9,569.1               | 3,236.0      | 626.4        | 3,264.3                 | 0.63                    | 0.42                   | 0.46                  |
| 12,899.0              | 91.90           | 358.76      | 9,566.6               | 3,329.0      | 624.6        | 3,357.0                 | 0.78                    | 0.75                   | -0.19                 |
| 12,994.0              | 89.50           | 358.67      | 9,565.5               | 3,423.9      | 622.4        | 3,451.8                 | 2.53                    | -2.53                  | -0.09                 |
| 13,089.0              | 92.00           | 358.67      | 9,564.2               | 3,518.9      | 620.2        | 3,546.5                 | 2.63                    | 2.63                   | 0.00                  |
| 13,183.0              | 90.10           | 358.76      | 9,562.5               | 3,612.8      | 618.1        | 3,640.2                 | 2.02                    | -2.02                  | 0.10                  |
| 13,277.0              | 91.00           | 358.67      | 9,561.6               | 3,706.8      | 616.0        | 3,733.9                 | 0.96                    | 0.96                   | -0.10                 |
| 13,372.0              | 89.20           | 359.29      | 9,561.4               | 3,801.8      | 614.3        | 3,828.7                 | 2.00                    | -1.89                  | 0.65                  |
| 13,467.0              | 89.00           | 358.67      | 9,562.9               | 3,896.8      | 612.6        | 3,923.5                 | 0.69                    | -0.21                  | -0.65                 |
| 13,561.0              | 89.70           | 358.67      | 9,564.0               | 3,990.7      | 610.4        | 4,017.2                 | 0.74                    | 0.74                   | 0.00                  |
| 13,655.0              | 90.20           | 358.32      | 9,564.1               | 4,084.7      | 608.0        | 4,110.9                 | 0.65                    | 0.53                   | -0.37                 |
| 13,749.0              | 91.60           | 358.23      | 9,562.6               | 4,178.6      | 605.2        | 4,204.6                 | 1.49                    | 1.49                   | -0.10                 |
| 13,842.0              | 90.30           | 359.29      | 9,561.0               | 4,271.6      | 603.1        | 4,297.3                 | 1.80                    | -1.40                  | 1.14                  |
| 13,936.0              | 91.40           | 358.94      | 9,559.6               | 4,365.6      | 601.7        | 4,391.1                 | 1.23                    | 1.17                   | -0.37                 |
| 14,031.0              | 90.00           | 359.64      | 9,558.5               | 4,460.6      | 600.5        | 4,485.8                 | 1.65                    | -1.47                  | 0.74                  |
| 14,125.0              | 89.20           | 359.37      | 9,559.1               | 4,554.6      | 599.7        | 4,579.7                 | 0.90                    | -0.85                  | -0.29                 |
| 14,219.0              | 89.20           | 358.32      | 9,560.5               | 4,648.5      | 597.8        | 4,673.4                 | 1.12                    | 0.00                   | -1.12                 |
| 14,315.0              | 90.60           | 357.35      | 9,560.6               | 4,744.5      | 594.2        | 4,769.0                 | 1.77                    | 1.46                   | -1.01                 |
| 14,409.0              | 91.60           | 355.86      | 9,558.8               | 4,838.3      | 588.6        | 4,862.4                 | 1.91                    | 1.06                   | -1.59                 |
| 14,502.0              | 90.10           | 357.44      | 9,557.4               | 4,931.1      | 583.2        | 4,954.8                 | 2.34                    | -1.61                  | 1.70                  |
| 14,598.0              | 88.70           | 358.58      | 9,558.4               | 5,027.0      | 579.8        | 5,050.5                 | 1.88                    | -1.46                  | 1.19                  |
| 14,692.0              | 88.60           | 358.41      | 9,560.7               | 5,121.0      | 577.4        | 5,144.1                 | 0.21                    | -0.11                  | -0.18                 |
| 14,787.0              | 88.60           | 357.79      | 9,563.0               | 5,215.9      | 574.2        | 5,238.8                 | 0.65                    | 0.00                   | -0.65                 |
| 14,881.0              | 88.70           | 359.37      | 9,565.2               | 5,309.8      | 571.9        | 5,332.5                 | 1.68                    | 0.11                   | 1.68                  |
| 14,976.0              | 90.10           | 0.52        | 9,566.2               | 5,404.8      | 571.8        | 5,427.3                 | 1.91                    | 1.47                   | 1.21                  |
| 15,071.0              | 91.30           | 0.87        | 9,565.0               | 5,499.8      | 573.0        | 5,522.2                 | 1.32                    | 1.26                   | 0.37                  |
| 15,165.0              | 92.30           | 1.22        | 9,562.1               | 5,593.7      | 574.7        | 5,616.1                 | 1.13                    | 1.06                   | 0.37                  |
| 15,259.0              | 90.80           | 359.90      | 9,559.5               | 5,687.7      | 575.6        | 5,710.0                 | 2.13                    | -1.60                  | -1.40                 |
| 15,354.0              | 88.70           | 358.76      | 9,559.9               | 5,782.7      | 574.5        | 5,804.8                 | 2.52                    | -2.21                  | -1.20                 |
| 15,448.0              | 89.80           | 359.64      | 9,561.2               | 5,876.7      | 573.2        | 5,898.6                 | 1.50                    | 1.17                   | 0.94                  |
| 15,542.0              | 90.80           | 359.64      | 9,560.7               | 5,970.7      | 572.6        | 5,992.4                 | 1.06                    | 1.06                   | 0.00                  |
| 15,637.0              | 90.80           | 359.20      | 9,559.4               | 6,065.6      | 571.6        | 6,087.2                 | 0.46                    | 0.00                   | -0.46                 |
| 15,732.0              | 92.00           | 359.37      | 9,557.0               | 6,160.6      | 570.4        | 6,182.0                 | 1.28                    | 1.26                   | 0.18                  |
| 15,827.0              | 90.00           | 0.69        | 9,555.4               | 6,255.6      | 570.5        | 6,276.8                 | 2.52                    | -2.11                  | 1.39                  |
| 15,921.0              | 88.00           | 359.37      | 9,557.0               | 6,349.6      | 570.5        | 6,370.7                 | 2.55                    | -2.13                  | -1.40                 |





# Stryker Energy Directional Services

## Survey Report



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:** Well Hereford 29/20 B1PA St Com #1H  
**TVD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**MD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000

### 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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 16,016.0              | 89.90           | 359.81      | 9,558.8               | 6,444.5      | 569.9        | 6,465.5                 | 2.05                    | 2.00                   | 0.46                  |
| 16,110.0              | 88.30           | 358.76      | 9,560.2               | 6,538.5      | 568.7        | 6,559.3                 | 2.04                    | -1.70                  | -1.12                 |
| 16,205.0              | 91.80           | 0.61        | 9,560.2               | 6,633.5      | 568.2        | 6,654.1                 | 4.17                    | 3.68                   | 1.95                  |
| 16,300.0              | 90.70           | 359.73      | 9,558.1               | 6,728.5      | 568.4        | 6,749.0                 | 1.48                    | -1.16                  | -0.93                 |
| 16,395.0              | 91.70           | 359.46      | 9,556.1               | 6,823.4      | 567.8        | 6,843.8                 | 1.09                    | 1.05                   | -0.28                 |
| 16,489.0              | 90.70           | 358.67      | 9,554.1               | 6,917.4      | 566.2        | 6,937.6                 | 1.36                    | -1.06                  | -0.84                 |
| 16,583.0              | 87.90           | 358.14      | 9,555.3               | 7,011.4      | 563.6        | 7,031.2                 | 3.03                    | -2.98                  | -0.56                 |
| 16,678.0              | 88.70           | 358.41      | 9,558.1               | 7,106.3      | 560.8        | 7,125.9                 | 0.89                    | 0.84                   | 0.28                  |
| 16,773.0              | 90.00           | 358.32      | 9,559.2               | 7,201.2      | 558.1        | 7,220.5                 | 1.37                    | 1.37                   | -0.09                 |
| 16,868.0              | 90.70           | 358.14      | 9,558.6               | 7,296.2      | 555.1        | 7,315.2                 | 0.76                    | 0.74                   | -0.19                 |
| 16,961.0              | 91.00           | 359.81      | 9,557.2               | 7,389.2      | 553.5        | 7,408.0                 | 1.82                    | 0.32                   | 1.80                  |
| 17,056.0              | 89.20           | 359.02      | 9,557.0               | 7,484.1      | 552.5        | 7,502.8                 | 2.07                    | -1.89                  | -0.83                 |
| 17,150.0              | 92.00           | 2.19        | 9,556.1               | 7,578.1      | 553.5        | 7,596.7                 | 4.50                    | 2.98                   | 3.37                  |
| 17,244.0              | 90.30           | 0.87        | 9,554.2               | 7,672.1      | 556.0        | 7,690.6                 | 2.29                    | -1.81                  | -1.40                 |
| 17,338.0              | 90.90           | 1.13        | 9,553.2               | 7,766.0      | 557.6        | 7,784.6                 | 0.70                    | 0.64                   | 0.28                  |
| 17,433.0              | 89.80           | 1.22        | 9,552.6               | 7,861.0      | 559.6        | 7,879.5                 | 1.16                    | -1.16                  | 0.09                  |
| 17,527.0              | 88.90           | 359.99      | 9,553.7               | 7,955.0      | 560.6        | 7,973.4                 | 1.62                    | -0.96                  | -1.31                 |
| 17,622.0              | 88.00           | 359.64      | 9,556.2               | 8,050.0      | 560.3        | 8,068.2                 | 1.02                    | -0.95                  | -0.37                 |
| 17,716.0              | 92.00           | 1.40        | 9,556.2               | 8,143.9      | 561.1        | 8,162.1                 | 4.65                    | 4.26                   | 1.87                  |
| 17,810.0              | 93.10           | 1.75        | 9,552.1               | 8,237.8      | 563.7        | 8,256.0                 | 1.23                    | 1.17                   | 0.37                  |
| 17,905.0              | 91.30           | 1.31        | 9,548.4               | 8,332.7      | 566.2        | 8,350.9                 | 1.95                    | -1.89                  | -0.46                 |
| 17,999.0              | 89.80           | 0.78        | 9,547.5               | 8,426.7      | 567.9        | 8,444.8                 | 1.69                    | -1.60                  | -0.56                 |
| 18,092.0              | 88.40           | 0.52        | 9,549.0               | 8,519.7      | 569.0        | 8,537.7                 | 1.53                    | -1.51                  | -0.28                 |
| 18,187.0              | 88.60           | 0.87        | 9,551.5               | 8,614.6      | 570.1        | 8,632.6                 | 0.42                    | 0.21                   | 0.37                  |
| 18,282.0              | 89.20           | 0.78        | 9,553.3               | 8,709.6      | 571.5        | 8,727.5                 | 0.64                    | 0.63                   | -0.09                 |
| 18,377.0              | 88.10           | 0.08        | 9,555.5               | 8,804.6      | 572.2        | 8,822.4                 | 1.37                    | -1.16                  | -0.74                 |
| 18,471.0              | 86.50           | 359.11      | 9,559.9               | 8,898.4      | 571.6        | 8,916.2                 | 1.99                    | -1.70                  | -1.03                 |
| 18,565.0              | 89.00           | 359.73      | 9,563.6               | 8,992.4      | 570.6        | 9,009.9                 | 2.74                    | 2.66                   | 0.66                  |
| 18,660.0              | 89.70           | 0.61        | 9,564.7               | 9,087.3      | 570.9        | 9,104.8                 | 1.18                    | 0.74                   | 0.93                  |
| 18,753.0              | 90.60           | 0.52        | 9,564.5               | 9,180.3      | 571.8        | 9,197.7                 | 0.97                    | 0.97                   | -0.10                 |
| 18,847.0              | 90.80           | 359.73      | 9,563.3               | 9,274.3      | 572.0        | 9,291.6                 | 0.87                    | 0.21                   | -0.84                 |
| 18,940.0              | 88.40           | 357.53      | 9,564.0               | 9,367.3      | 569.8        | 9,384.3                 | 3.50                    | -2.58                  | -2.37                 |
| 19,034.0              | 92.10           | 358.50      | 9,563.6               | 9,461.2      | 566.5        | 9,477.9                 | 4.07                    | 3.94                   | 1.03                  |
| 19,127.0              | 92.20           | 359.55      | 9,560.1               | 9,554.1      | 565.0        | 9,570.6                 | 1.13                    | 0.11                   | 1.13                  |
| 19,221.0              | 92.60           | 359.29      | 9,556.1               | 9,648.1      | 564.0        | 9,664.3                 | 0.51                    | 0.43                   | -0.28                 |
| 19,313.0              | 89.80           | 358.14      | 9,554.2               | 9,740.0      | 561.9        | 9,756.1                 | 3.29                    | -3.04                  | -1.25                 |
| 19,408.0              | 93.00           | 359.46      | 9,551.9               | 9,834.9      | 560.0        | 9,850.8                 | 3.64                    | 3.37                   | 1.39                  |
| 19,502.0              | 88.10           | 356.03      | 9,551.0               | 9,928.8      | 556.3        | 9,944.3                 | 6.36                    | -5.21                  | -3.65                 |
| 19,596.0              | 91.60           | 358.23      | 9,551.2               | 10,022.7     | 551.6        | 10,037.8                | 4.40                    | 3.72                   | 2.34                  |
| 19,690.0              | 91.20           | 358.06      | 9,548.9               | 10,116.6     | 548.5        | 10,131.4                | 0.46                    | -0.43                  | -0.18                 |
| 19,784.0              | 89.10           | 356.39      | 9,548.7               | 10,210.5     | 544.0        | 10,225.0                | 2.85                    | -2.23                  | -1.78                 |
| 19,824.0              | 89.60           | 357.40      | 9,549.1               | 10,250.4     | 541.8        | 10,264.7                | 2.82                    | 1.25                   | 2.53                  |
| 19,880.0              | 89.60           | 357.40      | 9,549.5               | 10,306.4     | 539.3        | 10,320.5                | 0.00                    | 0.00                   | 0.00                  |



# Stryker Energy Directional Services

## Survey Report



|           |                                |                              |                                      |
|-----------|--------------------------------|------------------------------|--------------------------------------|
| Company:  | Mewbourne Oil Company          | Local Co-ordinate Reference: | Well Hereford 29/20 B1PA St Com #1H  |
| Project:  | Lea County N. M. Nad (83)      | TVD Reference:               | 3744+28 @ 3772.0usft (Patterson 217) |
| Site:     | Section 29 20-19S-35E Hereford | MD Reference:                | 3744+28 @ 3772.0usft (Patterson 217) |
| Well:     | Hereford 29/20 B1PA St Com #1H | North Reference:             | Grid                                 |
| Wellbore: | Original Hole                  | Survey Calculation Method:   | Minimum Curvature                    |
| Design:   | As Drilled                     | Database:                    | EDM5000                              |

| 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) |
| 19880.0' Projected to bit |                 |             |                       |              |              |                         |                         |                        |                       |

| Design Annotations    |                       |                   |              |                           |
|-----------------------|-----------------------|-------------------|--------------|---------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                   |
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                           |
| 1,871.0               | 1,870.9               | -3.5              | 14.1         | First Stryker Surveys     |
| 19,880.0              | 9,549.5               | 10,306.4          | 539.3        | 19880.0' Projected to bit |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|



April 7, 2020

New Mexico Energy, Minerals and Natural Resources Department  
Attn: Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Attn: Jackie Lathan

Re: Mewbourne Oil Company  
Hereford 29 20 B1PA State Com #1H  
Scharb; Bone Spring  
Lea County, New Mexico  
API# 30-025-45569

Enclosed please find the original and one (1) copy of the survey performed on the reference well by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C. Other information required by your office is as follows:

| <u>Name &amp; Title</u> | <u>Drainhole No.</u> | <u>Survey Depths</u>  | <u>Dates Performed</u> | <u>Type Survey</u> |
|-------------------------|----------------------|-----------------------|------------------------|--------------------|
| Cody Hash               | Original Hole        | 2,055ft. to 19,824ft. | 02-08-20 to 03-13-20   | MWD Survey         |

A certified plat on which the bottom-hole location is oriented to both surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

  
Eric Estes

Enclosures

CC:

Mewbourne Oil Company  
Attn: Frosty Lathan  
P.O. Box 5720  
Hobbs, NM 88241

Mewbourne Oil Company  
Attn: Robin Terrell  
P.O. Box 5720  
Hobbs, NM 88241

NMEMaNRD\Mewbourne Oil Company\Hereford 29 20 B1PA St Com #1HM201011

**STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.**  
P.O. Box 1250  
Montgomery, TX 77356  
Office (936) 582-7296 \* Fax (936)-588-4163



**April 7, 2020**

**Survey Certification Report**

**STATE OF            TEXAS**

**COUNTY OF        Montgomery**

I, Eric Estes, certify that I am employed by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C., and that I did on the day(s) of February 8, 2020, through March 13, 2020 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 2,055feet to a depth of 19,824feet; that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil Company, for the Hereford 29 20 B1PA State Com #1H,well API # **30-025-45569** in Lea County, New Mexico; and that I have reviewed this report and find that it conforms to the principles as set forth by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

A handwritten signature in black ink, appearing to read "Eric Estes", is written over a horizontal line.

**Eric Estes**

**STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.**

**STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.  
P.O. Box 1250  
Montgomery, TX 77356  
Office (936) 582-7296 \* Fax (936)-588-4163**





# Stryker Energy Directional Services

Survey Report Landscape



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:** Well Hereford 29/20 B1PA St Com #1H  
**TVD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**MD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000

**Survey Program**      **Date** 03/24/20

| From (usft) | To (usft) | Survey (Wellbore)                | Tool Name   | Description                    |
|-------------|-----------|----------------------------------|-------------|--------------------------------|
| 117.0       | 1,871.0   | Invictus Surveys (Original Hole) | SRG-GYRO-MS | surface readout gyro multishot |
| 2,055.0     | 19,880.0  | Stryker Surveys (Original Hole)  | MWD         | MWD v3:standard declination    |

| Survey                       | MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | EW (usft) | Closure Distance (usft) | Closure Azimuth (°) | DLeg (°/100usft) | Northing (usft) | Easting (usft) |
|------------------------------|-----------|---------|-------------------|------------|------------|-----------|-------------------------|---------------------|------------------|-----------------|----------------|
|                              | 0.0       | 0.00    | 0.00              | 0.0        | 0.0        | 0.0       | 0.0                     | 0.00                | 0.00             | 592,071.80      | 805,570.40     |
|                              | 117.0     | 1.00    | 212.70            | 117.0      | -0.9       | -0.6      | 1.0                     | 212.70              | 0.85             | 592,070.94      | 805,569.85     |
|                              | 294.0     | 0.60    | 109.70            | 294.0      | -2.5       | -0.5      | 2.5                     | 191.74              | 0.72             | 592,069.33      | 805,569.89     |
|                              | 419.0     | 0.90    | 37.70             | 419.0      | -1.9       | 0.7       | 2.0                     | 159.84              | 0.73             | 592,069.88      | 805,571.10     |
|                              | 495.0     | 0.40    | 57.70             | 495.0      | -1.3       | 1.3       | 1.8                     | 135.20              | 0.71             | 592,070.50      | 805,571.69     |
|                              | 590.0     | 0.70    | 95.70             | 590.0      | -1.2       | 2.2       | 2.5                     | 118.79              | 0.48             | 592,070.62      | 805,572.55     |
|                              | 740.0     | 0.90    | 101.70            | 740.0      | -1.5       | 4.2       | 4.5                     | 109.73              | 0.14             | 592,070.29      | 805,574.62     |
|                              | 837.0     | 1.10    | 109.70            | 836.9      | -2.0       | 5.8       | 6.2                     | 108.73              | 0.25             | 592,069.82      | 805,576.24     |
|                              | 928.0     | 0.70    | 96.70             | 927.9      | -2.3       | 7.2       | 7.6                     | 107.97              | 0.49             | 592,069.46      | 805,577.61     |
|                              | 1,116.0   | 0.70    | 114.70            | 1,115.9    | -3.0       | 9.4       | 9.8                     | 107.45              | 0.12             | 592,068.85      | 805,579.80     |
|                              | 1,305.0   | 0.90    | 121.70            | 1,304.9    | -4.2       | 11.7      | 12.4                    | 109.80              | 0.12             | 592,067.58      | 805,582.11     |
|                              | 1,495.0   | 0.10    | 315.70            | 1,494.9    | -4.9       | 12.9      | 13.8                    | 110.78              | 0.52             | 592,066.92      | 805,583.26     |
|                              | 1,593.0   | 0.40    | 39.70             | 1,592.9    | -4.6       | 13.0      | 13.8                    | 109.29              | 0.41             | 592,067.24      | 805,583.42     |
|                              | 1,683.0   | 0.20    | 21.70             | 1,682.9    | -4.2       | 13.3      | 13.9                    | 107.43              | 0.24             | 592,067.63      | 805,583.68     |
|                              | 1,871.0   | 0.50    | 65.70             | 1,870.9    | -3.5       | 14.1      | 14.6                    | 104.00              | 0.20             | 592,068.27      | 805,584.55     |
| <b>First Stryker Surveys</b> |           |         |                   |            |            |           |                         |                     |                  |                 |                |
|                              | 2,055.0   | 1.90    | 60.40             | 2,054.8    | -1.7       | 17.5      | 17.6                    | 95.50               | 0.76             | 592,070.11      | 805,587.93     |
|                              | 2,145.0   | 4.10    | 82.00             | 2,144.7    | -0.5       | 22.0      | 22.0                    | 91.31               | 2.71             | 592,071.30      | 805,592.42     |
|                              | 2,236.0   | 6.60    | 90.50             | 2,235.3    | -0.1       | 30.5      | 30.5                    | 90.18               | 2.87             | 592,071.70      | 805,600.87     |
|                              | 2,422.0   | 6.70    | 105.50            | 2,420.1    | -3.1       | 51.6      | 51.7                    | 93.43               | 0.93             | 592,068.71      | 805,622.01     |
|                              | 2,610.0   | 6.30    | 107.80            | 2,606.9    | -9.2       | 72.0      | 72.6                    | 97.26               | 0.25             | 592,062.63      | 805,642.40     |



# Stryker Energy Directional Services

## Survey Report Landscape



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:**  
TVD Reference:  
MD Reference:  
North Reference:  
Survey Calculation Method:  
Database:

Well Hereford 29/20 B1PA St Com #1H  
3744+28 @ 3772.0ust (Patterson 217)  
3744+28 @ 3772.0ust (Patterson 217)  
Grid  
Minimum Curvature  
EDM5000

### Survey

| MD<br>(ustft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(ustft) | N/S<br>(ustft) | E/W<br>(ustft) | Closure Distance<br>(ustft) | Closure Azimuth<br>(°) | DLeg<br>(°/100ustft) | Northing<br>(ustft) | Easting<br>(ustft) |
|---------------|------------|----------------------|----------------|----------------|----------------|-----------------------------|------------------------|----------------------|---------------------|--------------------|
| 2,800.0       | 5.50       | 106.80               | 2,795.9        | -15.0          | 90.6           | 91.9                        | 99.39                  | 0.42                 | 592,056.81          | 805,661.05         |
| 2,990.0       | 5.70       | 102.00               | 2,984.9        | -19.6          | 108.6          | 110.3                       | 100.22                 | 0.27                 | 592,052.21          | 805,678.99         |
| 3,179.0       | 5.70       | 115.50               | 3,173.0        | -25.6          | 126.2          | 128.8                       | 101.45                 | 0.71                 | 592,046.22          | 805,696.65         |
| 3,368.0       | 5.10       | 118.60               | 3,361.2        | -33.6          | 142.1          | 146.0                       | 103.32                 | 0.35                 | 592,038.16          | 805,712.49         |
| 3,554.0       | 3.90       | 115.10               | 3,546.6        | -40.3          | 155.1          | 160.2                       | 104.56                 | 0.66                 | 592,031.52          | 805,725.48         |
| 3,596.0       | 3.70       | 113.60               | 3,588.5        | -41.4          | 157.6          | 163.0                       | 104.73                 | 0.53                 | 592,030.37          | 805,728.02         |
| 3,663.0       | 3.50       | 112.50               | 3,655.4        | -43.1          | 161.5          | 167.1                       | 104.94                 | 0.32                 | 592,028.72          | 805,731.89         |
| 3,789.0       | 5.10       | 108.30               | 3,781.0        | -46.3          | 170.4          | 176.5                       | 105.21                 | 1.29                 | 592,025.49          | 805,740.76         |
| 3,979.0       | 4.60       | 109.80               | 3,970.3        | -51.5          | 185.5          | 192.6                       | 105.52                 | 0.27                 | 592,020.26          | 805,755.94         |
| 4,168.0       | 4.60       | 104.50               | 4,158.7        | -56.0          | 200.0          | 207.7                       | 105.64                 | 0.22                 | 592,015.79          | 805,770.41         |
| 4,357.0       | 5.60       | 105.50               | 4,347.0        | -60.4          | 216.2          | 224.5                       | 105.60                 | 0.53                 | 592,011.43          | 805,786.64         |
| 4,544.0       | 5.80       | 101.20               | 4,533.1        | -64.6          | 234.3          | 243.1                       | 105.42                 | 0.25                 | 592,007.16          | 805,804.70         |
| 4,731.0       | 6.00       | 108.70               | 4,719.1        | -69.6          | 252.8          | 262.2                       | 105.39                 | 0.43                 | 592,002.19          | 805,823.22         |
| 4,920.0       | 5.90       | 105.30               | 4,907.1        | -75.3          | 271.5          | 281.8                       | 105.51                 | 0.19                 | 591,996.46          | 805,841.95         |
| 5,109.0       | 6.00       | 108.30               | 5,095.0        | -81.0          | 290.3          | 301.4                       | 105.59                 | 0.17                 | 591,990.79          | 805,860.70         |
| 5,298.0       | 5.80       | 109.70               | 5,283.0        | -87.3          | 308.7          | 320.8                       | 105.80                 | 0.13                 | 591,984.47          | 805,879.07         |
| 5,487.0       | 5.80       | 105.50               | 5,471.1        | -93.1          | 326.9          | 339.9                       | 105.90                 | 0.22                 | 591,978.70          | 805,897.26         |
| 5,677.0       | 5.50       | 105.80               | 5,660.1        | -98.1          | 344.9          | 358.6                       | 105.89                 | 0.16                 | 591,973.66          | 805,915.27         |
| 5,865.0       | 5.20       | 106.30               | 5,847.3        | -103.0         | 361.7          | 376.1                       | 105.89                 | 0.16                 | 591,968.81          | 805,932.12         |
| 6,053.0       | 4.90       | 101.90               | 6,034.6        | -107.0         | 377.8          | 392.6                       | 105.82                 | 0.26                 | 591,964.77          | 805,948.15         |
| 6,242.0       | 4.20       | 103.60               | 6,223.0        | -110.3         | 392.4          | 407.6                       | 105.70                 | 0.38                 | 591,961.47          | 805,962.78         |
| 6,429.0       | 4.80       | 102.40               | 6,409.4        | -113.6         | 406.7          | 422.2                       | 105.61                 | 0.32                 | 591,958.18          | 805,977.08         |
| 6,617.0       | 5.10       | 112.10               | 6,596.7        | -118.4         | 422.1          | 438.4                       | 105.68                 | 0.47                 | 591,953.35          | 805,992.50         |
| 6,806.0       | 5.30       | 113.20               | 6,784.9        | -125.0         | 437.9          | 455.4                       | 105.94                 | 0.12                 | 591,946.75          | 806,008.31         |
| 6,995.0       | 4.90       | 118.80               | 6,973.2        | -132.4         | 453.0          | 471.9                       | 106.29                 | 0.34                 | 591,939.42          | 806,023.40         |
| 7,185.0       | 5.30       | 108.10               | 7,162.5        | -139.0         | 468.5          | 488.6                       | 106.53                 | 0.54                 | 591,932.79          | 806,038.86         |
| 7,373.0       | 5.10       | 105.00               | 7,349.7        | -143.9         | 484.8          | 505.7                       | 106.53                 | 0.18                 | 591,927.93          | 806,055.18         |



# Stryker Energy Directional Services

## Survey Report Landscape



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:**  
Well Hereford 29/20 B1PA St Com #1H  
3744+28 @ 3772.0usft (Patterson 217)  
3744+28 @ 3772.0usft (Patterson 217)  
**TVD Reference:**  
MD Reference:  
**North Reference:**  
Grid  
**Survey Calculation Method:**  
Minimum Curvature  
**Database:**  
EDM5000

### Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | EW<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|---------------|--------------|----------------------------|------------------------|---------------------|--------------------|-------------------|
| 7,563.0      | 5.90       | 115.70               | 7,538.8       | -150.3        | 501.7        | 523.8                      | 106.68                 | 0.68                | 591,921.51         | 806,072.14        |
| 7,752.0      | 5.80       | 116.20               | 7,726.8       | -158.7        | 519.1        | 542.8                      | 107.00                 | 0.06                | 591,913.08         | 806,089.46        |
| 7,939.0      | 5.50       | 107.50               | 7,912.9       | -165.6        | 536.1        | 561.1                      | 107.17                 | 0.48                | 591,906.21         | 806,106.48        |
| 8,126.0      | 5.00       | 105.70               | 8,099.1       | -170.5        | 552.5        | 578.2                      | 107.15                 | 0.28                | 591,901.31         | 806,122.88        |
| 8,313.0      | 4.60       | 101.50               | 8,285.5       | -174.2        | 567.7        | 593.8                      | 107.06                 | 0.28                | 591,897.61         | 806,138.07        |
| 8,501.0      | 5.50       | 104.80               | 8,472.7       | -178.0        | 583.8        | 610.3                      | 106.96                 | 0.50                | 591,893.81         | 806,154.17        |
| 8,690.0      | 4.40       | 104.80               | 8,661.0       | -182.2        | 599.5        | 626.6                      | 106.90                 | 0.58                | 591,889.64         | 806,169.93        |
| 8,878.0      | 3.30       | 101.40               | 8,848.6       | -185.1        | 611.8        | 639.2                      | 106.83                 | 0.60                | 591,886.73         | 806,182.21        |
| 9,066.0      | 1.10       | 64.50                | 9,036.5       | -185.4        | 618.7        | 645.9                      | 106.68                 | 1.33                | 591,886.44         | 806,189.15        |
| 9,138.0      | 3.60       | 17.60                | 9,108.4       | -182.9        | 620.1        | 646.5                      | 106.44                 | 4.11                | 591,888.89         | 806,190.45        |
| 9,185.0      | 11.50      | 9.40                 | 9,155.0       | -176.9        | 621.3        | 646.0                      | 105.89                 | 16.92               | 591,894.93         | 806,191.67        |
| 9,232.0      | 18.20      | 5.00                 | 9,200.4       | -184.9        | 622.7        | 644.1                      | 104.83                 | 14.45               | 591,906.88         | 806,193.07        |
| 9,279.0      | 24.40      | 7.40                 | 9,244.1       | -148.0        | 624.6        | 641.9                      | 103.33                 | 13.32               | 591,923.83         | 806,194.97        |
| 9,322.0      | 30.20      | 8.80                 | 9,282.3       | -128.5        | 627.4        | 640.4                      | 101.57                 | 13.57               | 591,943.34         | 806,197.77        |
| 9,374.0      | 35.00      | 7.70                 | 9,326.1       | -100.7        | 631.4        | 639.4                      | 99.07                  | 9.30                | 591,971.06         | 806,201.77        |
| 9,421.0      | 38.90      | 5.10                 | 9,363.7       | -72.7         | 634.5        | 638.6                      | 96.53                  | 8.94                | 591,999.13         | 806,204.89        |
| 9,468.0      | 42.90      | 2.60                 | 9,399.2       | -42.0         | 636.5        | 637.9                      | 93.77                  | 9.19                | 592,029.83         | 806,206.92        |
| 9,515.0      | 46.20      | 2.20                 | 9,432.7       | -9.0          | 637.9        | 638.0                      | 90.81                  | 7.05                | 592,062.77         | 806,208.30        |
| 9,561.0      | 50.30      | 1.80                 | 9,463.3       | 25.3          | 639.1        | 639.6                      | 87.74                  | 8.94                | 592,097.06         | 806,209.50        |
| 9,608.0      | 54.50      | 1.00                 | 9,492.0       | 62.5          | 640.0        | 643.0                      | 84.42                  | 9.04                | 592,134.27         | 806,210.40        |
| 9,656.0      | 58.80      | 359.90               | 9,518.4       | 102.6         | 640.3        | 648.5                      | 80.90                  | 9.16                | 592,174.36         | 806,210.70        |
| 9,703.0      | 63.80      | 359.20               | 9,540.9       | 143.8         | 640.0        | 655.9                      | 77.34                  | 10.72               | 592,215.57         | 806,210.37        |
| 9,751.0      | 68.30      | 359.70               | 9,560.4       | 187.6         | 639.6        | 666.5                      | 73.65                  | 9.42                | 592,259.42         | 806,209.96        |
| 9,798.0      | 73.10      | 0.00                 | 9,575.9       | 232.0         | 639.4        | 680.2                      | 70.06                  | 10.23               | 592,303.77         | 806,209.84        |
| 9,845.0      | 77.30      | 359.60               | 9,587.9       | 277.4         | 639.3        | 696.9                      | 66.54                  | 8.97                | 592,349.20         | 806,209.68        |
| 9,892.0      | 81.50      | 359.90               | 9,596.6       | 323.6         | 639.1        | 716.3                      | 63.15                  | 8.96                | 592,395.39         | 806,209.48        |
| 9,908.0      | 83.00      | 359.90               | 9,598.7       | 339.4         | 639.1        | 723.6                      | 62.02                  | 9.37                | 592,411.24         | 806,209.45        |



# Stryker Energy Directional Services

## Survey Report Landscape



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:**  
TVD Reference:  
MD Reference:  
North Reference:  
Survey Calculation Method:  
Database:

Well Hereford 29/20 B1PA St Com #1H  
3744+28 @ 3772.0usft (Patterson 217)  
3744+28 @ 3772.0usft (Patterson 217)  
Grid  
Minimum Curvature  
EDM5000

### Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | DLog<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|---------------------|--------------------|-------------------|
| 9,963.0      | 89.10      | 0.30                 | 9,602.5       | 394.3         | 639.1         | 751.0                      | 58.33                  | 11.11               | 592,466.08         | 806,209.55        |
| 10,057.0     | 89.40      | 359.60               | 9,603.8       | 488.3         | 639.1         | 804.2                      | 52.62                  | 0.81                | 592,560.07         | 806,209.47        |
| 10,152.0     | 90.10      | 1.80                 | 9,604.2       | 583.3         | 640.2         | 866.1                      | 47.67                  | 2.43                | 592,655.06         | 806,210.63        |
| 10,247.0     | 92.40      | 1.40                 | 9,602.1       | 678.2         | 642.9         | 934.5                      | 43.47                  | 2.46                | 592,749.99         | 806,213.28        |
| 10,341.0     | 92.30      | 1.30                 | 9,598.3       | 772.1         | 645.1         | 1,006.1                    | 39.88                  | 0.15                | 592,843.89         | 806,215.49        |
| 10,435.0     | 91.30      | 1.00                 | 9,595.3       | 866.0         | 647.0         | 1,081.0                    | 36.76                  | 1.11                | 592,937.82         | 806,217.38        |
| 10,530.0     | 91.60      | 1.70                 | 9,592.9       | 961.0         | 649.2         | 1,159.7                    | 34.04                  | 0.80                | 593,032.76         | 806,219.62        |
| 10,625.0     | 91.60      | 1.70                 | 9,590.2       | 1,055.9       | 652.0         | 1,241.0                    | 31.70                  | 0.00                | 593,127.68         | 806,222.43        |
| 10,719.0     | 90.70      | 0.50                 | 9,588.4       | 1,149.8       | 653.8         | 1,322.7                    | 29.62                  | 1.60                | 593,221.65         | 806,224.24        |
| 10,814.0     | 90.90      | 359.60               | 9,587.0       | 1,244.8       | 653.9         | 1,406.1                    | 27.71                  | 0.97                | 593,316.64         | 806,224.32        |
| 10,906.0     | 90.60      | 358.00               | 9,585.8       | 1,336.8       | 652.0         | 1,487.3                    | 26.00                  | 1.77                | 593,408.60         | 806,222.39        |
| 11,000.0     | 90.60      | 357.80               | 9,584.8       | 1,430.7       | 648.5         | 1,570.9                    | 24.38                  | 0.21                | 593,502.54         | 806,218.95        |
| 11,095.0     | 90.70      | 358.90               | 9,583.8       | 1,525.7       | 645.8         | 1,656.7                    | 22.94                  | 1.16                | 593,597.49         | 806,216.21        |
| 11,190.0     | 90.20      | 359.10               | 9,583.0       | 1,620.7       | 644.2         | 1,744.0                    | 21.68                  | 0.57                | 593,692.47         | 806,214.56        |
| 11,284.0     | 90.10      | 1.80                 | 9,582.8       | 1,714.7       | 644.9         | 1,831.9                    | 20.61                  | 2.87                | 593,786.46         | 806,215.29        |
| 11,379.0     | 90.60      | 358.90               | 9,582.2       | 1,809.6       | 645.5         | 1,921.3                    | 19.63                  | 3.10                | 593,881.45         | 806,215.87        |
| 11,473.0     | 90.90      | 358.70               | 9,581.0       | 1,903.6       | 643.5         | 2,009.4                    | 18.68                  | 0.38                | 593,975.42         | 806,213.91        |
| 11,567.0     | 91.70      | 358.60               | 9,578.8       | 1,997.6       | 641.3         | 2,098.0                    | 17.80                  | 0.86                | 594,069.37         | 806,211.69        |
| 11,658.0     | 91.00      | 358.70               | 9,576.7       | 2,088.5       | 639.1         | 2,184.1                    | 17.02                  | 0.78                | 594,160.31         | 806,209.55        |
| 11,753.0     | 90.60      | 359.60               | 9,575.4       | 2,183.5       | 637.7         | 2,274.7                    | 16.28                  | 1.04                | 594,255.29         | 806,208.14        |
| 11,849.0     | 90.90      | 357.18               | 9,574.1       | 2,279.4       | 635.0         | 2,366.2                    | 15.57                  | 2.54                | 594,351.24         | 806,205.44        |
| 11,944.0     | 91.20      | 359.99               | 9,572.4       | 2,374.4       | 632.7         | 2,457.2                    | 14.92                  | 2.97                | 594,446.19         | 806,203.10        |
| 11,987.0     | 91.40      | 2.10                 | 9,571.4       | 2,417.4       | 633.5         | 2,499.0                    | 14.68                  | 4.93                | 594,489.16         | 806,203.88        |
| 12,050.0     | 93.10      | 1.60                 | 9,568.9       | 2,480.3       | 635.5         | 2,560.4                    | 14.37                  | 2.81                | 594,552.08         | 806,205.91        |
| 12,145.0     | 88.80      | 0.25                 | 9,567.3       | 2,575.2       | 637.0         | 2,652.9                    | 13.89                  | 4.74                | 594,647.03         | 806,207.45        |
| 12,239.0     | 89.40      | 359.29               | 9,566.8       | 2,669.2       | 636.7         | 2,744.1                    | 13.42                  | 1.20                | 594,741.02         | 806,207.07        |
| 12,333.0     | 90.20      | 359.20               | 9,569.1       | 2,763.2       | 635.4         | 2,835.3                    | 12.95                  | 0.86                | 594,835.01         | 806,205.83        |





# Stryker Energy Directional Services

## Survey Report Landscape

**Company:**

Mewbourne Oil Company

**Project:**

Lea County N. M. Nad (83)

**Site:**

Section 29 20-19S-35E Hereford

**Well:**

Hereford 29/20 B1PA St Com #1H

**Wellbore:**

Original Hole

**Design:**

As Drilled

**Local Co-ordinate Reference:**

Well Hereford 29/20 B1PA St Com #1H

**TVD Reference:**

3744+28 @ 3772.0usft (Patterson 217)

**MD Reference:**

3744+28 @ 3772.0usft (Patterson 217)

**North Reference:**

Grid

**Survey Calculation Method:**

Minimum Curvature

**Database:**

EDM5000

**Survey**

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | EW<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|---------------|--------------|----------------------------|------------------------|---------------------|--------------------|-------------------|
| 12,427.0     | 91.60      | 359.02               | 9,567.7       | 2,857.2       | 634.0        | 2,926.7                    | 12.51                  | 1.50                | 594,928.98         | 806,204.37        |
| 12,522.0     | 89.50      | 359.11               | 9,566.8       | 2,952.2       | 632.4        | 3,019.1                    | 12.09                  | 2.21                | 595,023.96         | 806,202.82        |
| 12,616.0     | 87.40      | 358.85               | 9,569.3       | 3,046.1       | 630.7        | 3,110.7                    | 11.70                  | 2.25                | 595,117.91         | 806,201.15        |
| 12,711.0     | 90.80      | 358.50               | 9,570.8       | 3,141.1       | 628.6        | 3,203.3                    | 11.32                  | 3.60                | 595,212.85         | 806,198.95        |
| 12,806.0     | 91.20      | 358.94               | 9,569.1       | 3,236.0       | 626.4        | 3,296.1                    | 10.96                  | 0.63                | 595,307.82         | 806,196.83        |
| 12,899.0     | 91.90      | 358.76               | 9,566.6       | 3,329.0       | 624.6        | 3,387.0                    | 10.63                  | 0.78                | 595,400.76         | 806,194.96        |
| 12,994.0     | 89.50      | 358.67               | 9,565.5       | 3,423.9       | 622.4        | 3,480.0                    | 10.30                  | 2.53                | 595,495.72         | 806,192.83        |
| 13,089.0     | 92.00      | 358.67               | 9,564.2       | 3,518.9       | 620.2        | 3,573.1                    | 10.00                  | 2.63                | 595,590.68         | 806,190.63        |
| 13,183.0     | 90.10      | 358.76               | 9,562.5       | 3,612.8       | 618.1        | 3,665.3                    | 9.71                   | 2.02                | 595,684.64         | 806,188.52        |
| 13,277.0     | 91.00      | 358.67               | 9,561.6       | 3,706.8       | 616.0        | 3,757.6                    | 9.44                   | 0.96                | 595,778.61         | 806,186.41        |
| 13,372.0     | 89.20      | 359.29               | 9,561.4       | 3,801.8       | 614.3        | 3,851.1                    | 9.18                   | 2.00                | 595,873.59         | 806,184.72        |
| 13,467.0     | 89.00      | 358.67               | 9,562.9       | 3,896.8       | 612.6        | 3,944.6                    | 8.93                   | 0.69                | 595,968.56         | 806,183.03        |
| 13,561.0     | 89.70      | 358.67               | 9,564.0       | 3,990.7       | 610.4        | 4,037.2                    | 8.70                   | 0.74                | 596,062.53         | 806,180.85        |
| 13,655.0     | 90.20      | 358.32               | 9,564.1       | 4,084.7       | 608.0        | 4,129.7                    | 8.47                   | 0.65                | 596,156.50         | 806,178.38        |
| 13,749.0     | 91.60      | 358.23               | 9,562.6       | 4,178.6       | 605.2        | 4,222.2                    | 8.24                   | 1.49                | 596,250.44         | 806,175.55        |
| 13,842.0     | 90.30      | 359.29               | 9,561.0       | 4,271.6       | 603.1        | 4,314.0                    | 8.04                   | 1.80                | 596,343.40         | 806,173.54        |
| 13,936.0     | 91.40      | 358.94               | 9,559.6       | 4,365.6       | 601.7        | 4,406.8                    | 7.85                   | 1.23                | 596,437.38         | 806,172.09        |
| 14,031.0     | 90.00      | 359.64               | 9,558.5       | 4,460.6       | 600.5        | 4,500.8                    | 7.67                   | 1.65                | 596,532.36         | 806,170.91        |
| 14,125.0     | 89.20      | 359.37               | 9,559.1       | 4,554.6       | 599.7        | 4,593.9                    | 7.50                   | 0.90                | 596,626.36         | 806,170.10        |
| 14,219.0     | 89.20      | 358.32               | 9,560.5       | 4,648.5       | 597.8        | 4,686.8                    | 7.33                   | 1.12                | 596,720.33         | 806,168.20        |
| 14,315.0     | 90.60      | 357.35               | 9,560.6       | 4,744.5       | 594.2        | 4,781.5                    | 7.14                   | 1.77                | 596,816.26         | 806,164.58        |
| 14,409.0     | 91.60      | 355.86               | 9,558.8       | 4,838.3       | 588.6        | 4,873.9                    | 6.94                   | 1.91                | 596,910.07         | 806,159.01        |
| 14,502.0     | 90.10      | 357.44               | 9,557.4       | 4,931.1       | 583.2        | 4,965.5                    | 6.74                   | 2.34                | 597,002.89         | 806,153.58        |
| 14,598.0     | 88.70      | 358.58               | 9,558.4       | 5,027.0       | 579.8        | 5,060.4                    | 6.58                   | 1.88                | 597,098.83         | 806,150.25        |
| 14,692.0     | 88.60      | 358.41               | 9,560.7       | 5,121.0       | 577.4        | 5,153.4                    | 6.43                   | 0.21                | 597,192.77         | 806,147.78        |
| 14,787.0     | 88.60      | 357.79               | 9,563.0       | 5,215.9       | 574.2        | 5,247.4                    | 6.28                   | 0.65                | 597,287.69         | 806,144.63        |
| 14,881.0     | 88.70      | 359.37               | 9,565.2       | 5,309.8       | 571.9        | 5,340.5                    | 6.15                   | 1.68                | 597,381.63         | 806,142.30        |



# Stryker Energy Directional Services

## Survey Report Landscape



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:** Well Hereford 29/20 B1PA St Com #1H  
**TVD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**MD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000

| Survey | MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|---------------------|--------------------|-------------------|
|        | 14,976.0     | 90.10      | 0.52                 | 9,566.2       | 5,404.8       | 571.8         | 5,435.0                    | 6.04                   | 1.91                | 597,476.62         | 806,142.21        |
|        | 15,071.0     | 91.30      | 0.87                 | 9,565.0       | 5,499.8       | 573.0         | 5,529.6                    | 5.95                   | 1.32                | 597,571.60         | 806,143.36        |
|        | 15,165.0     | 92.30      | 1.22                 | 9,562.1       | 5,593.7       | 574.7         | 5,623.2                    | 5.87                   | 1.13                | 597,665.54         | 806,145.08        |
|        | 15,259.0     | 90.80      | 359.90               | 9,559.5       | 5,687.7       | 575.6         | 5,716.7                    | 5.78                   | 2.13                | 597,759.50         | 806,145.99        |
|        | 15,354.0     | 88.70      | 358.76               | 9,559.9       | 5,782.7       | 574.5         | 5,811.1                    | 5.67                   | 2.52                | 597,854.48         | 806,144.88        |
|        | 15,448.0     | 89.80      | 359.64               | 9,561.2       | 5,876.7       | 573.2         | 5,904.5                    | 5.57                   | 1.50                | 597,948.46         | 806,143.57        |
|        | 15,542.0     | 90.80      | 359.64               | 9,560.7       | 5,970.7       | 572.6         | 5,998.1                    | 5.48                   | 1.06                | 598,042.46         | 806,142.98        |
|        | 15,637.0     | 90.80      | 359.20               | 9,559.4       | 6,065.6       | 571.6         | 6,092.5                    | 5.38                   | 0.46                | 598,137.44         | 806,142.02        |
|        | 15,732.0     | 92.00      | 359.37               | 9,557.0       | 6,160.6       | 570.4         | 6,187.0                    | 5.29                   | 1.28                | 598,232.41         | 806,140.83        |
|        | 15,827.0     | 90.00      | 0.69                 | 9,555.4       | 6,255.6       | 570.5         | 6,281.5                    | 5.21                   | 2.52                | 598,327.39         | 806,140.88        |
|        | 15,921.0     | 88.00      | 359.37               | 9,557.0       | 6,349.6       | 570.5         | 6,375.1                    | 5.13                   | 2.55                | 598,421.36         | 806,140.93        |
|        | 16,016.0     | 89.90      | 359.81               | 9,558.8       | 6,444.5       | 569.9         | 6,469.7                    | 5.05                   | 2.05                | 598,516.34         | 806,140.25        |
|        | 16,110.0     | 88.30      | 358.76               | 9,560.2       | 6,538.5       | 568.7         | 6,563.2                    | 4.97                   | 2.04                | 598,610.32         | 806,139.08        |
|        | 16,205.0     | 91.80      | 0.61                 | 9,560.2       | 6,633.5       | 568.2         | 6,657.8                    | 4.90                   | 4.17                | 598,705.30         | 806,138.56        |
|        | 16,300.0     | 90.70      | 359.73               | 9,558.1       | 6,728.5       | 568.4         | 6,752.4                    | 4.83                   | 1.48                | 598,800.27         | 806,138.84        |
|        | 16,395.0     | 91.70      | 359.46               | 9,556.1       | 6,823.4       | 567.8         | 6,847.0                    | 4.76                   | 1.09                | 598,895.25         | 806,138.17        |
|        | 16,489.0     | 90.70      | 358.67               | 9,554.1       | 6,917.4       | 566.2         | 6,940.5                    | 4.68                   | 1.36                | 598,989.21         | 806,136.63        |
|        | 16,583.0     | 87.90      | 358.14               | 9,555.3       | 7,011.4       | 563.6         | 7,034.0                    | 4.60                   | 3.03                | 599,083.16         | 806,134.02        |
|        | 16,678.0     | 88.70      | 358.41               | 9,558.1       | 7,106.3       | 560.8         | 7,128.4                    | 4.51                   | 0.89                | 599,178.07         | 806,131.16        |
|        | 16,773.0     | 90.00      | 358.32               | 9,559.2       | 7,201.2       | 558.1         | 7,222.8                    | 4.43                   | 1.37                | 599,273.03         | 806,128.45        |
|        | 16,868.0     | 90.70      | 358.14               | 9,558.6       | 7,296.2       | 555.1         | 7,317.3                    | 4.35                   | 0.76                | 599,367.98         | 806,125.52        |
|        | 16,961.0     | 91.00      | 359.81               | 9,557.2       | 7,389.2       | 553.5         | 7,409.8                    | 4.28                   | 1.82                | 599,460.95         | 806,123.85        |
|        | 17,056.0     | 89.20      | 359.02               | 9,557.0       | 7,484.1       | 552.5         | 7,504.5                    | 4.22                   | 2.07                | 599,555.94         | 806,122.88        |
|        | 17,150.0     | 92.00      | 2.19                 | 9,556.1       | 7,578.1       | 553.5         | 7,598.3                    | 4.18                   | 4.50                | 599,649.91         | 806,123.87        |
|        | 17,244.0     | 90.30      | 0.87                 | 9,554.2       | 7,672.1       | 556.0         | 7,692.2                    | 4.14                   | 2.29                | 599,743.85         | 806,126.38        |
|        | 17,338.0     | 90.90      | 1.13                 | 9,553.2       | 7,766.0       | 557.6         | 7,786.0                    | 4.11                   | 0.70                | 599,837.83         | 806,128.02        |
|        | 17,433.0     | 89.80      | 1.22                 | 9,552.6       | 7,861.0       | 559.6         | 7,880.9                    | 4.07                   | 1.16                | 599,932.81         | 806,129.97        |



# Stryker Energy Directional Services

Survey Report Landscape



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:**  
Well Hereford 29/20 B1PA St Com #1H  
3744+28 @ 3772.0usft (Patterson 217)  
3744+28 @ 3772.0usft (Patterson 217)  
**MD Reference:** Grid  
**North Reference:** Minimum Curvature  
**Survey Calculation Method:** EDM5000  
**Database:**

## Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | EW<br>(usft) | Closure Distance<br>(usft) | Closeure Azimuth<br>(°) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|---------------|--------------|----------------------------|-------------------------|---------------------|--------------------|-------------------|
| 17,527.0     | 88.90      | 359.99               | 9,553.7       | 7,955.0       | 560.6        | 7,974.7                    | 4.03                    | 1.62                | 600,026.79         | 806,130.96        |
| 17,622.0     | 88.00      | 359.64               | 9,556.2       | 8,050.0       | 560.3        | 8,069.4                    | 3.98                    | 1.02                | 600,121.76         | 806,130.66        |
| 17,716.0     | 92.00      | 1.40                 | 9,556.2       | 8,143.9       | 561.1        | 8,163.2                    | 3.94                    | 4.65                | 600,215.73         | 806,131.51        |
| 17,810.0     | 93.10      | 1.75                 | 9,552.1       | 8,237.8       | 563.7        | 8,257.1                    | 3.91                    | 1.23                | 600,309.60         | 806,134.09        |
| 17,905.0     | 91.30      | 1.31                 | 9,548.4       | 8,332.7       | 566.2        | 8,351.9                    | 3.89                    | 1.95                | 600,404.49         | 806,136.63        |
| 17,999.0     | 89.80      | 0.78                 | 9,547.5       | 8,426.7       | 567.9        | 8,445.8                    | 3.86                    | 1.69                | 600,498.47         | 806,138.34        |
| 18,092.0     | 88.40      | 0.52                 | 9,549.0       | 8,519.7       | 569.0        | 8,538.6                    | 3.82                    | 1.53                | 600,591.45         | 806,139.39        |
| 18,187.0     | 88.60      | 0.87                 | 9,551.5       | 8,614.6       | 570.1        | 8,633.5                    | 3.79                    | 0.42                | 600,686.41         | 806,140.55        |
| 18,282.0     | 89.20      | 0.78                 | 9,553.3       | 8,709.6       | 571.5        | 8,728.3                    | 3.75                    | 0.64                | 600,781.38         | 806,141.91        |
| 18,377.0     | 88.10      | 0.08                 | 9,555.5       | 8,804.6       | 572.2        | 8,823.1                    | 3.72                    | 1.37                | 600,876.35         | 806,142.63        |
| 18,471.0     | 86.50      | 359.11               | 9,559.9       | 8,898.4       | 571.6        | 8,916.8                    | 3.68                    | 1.99                | 600,970.24         | 806,141.96        |
| 18,565.0     | 89.00      | 359.73               | 9,563.6       | 8,992.4       | 570.6        | 9,010.4                    | 3.63                    | 2.74                | 601,064.16         | 806,141.01        |
| 18,660.0     | 89.70      | 0.61                 | 9,564.7       | 9,087.3       | 570.9        | 9,105.3                    | 3.59                    | 1.18                | 601,159.15         | 806,141.30        |
| 18,753.0     | 90.60      | 0.52                 | 9,564.5       | 9,180.3       | 571.8        | 9,198.1                    | 3.56                    | 0.97                | 601,252.14         | 806,142.21        |
| 18,847.0     | 90.80      | 359.73               | 9,563.3       | 9,274.3       | 572.0        | 9,292.0                    | 3.53                    | 0.87                | 601,346.13         | 806,142.42        |
| 18,940.0     | 88.40      | 357.53               | 9,564.0       | 9,367.3       | 569.8        | 9,384.6                    | 3.48                    | 3.50                | 601,439.09         | 806,140.19        |
| 19,034.0     | 92.10      | 358.50               | 9,563.6       | 9,461.2       | 566.5        | 9,478.2                    | 3.43                    | 4.07                | 601,533.02         | 806,136.94        |
| 19,127.0     | 92.20      | 359.55               | 9,560.1       | 9,554.1       | 565.0        | 9,570.8                    | 3.38                    | 1.13                | 601,625.94         | 806,135.36        |
| 19,221.0     | 92.60      | 359.29               | 9,556.1       | 9,648.1       | 564.0        | 9,664.5                    | 3.35                    | 0.51                | 601,719.85         | 806,134.41        |
| 19,313.0     | 89.80      | 358.14               | 9,554.2       | 9,740.0       | 561.9        | 9,756.2                    | 3.30                    | 3.29                | 601,811.80         | 806,132.34        |
| 19,408.0     | 93.00      | 359.46               | 9,551.9       | 9,834.9       | 560.0        | 9,850.9                    | 3.26                    | 3.64                | 601,906.73         | 806,130.35        |
| 19,502.0     | 88.10      | 356.03               | 9,551.0       | 9,928.8       | 556.3        | 9,944.4                    | 3.21                    | 6.36                | 602,000.61         | 806,126.66        |
| 19,596.0     | 91.60      | 358.23               | 9,551.2       | 10,022.7      | 551.6        | 10,037.8                   | 3.15                    | 4.40                | 602,094.47         | 806,121.95        |
| 19,690.0     | 91.20      | 358.06               | 9,548.9       | 10,116.6      | 548.5        | 10,131.5                   | 3.10                    | 0.46                | 602,188.40         | 806,118.91        |
| 19,784.0     | 89.10      | 356.39               | 9,548.7       | 10,210.5      | 544.0        | 10,225.0                   | 3.05                    | 2.85                | 602,282.28         | 806,114.36        |
| 19,824.0     | 89.60      | 357.40               | 9,549.1       | 10,250.4      | 541.8        | 10,264.7                   | 3.03                    | 2.82                | 602,322.22         | 806,112.19        |



# Stryker Energy Directional Services

## Survey Report Landscape



**Company:** Mewbourne Oil Company  
**Project:** Lea County N. M. Nad (83)  
**Site:** Section 29 20-19S-35E Hereford  
**Well:** Hereford 29/20 B1PA St Com #1H  
**Wellbore:** Original Hole  
**Design:** As Drilled

**Local Co-ordinate Reference:** Well Hereford 29/20 B1PA St Com #1H  
**TVD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**MD Reference:** 3744+28 @ 3772.0usft (Patterson 217)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000

### Survey

| MD<br>(usft)              | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | D Leg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|---------------------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|----------------------|--------------------|-------------------|
| 19,880.0                  | 89.60      | 357.40               | 9,549.5       | 10,306.4      | 539.3         | 10,320.5                   | 3.00                   | 0.00                 | 602,378.16         | 806,109.65        |
| 19880.0' Projected to bit |            |                      |               |               |               |                            |                        |                      |                    |                   |

### Design Annotations

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                   |
|-----------------------------|-----------------------------|-------------------|-----------------|---------------------------|
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                           |
| 1,871.0                     | 1,870.9                     | -3.5              | 14.1            | First Stryker Surveys     |
| 19,880.0                    | 9,549.5                     | 10,306.4          | 539.3           | 19880.0' Projected to bit |

Checked By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_





COMPANY: Mewbourne Oil Company  
WELL: Hereford 29/20 B1PA St Com #1H  
COUNTY: Lea County N. M. Nad (83)  
DATUM: North American Datum 1983  
RIG: Patterson 217



GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 4.23°

GEODETIC ZONE: New Mexico Eastern Zone  
3744+28 @ 3772.0usft (Patterson 217)  
GROUND ELEVATION: 3744.0

| +N/-S | +E/-W | Northing  | Easting   | Latitude         | Longitude         | Slot |
|-------|-------|-----------|-----------|------------------|-------------------|------|
| 0.0   | 0.0   | 592071.80 | 805570.40 | 32° 37' 29.000 N | 103° 28' 30.286 W |      |

PLAN SECTIONS

| Sec | MD      | Inc   | Azi    | TVD    | +N/-S   | +E/-W | Dleg  | TFace  | VSect   | Target    |
|-----|---------|-------|--------|--------|---------|-------|-------|--------|---------|-----------|
| 1   | 0.0     | 0.00  | 0.00   | 0.0    | 0.0     | 0.0   | 0.00  | 0.00   | 0.0     |           |
| 2   | 1930.0  | 0.00  | 0.00   | 1930.0 | 0.0     | 0.0   | 0.00  | 0.00   | 0.0     |           |
| 3   | 2206.2  | 5.52  | 106.95 | 2205.8 | -3.9    | 12.7  | 2.00  | 106.95 | -3.2    |           |
| 4   | 8880.2  | 5.52  | 106.95 | 8848.7 | -191.1  | 627.3 | 0.00  | 0.00   | -157.0  |           |
| 5   | 9158.3  | 0.00  | 0.00   | 9124.5 | -195.0  | 640.0 | 2.00  | 180.00 | -160.1  | BB B1PA   |
| 6   | 9907.8  | 90.17 | 359.55 | 9602.0 | 283.9   | 636.2 | 12.00 | 359.55 | 317.8   |           |
| 7   | 19919.9 | 90.17 | 359.55 | 9572.0 | 10295.6 | 558.9 | 0.00  | 0.00   | 10310.7 | PBHL B1PA |

SHL: 205' FSL; 1300' FEL  
Section 29-19S-35E  
PBHL: 100 FNL; 660' FEL  
Section 20-19S-35E

