

# MEWBOURNE OIL COMPANY

Site: Paducah /-0  
Well: W1FC Fed Com 3H  
Wellbore: OH  
Design: Plan #1  
Lat: 32.058009  
Long: -103.717180  
GL: 3248.00  
KB: RKB=27' @ 3275.00usft (Patterson 244)



Azimuths to Grid North  
True North: -0.33°  
Magnetic North: 6.46°  
  
Magnetic Field  
Strength: 47618.1 uT  
Dip Angle: 59.86°  
Date: 06/25/2019  
Model: IGRF2015

## WELL DETAILS: W1FC Fed Com 3H

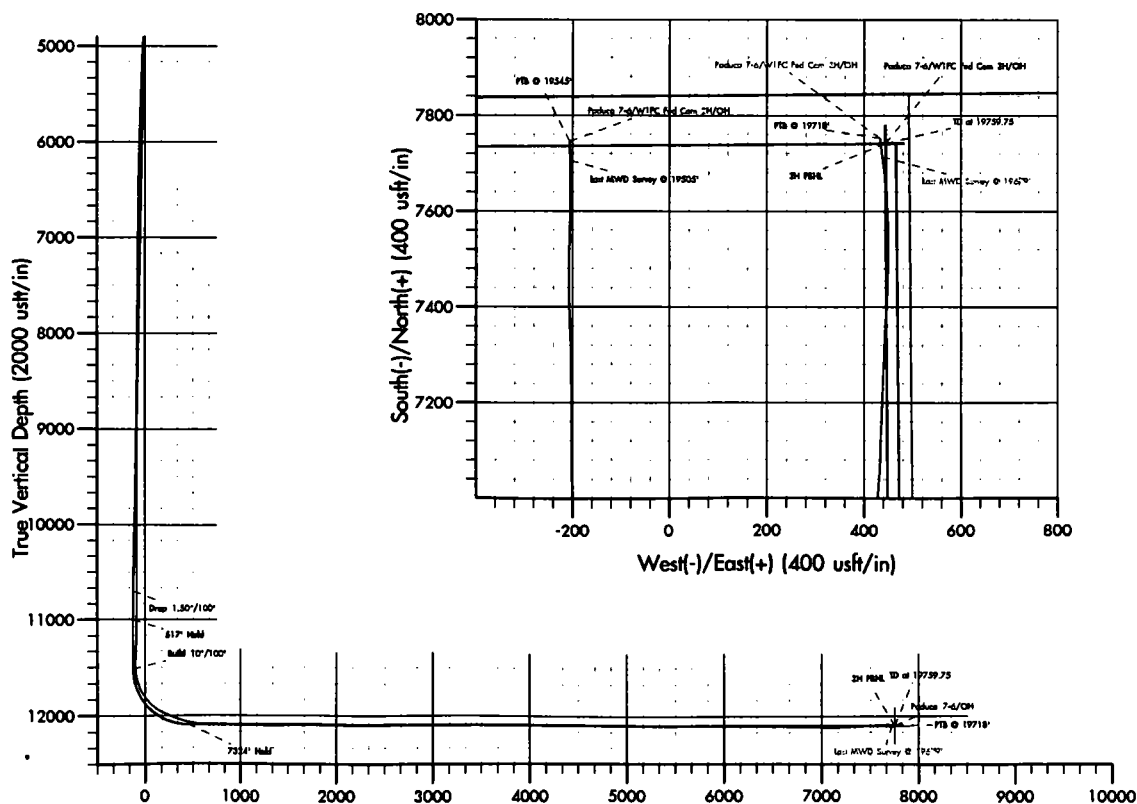
| +N/-S | +E/-W | Northing  | Easting   | Latitude  | Longitude   |
|-------|-------|-----------|-----------|-----------|-------------|
| 0.00  | 0.00  | 385386.20 | 732219.10 | 32.058009 | -103.717180 |

## WELLBORE TARGET DETAILS (LAT/LONG)

| Name    | TVD      | +N/-S   | +E/-W  | Northing  | Easting   | Shape Point |
|---------|----------|---------|--------|-----------|-----------|-------------|
| 3H PBHL | 12100.00 | 7741.60 | 444.20 | 393127.80 | 732663.30 | Point       |

## SECTION DETAILS

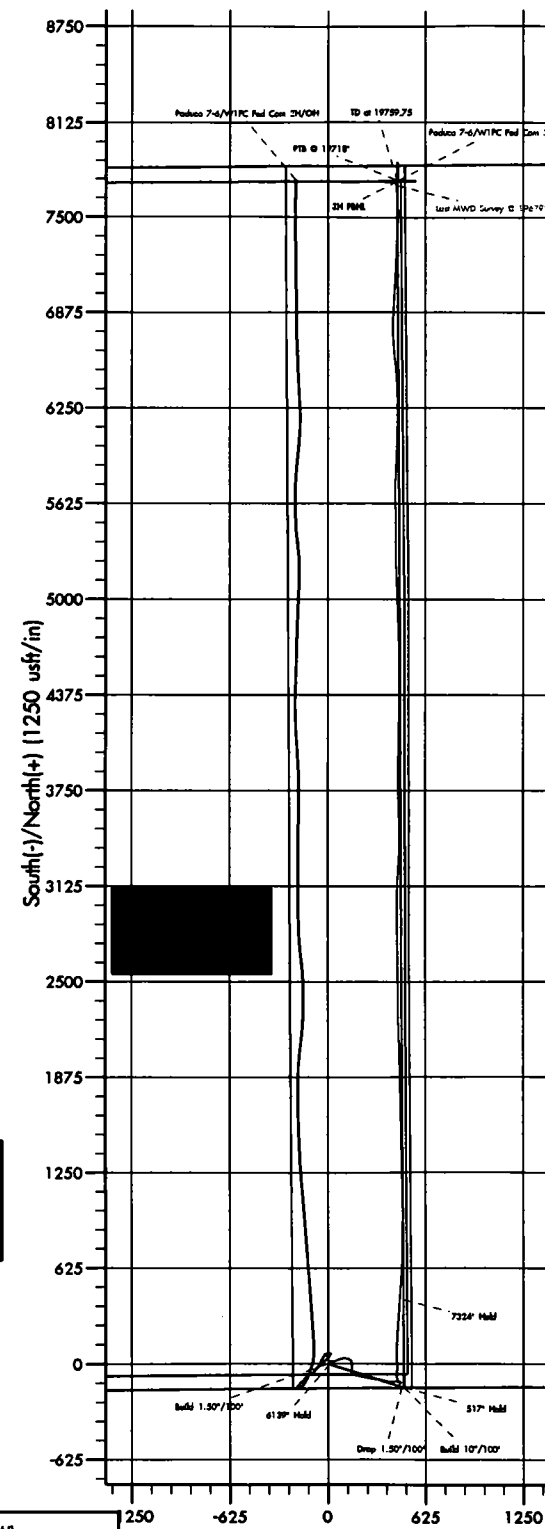
| MD       | Inc   | Azi    | TVD      | +N/-S   | +E/-W  | Dleg  | TFace  | VFace   | Annotation       |
|----------|-------|--------|----------|---------|--------|-------|--------|---------|------------------|
| 0.00     | 0.00  | 0.00   | 0.00     | 0.00    | 0.00   | 0.00  | 0.00   | 0.00    |                  |
| 4275.00  | 0.00  | 0.00   | 4275.00  | 0.00    | 0.00   | 0.00  | 0.00   | 0.00    | Build 1.50°/100' |
| 4578.04  | 4.55  | 107.58 | 4577.72  | -3.63   | 11.45  | 1.50  | 107.58 | -2.97   | 6139° Hold       |
| 10716.91 | 4.55  | 107.58 | 10697.28 | -150.60 | 475.24 | 0.00  | 0.00   | -123.13 | Drop 1.50°/100'  |
| 11019.94 | 0.00  | 0.00   | 11000.00 | -154.23 | 486.69 | 1.50  | 180.00 | -126.10 | 517° Hold        |
| 11536.76 | 0.00  | 0.00   | 11516.82 | -154.23 | 486.69 | 0.00  | 0.00   | -126.10 | Build 10°/100'   |
| 12435.96 | 89.92 | 359.69 | 12089.77 | 417.92  | 483.61 | 10.00 | 359.69 | 444.94  | 7324° Hold       |
| 19759.75 | 89.92 | 359.69 | 12100.00 | 7741.60 | 444.20 | 0.00  | 0.00   | 7754.33 | TD at 19759.75   |



Formation Tops  
No formation data is available

3H PBHL:  
100' FNL & 2310' FWL

3H SHL  
2500' FNL & 1825' FWL





**MEWBOURNE**  
**OIL COMPANY**

## **Mewbourne Oil Company**

Lea Co., NM (NAD 83)

Paduca 7-6

W1FC Fed Com 3H

OH

Design: OH

## **Standard Survey Report**

17 September, 2019



**L T I T U D E**  
ENERGY PARTNERS

|                  |                       |                                     |                                       |
|------------------|-----------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company | <b>Local Co-ordinate Reference:</b> | Well W1FC Fed Com 3H                  |
| <b>Project:</b>  | Lea Co., NM (NAD 83)  | <b>TVD Reference:</b>               | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Site:</b>     | Paduca 7-6            | <b>MD Reference:</b>                | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Well:</b>     | W1FC Fed Com 3H       | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db             |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Lea Co., NM (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   |                      |                |

|                       |           |              |                 |                   |             |
|-----------------------|-----------|--------------|-----------------|-------------------|-------------|
| Site                  |           | Paduca 7-6   |                 |                   |             |
| Site Position:        |           | Northing:    | 385,386.20 usft | Latitude:         | 32.058009   |
| From:                 | Map       | Easting:     | 732,219.10 usft | Longitude:        | -103.717180 |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13-3/16 "       | Grid Convergence: | 0.33 °      |

|                      |                 |           |                     |                 |               |               |
|----------------------|-----------------|-----------|---------------------|-----------------|---------------|---------------|
| Well                 | W1FC Fed Com 3H |           |                     |                 |               |               |
| Well Position        | +N/-S           | 0.00 usft | Northing:           | 385,386.20 usft | Latitude:     | 32.058009     |
|                      | +E/-W           | 0.00 usft | Easting:            | 732,219.10 usft | Longitude:    | -103.717180   |
| Position Uncertainty |                 | 0.00 usft | Wellhead Elevation: | usft            | Ground Level: | 3,248.00 usft |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | OH                |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2015          | 06/25/19           | 6.79                   | 59.86                | 47,618.09922175            |

|                          |                                |                     |                     |                      |      |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| <b>Design</b>            | OH                             |                     |                     |                      |      |
| <b>Audit Notes:</b>      |                                |                     |                     |                      |      |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>       | ACTUAL              | <b>Tie On Depth:</b> | 0.00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Direction (°)</b> |      |
|                          | 0.00                           | 0.00                | 0.00                | 3.28                 |      |

|                       |                      |                          |                  |                     |
|-----------------------|----------------------|--------------------------|------------------|---------------------|
| <b>Survey Program</b> | <b>Date</b> 09/17/19 |                          |                  |                     |
| <b>From (usft)</b>    | <b>To (usft)</b>     | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b>  |
| 181.00                | 19,718.00            | MWD Survey (OH)          | MWD              | OWSG MWD - Standard |

| <b>Survey</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
|-------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)   | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.00                    | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 100.00                  | 0.50            | 0.83        | 100.00                | 0.43         | 0.01         | 0.43                    | 0.50                    | 0.50                   | 0.00                  |
| 181.00                  | 0.90            | 0.83        | 180.99                | 1.42         | 0.02         | 1.42                    | 0.50                    | 0.50                   | 0.00                  |
| <b>First MWD Survey</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 200.00                  | 0.80            | 3.10        | 199.99                | 1.70         | 0.03         | 1.70                    | 0.53                    | -0.50                  | 11.95                 |
| 300.00                  | 0.36            | 34.52       | 299.99                | 2.66         | 0.25         | 2.67                    | 0.53                    | -0.44                  | 31.42                 |
| 400.00                  | 0.42            | 119.99      | 399.98                | 2.74         | 0.74         | 2.78                    | 0.53                    | 0.06                   | 85.48                 |
| 500.00                  | 0.57            | 77.25       | 499.98                | 2.52         | 1.54         | 2.61                    | 0.38                    | 0.14                   | -42.74                |
| 600.00                  | 0.88            | 47.54       | 599.97                | 3.20         | 2.65         | 3.34                    | 0.48                    | 0.32                   | -29.71                |
| 700.00                  | 0.88            | 23.81       | 699.96                | 4.42         | 3.53         | 4.62                    | 0.36                    | 0.00                   | -23.73                |
| 800.00                  | 1.02            | 24.25       | 799.95                | 5.95         | 4.14         | 6.18                    | 0.14                    | 0.14                   | 0.44                  |

|                  |                       |                                     |                                       |
|------------------|-----------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company | <b>Local Co-ordinate Reference:</b> | Well W1FC Fed Com 3H                  |
| <b>Project:</b>  | Lea Co., NM (NAD 83)  | <b>TVD Reference:</b>               | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Site:</b>     | Paduca 7-6            | <b>MD Reference:</b>                | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Well:</b>     | W1FC Fed Com 3H       | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db             |

**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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 900.00                | 1.19            | 29.52       | 899.93                | 7.67         | 5.01         | 7.94                    | 0.19                    | 0.17                   | 5.27                  |
| 1,000.00              | 1.10            | 27.23       | 999.91                | 9.43         | 5.98         | 9.76                    | 0.10                    | -0.09                  | -2.29                 |
| 1,100.00              | 1.00            | 23.87       | 1,099.89              | 11.09        | 6.77         | 11.46                   | 0.12                    | -0.10                  | -3.36                 |
| 1,200.00              | 1.10            | 47.46       | 1,199.87              | 12.54        | 7.83         | 12.97                   | 0.44                    | 0.10                   | 23.59                 |
| 1,300.00              | 1.14            | 64.63       | 1,299.85              | 13.64        | 9.51         | 14.16                   | 0.34                    | 0.04                   | 17.18                 |
| 1,400.00              | 1.08            | 71.16       | 1,399.83              | 14.27        | 11.35        | 14.90                   | 0.14                    | -0.06                  | 6.53                  |
| 1,500.00              | 1.02            | 57.26       | 1,499.82              | 15.08        | 12.96        | 15.80                   | 0.26                    | -0.06                  | -13.90                |
| 1,600.00              | 0.97            | 72.33       | 1,599.80              | 15.80        | 14.64        | 16.61                   | 0.26                    | -0.05                  | 15.07                 |
| 1,700.00              | 0.65            | 48.18       | 1,699.79              | 16.40        | 15.83        | 17.28                   | 0.46                    | -0.32                  | -24.15                |
| 1,800.00              | 0.71            | 55.56       | 1,799.79              | 17.13        | 16.76        | 18.06                   | 0.11                    | 0.06                   | 7.39                  |
| 1,900.00              | 0.57            | 27.10       | 1,899.78              | 17.92        | 17.54        | 18.89                   | 0.34                    | -0.14                  | -28.46                |
| 2,000.00              | 0.17            | 72.69       | 1,999.78              | 18.39        | 17.90        | 19.38                   | 0.47                    | -0.40                  | 45.59                 |
| 2,100.00              | 0.12            | 83.65       | 2,099.78              | 18.45        | 18.13        | 19.46                   | 0.06                    | -0.05                  | 10.96                 |
| 2,200.00              | 0.18            | 114.79      | 2,199.78              | 18.38        | 18.37        | 19.40                   | 0.10                    | 0.06                   | 31.14                 |
| 2,300.00              | 0.34            | 103.51      | 2,299.78              | 18.26        | 18.76        | 19.30                   | 0.17                    | 0.17                   | -11.27                |
| 2,400.00              | 0.65            | 100.47      | 2,399.77              | 18.08        | 19.64        | 19.18                   | 0.31                    | 0.31                   | -3.04                 |
| 2,500.00              | 0.83            | 115.19      | 2,499.76              | 17.78        | 20.90        | 18.95                   | 0.26                    | 0.18                   | 14.72                 |
| 2,600.00              | 1.18            | 133.09      | 2,599.75              | 16.71        | 22.26        | 17.96                   | 0.46                    | 0.34                   | 17.90                 |
| 2,700.00              | 1.20            | 140.39      | 2,699.72              | 15.12        | 23.81        | 16.46                   | 0.15                    | 0.02                   | 7.31                  |
| 2,800.00              | 1.43            | 106.61      | 2,799.70              | 13.80        | 25.33        | 15.23                   | 0.79                    | 0.23                   | -33.78                |
| 2,900.00              | 3.45            | 76.38       | 2,899.62              | 14.04        | 29.24        | 15.69                   | 2.33                    | 2.02                   | -30.23                |
| 3,000.00              | 5.68            | 70.06       | 2,999.29              | 16.50        | 36.90        | 18.59                   | 2.28                    | 2.23                   | -6.32                 |
| 3,100.00              | 5.82            | 68.40       | 3,098.75              | 20.19        | 46.56        | 22.82                   | 0.21                    | 0.13                   | -1.66                 |
| 3,200.00              | 4.45            | 65.41       | 3,198.34              | 23.70        | 54.89        | 26.80                   | 1.39                    | -1.37                  | -3.00                 |
| 3,300.00              | 5.46            | 63.27       | 3,297.97              | 27.45        | 62.61        | 30.99                   | 1.03                    | 1.01                   | -2.14                 |
| 3,400.00              | 5.01            | 67.97       | 3,397.53              | 31.30        | 71.08        | 35.31                   | 0.62                    | -0.45                  | 4.71                  |
| 3,500.00              | 2.65            | 76.41       | 3,497.32              | 33.36        | 77.11        | 37.72                   | 2.42                    | -2.36                  | 8.44                  |
| 3,600.00              | 2.72            | 79.82       | 3,597.22              | 34.16        | 81.58        | 38.77                   | 0.17                    | 0.07                   | 3.41                  |
| 3,700.00              | 3.63            | 74.04       | 3,697.06              | 35.60        | 86.90        | 40.51                   | 0.97                    | 0.91                   | -5.78                 |
| 3,800.00              | 4.50            | 79.73       | 3,796.81              | 37.22        | 93.86        | 42.53                   | 0.96                    | 0.87                   | 5.69                  |
| 3,900.00              | 5.14            | 86.58       | 3,896.45              | 38.25        | 102.22       | 44.04                   | 0.86                    | 0.63                   | 6.85                  |
| 4,000.00              | 5.72            | 96.39       | 3,996.00              | 38.09        | 111.68       | 44.41                   | 1.10                    | 0.59                   | 9.81                  |
| 4,100.00              | 6.79            | 108.20      | 4,095.42              | 35.78        | 122.13       | 42.71                   | 1.67                    | 1.07                   | 11.81                 |
| 4,200.00              | 6.93            | 116.25      | 4,194.64              | 30.98        | 133.64       | 38.57                   | 0.97                    | 0.14                   | 8.05                  |
| 4,300.00              | 5.00            | 137.93      | 4,294.06              | 25.17        | 142.51       | 33.29                   | 2.93                    | -1.93                  | 21.68                 |
| 4,400.00              | 4.10            | 163.26      | 4,393.77              | 18.35        | 145.99       | 26.67                   | 2.18                    | -0.90                  | 25.33                 |
| 4,500.00              | 4.38            | 166.20      | 4,493.50              | 11.28        | 147.59       | 19.71                   | 0.36                    | 0.29                   | 2.94                  |
| 4,600.00              | 5.23            | 165.32      | 4,593.16              | 3.25         | 149.69       | 11.81                   | 0.85                    | 0.85                   | -0.88                 |
| 4,700.00              | 6.20            | 170.98      | 4,692.66              | -6.48        | 151.80       | 2.22                    | 1.12                    | 0.97                   | 5.66                  |
| 4,800.00              | 6.23            | 180.36      | 4,792.06              | -17.37       | 152.68       | -8.60                   | 1.02                    | 0.03                   | 9.38                  |
| 4,900.00              | 4.63            | 190.25      | 4,891.59              | -26.90       | 151.90       | -18.16                  | 1.85                    | -1.60                  | 9.89                  |
| 5,000.00              | 3.06            | 194.57      | 4,991.37              | -33.43       | 150.49       | -24.76                  | 1.59                    | -1.57                  | 4.32                  |
| 5,100.00              | 2.67            | 194.95      | 5,091.24              | -38.24       | 149.23       | -29.64                  | 0.39                    | -0.39                  | 0.39                  |

|                  |                       |                                     |                                       |
|------------------|-----------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company | <b>Local Co-ordinate Reference:</b> | Well W1FC Fed Com 3H                  |
| <b>Project:</b>  | Lea Co., NM (NAD 83)  | <b>TVD Reference:</b>               | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Site:</b>     | Paduca 7-6            | <b>MD Reference:</b>                | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Well:</b>     | W1FC Fed Com 3H       | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db             |

| <b>Survey</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 5,200.00              | 2.57            | 196.23      | 5,191.14              | -42.62       | 148.00       | -34.08                  | 0.11                    | -0.10                  | 1.28                  |
| 5,300.00              | 2.51            | 193.04      | 5,291.04              | -46.98       | 146.74       | -38.50                  | 0.16                    | -0.07                  | -3.19                 |
| 5,400.00              | 2.07            | 177.24      | 5,390.96              | -50.88       | 146.49       | -42.42                  | 0.77                    | -0.44                  | -15.80                |
| 5,500.00              | 1.83            | 176.50      | 5,490.90              | -54.25       | 146.68       | -45.77                  | 0.24                    | -0.23                  | -0.74                 |
| 5,600.00              | 1.88            | 163.81      | 5,590.85              | -57.35       | 147.02       | -48.85                  | 0.41                    | 0.05                   | -12.69                |
| 5,700.00              | 2.14            | 145.39      | 5,690.79              | -60.56       | 148.69       | -51.96                  | 0.69                    | 0.26                   | -18.42                |
| 5,800.00              | 2.59            | 126.63      | 5,790.71              | -63.42       | 151.34       | -54.66                  | 0.89                    | 0.45                   | -18.77                |
| 5,900.00              | 3.10            | 115.51      | 5,890.58              | -65.96       | 155.84       | -56.94                  | 0.75                    | 0.51                   | -11.12                |
| 6,000.00              | 3.10            | 110.21      | 5,990.43              | -68.06       | 160.85       | -58.75                  | 0.29                    | -0.01                  | -5.29                 |
| 6,100.00              | 3.07            | 107.47      | 6,090.28              | -69.77       | 165.95       | -60.16                  | 0.15                    | -0.02                  | -2.74                 |
| 6,200.00              | 3.17            | 108.23      | 6,190.14              | -71.40       | 171.12       | -61.50                  | 0.10                    | 0.10                   | 0.76                  |
| 6,300.00              | 3.30            | 106.45      | 6,289.98              | -73.11       | 176.49       | -62.89                  | 0.16                    | 0.13                   | -1.78                 |
| 6,400.00              | 3.70            | 106.26      | 6,389.79              | -74.81       | 182.32       | -64.25                  | 0.40                    | 0.40                   | -0.19                 |
| 6,500.00              | 4.04            | 106.31      | 6,489.56              | -76.70       | 188.80       | -65.77                  | 0.34                    | 0.34                   | 0.05                  |
| 6,600.00              | 4.42            | 103.10      | 6,589.29              | -78.55       | 195.97       | -67.20                  | 0.45                    | 0.38                   | -3.21                 |
| 6,700.00              | 4.44            | 104.50      | 6,688.99              | -80.41       | 203.47       | -68.64                  | 0.11                    | 0.02                   | 1.39                  |
| 6,800.00              | 4.54            | 103.31      | 6,788.69              | -82.29       | 211.01       | -70.08                  | 0.13                    | 0.10                   | -1.19                 |
| 6,900.00              | 4.82            | 102.19      | 6,888.35              | -84.07       | 219.08       | -71.40                  | 0.30                    | 0.28                   | -1.12                 |
| 7,000.00              | 4.65            | 101.99      | 6,988.01              | -85.86       | 227.12       | -72.73                  | 0.17                    | -0.17                  | -0.21                 |
| 7,100.00              | 4.44            | 100.29      | 7,087.69              | -87.34       | 234.96       | -73.75                  | 0.25                    | -0.21                  | -1.69                 |
| 7,200.00              | 4.22            | 100.58      | 7,187.41              | -88.72       | 242.32       | -74.71                  | 0.23                    | -0.23                  | 0.28                  |
| 7,300.00              | 4.31            | 101.35      | 7,287.13              | -90.08       | 249.56       | -75.65                  | 0.11                    | 0.10                   | 0.78                  |
| 7,400.00              | 4.17            | 103.50      | 7,386.85              | -91.70       | 256.93       | -76.85                  | 0.21                    | -0.14                  | 2.15                  |
| 7,500.00              | 3.84            | 100.77      | 7,486.61              | -93.27       | 263.70       | -78.03                  | 0.38                    | -0.33                  | -2.73                 |
| 7,600.00              | 4.13            | 98.40       | 7,586.37              | -94.34       | 270.43       | -78.71                  | 0.33                    | 0.29                   | -2.37                 |
| 7,700.00              | 4.47            | 97.88       | 7,686.09              | -95.41       | 277.90       | -79.35                  | 0.34                    | 0.34                   | -0.52                 |
| 7,800.00              | 4.56            | 99.28       | 7,785.78              | -96.56       | 285.71       | -80.06                  | 0.14                    | 0.08                   | 1.40                  |
| 7,900.00              | 4.26            | 96.62       | 7,885.48              | -97.67       | 293.34       | -80.72                  | 0.36                    | -0.30                  | -2.66                 |
| 8,000.00              | 3.83            | 101.83      | 7,985.23              | -98.76       | 300.30       | -81.41                  | 0.56                    | -0.43                  | 5.21                  |
| 8,100.00              | 3.38            | 101.73      | 8,085.03              | -100.03      | 306.46       | -82.34                  | 0.45                    | -0.45                  | -0.10                 |
| 8,200.00              | 2.93            | 104.30      | 8,184.88              | -101.25      | 311.79       | -83.24                  | 0.47                    | -0.45                  | 2.57                  |
| 8,300.00              | 2.88            | 107.26      | 8,284.76              | -102.67      | 316.61       | -84.39                  | 0.16                    | -0.05                  | 2.96                  |
| 8,400.00              | 2.93            | 103.57      | 8,384.62              | -104.02      | 321.57       | -85.45                  | 0.19                    | 0.05                   | -3.69                 |
| 8,500.00              | 2.63            | 101.01      | 8,484.50              | -105.05      | 326.33       | -86.21                  | 0.32                    | -0.30                  | -2.56                 |
| 8,600.00              | 2.33            | 97.31       | 8,584.41              | -105.77      | 330.57       | -86.69                  | 0.34                    | -0.31                  | -3.70                 |
| 8,700.00              | 2.34            | 87.04       | 8,684.33              | -105.99      | 334.52       | -86.68                  | 0.42                    | 0.01                   | -10.27                |
| 8,800.00              | 2.31            | 87.79       | 8,784.25              | -105.55      | 338.70       | -86.00                  | 0.05                    | -0.03                  | 0.75                  |
| 8,900.00              | 2.17            | 102.31      | 8,884.17              | -105.90      | 342.52       | -86.13                  | 0.58                    | -0.13                  | 14.52                 |
| 9,000.00              | 3.08            | 100.11      | 8,984.08              | -106.91      | 346.70       | -86.90                  | 0.91                    | 0.91                   | -2.20                 |
| 9,100.00              | 3.42            | 96.33       | 9,083.90              | -107.71      | 352.60       | -87.36                  | 0.40                    | 0.34                   | -3.78                 |
| 9,200.00              | 3.35            | 100.81      | 9,183.73              | -108.50      | 358.43       | -87.82                  | 0.27                    | -0.07                  | 4.48                  |
| 9,300.00              | 2.69            | 113.88      | 9,283.58              | -109.99      | 363.55       | -89.01                  | 0.95                    | -0.66                  | 13.07                 |
| 9,400.00              | 2.88            | 103.23      | 9,383.47              | -111.60      | 368.01       | -90.36                  | 0.55                    | 0.20                   | -10.65                |

|                  |                       |                                     |                                       |
|------------------|-----------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company | <b>Local Co-ordinate Reference:</b> | Well W1FC Fed Com 3H                  |
| <b>Project:</b>  | Lea Co., NM (NAD 83)  | <b>TVD Reference:</b>               | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Site:</b>     | Paduca 7-6            | <b>MD Reference:</b>                | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Well:</b>     | W1FC Fed Com 3H       | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db             |

**Survey**

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| 9,500.00                    | 4.19               | 99.88          | 9,483.28                    | -112.77         | 374.04          | -91.19                        | 1.32                          | 1.31                         | -3.35                       |
| 9,600.00                    | 3.98               | 97.68          | 9,583.02                    | -113.88         | 381.08          | -91.89                        | 0.27                          | -0.21                        | -2.20                       |
| 9,700.00                    | 3.65               | 91.30          | 9,682.80                    | -114.38         | 387.71          | -92.01                        | 0.54                          | -0.33                        | -6.38                       |
| 9,800.00                    | 3.43               | 87.61          | 9,782.62                    | -114.36         | 393.77          | -91.64                        | 0.31                          | -0.22                        | -3.69                       |
| 9,900.00                    | 3.78               | 85.28          | 9,882.42                    | -113.82         | 400.09          | -90.74                        | 0.38                          | 0.35                         | -2.33                       |
| 10,000.00                   | 3.73               | 91.19          | 9,982.19                    | -113.66         | 406.74          | -90.20                        | 0.39                          | -0.06                        | 5.91                        |
| 10,100.00                   | 3.38               | 94.12          | 10,082.01                   | -113.97         | 412.86          | -90.16                        | 0.39                          | -0.34                        | 2.93                        |
| 10,200.00                   | 3.14               | 93.16          | 10,181.84                   | -114.40         | 418.58          | -90.27                        | 0.25                          | -0.24                        | -0.95                       |
| 10,300.00                   | 3.07               | 92.20          | 10,281.70                   | -114.58         | 423.87          | -90.14                        | 0.08                          | -0.07                        | -0.97                       |
| 10,400.00                   | 3.25               | 88.47          | 10,381.55                   | -114.72         | 429.40          | -89.97                        | 0.27                          | 0.18                         | -3.73                       |
| 10,500.00                   | 3.50               | 87.86          | 10,481.38                   | -114.41         | 435.25          | -89.32                        | 0.25                          | 0.25                         | -0.61                       |
| 10,600.00                   | 3.67               | 89.65          | 10,581.18                   | -114.29         | 441.54          | -88.84                        | 0.21                          | 0.17                         | 1.79                        |
| 10,700.00                   | 4.26               | 92.11          | 10,680.95                   | -114.39         | 448.35          | -88.55                        | 0.61                          | 0.58                         | 2.46                        |
| 10,800.00                   | 4.23               | 104.64         | 10,780.66                   | -115.36         | 455.76          | -89.09                        | 0.93                          | -0.02                        | 12.53                       |
| 10,900.00                   | 3.39               | 118.51         | 10,880.44                   | -117.75         | 462.01          | -91.12                        | 1.24                          | -0.84                        | 13.87                       |
| 11,000.00                   | 1.94               | 136.89         | 10,980.33                   | -120.43         | 465.79          | -93.58                        | 1.66                          | -1.45                        | 18.38                       |
| 11,100.00                   | 0.87               | 195.34         | 11,080.30                   | -122.39         | 466.67          | -95.49                        | 1.66                          | -1.07                        | 58.44                       |
| 11,200.00                   | 0.81               | 229.99         | 11,180.29                   | -123.52         | 465.92          | -96.66                        | 0.50                          | -0.06                        | 34.66                       |
| 11,300.00                   | 1.22               | 231.37         | 11,280.28                   | -124.60         | 464.54          | -97.82                        | 0.41                          | 0.41                         | 1.38                        |
| 11,400.00                   | 1.60               | 226.79         | 11,380.24                   | -126.32         | 462.63          | -99.64                        | 0.40                          | 0.38                         | -4.58                       |
| 11,500.00                   | <u>1.88</u>        | 269.44         | 11,480.20                   | <u>-128.00</u>  | <u>460.46</u>   | -101.45                       | 1.29                          | 0.27                         | 42.65                       |
| 11,600.00                   | 11.29              | 321.46         | 11,579.56                   | -121.19         | 453.03          | -95.07                        | 10.24                         | 9.41                         | 52.03                       |
| 11,700.00                   | 20.38              | 347.59         | 11,675.43                   | -96.08          | 440.99          | -70.69                        | 11.34                         | 9.09                         | 26.13                       |
| 11,800.00                   | 29.84              | 4.44           | 11,766.14                   | -54.42          | 439.91          | -29.16                        | 11.77                         | 9.46                         | 16.85                       |
| 11,900.00                   | 41.50              | 357.91         | 11,847.46                   | 3.46            | 440.23          | 28.64                         | 12.25                         | 11.66                        | -6.53                       |
| 12,000.00                   | 54.60              | 358.96         | 11,914.65                   | 77.18           | 437.68          | 102.10                        | 13.13                         | 13.10                        | 1.05                        |
| 12,100.00                   | 63.74              | 4.34           | 11,964.89                   | <u>163.41</u>   | <u>441.29</u>   | 188.39                        | 10.23                         | 9.14                         | 5.38                        |
| 12,200.00                   | 67.33              | 3.88           | 12,006.30                   | 254.18          | 447.80          | 279.38                        | 3.62                          | 3.59                         | -0.47                       |
| 12,300.00                   | 72.02              | 4.13           | 12,041.36                   | 347.59          | 454.13          | 373.00                        | 4.69                          | 4.69                         | 0.25                        |
| 12,400.00                   | 76.71              | 4.08           | 12,068.14                   | 443.65          | 461.21          | 469.31                        | 4.69                          | 4.69                         | -0.05                       |
| 12,500.00                   | 83.55              | 3.97           | 12,085.77                   | 541.77          | 468.06          | 567.67                        | 6.84                          | 6.84                         | -0.12                       |
| 12,600.00                   | 89.08              | 2.43           | 12,091.89                   | 641.38          | 473.85          | 667.44                        | 5.74                          | 5.53                         | -1.54                       |
| 12,700.00                   | 89.75              | 0.96           | 12,092.49                   | 741.33          | 476.77          | 767.40                        | 1.62                          | 0.67                         | -1.47                       |
| 12,800.00                   | 89.74              | 1.22           | 12,092.93                   | 841.31          | 478.62          | 867.32                        | 0.26                          | 0.00                         | 0.26                        |
| 12,900.00                   | 89.51              | 1.00           | 12,093.63                   | 941.29          | 480.61          | 967.25                        | 0.32                          | -0.23                        | -0.22                       |
| 13,000.00                   | 89.85              | 359.87         | 12,094.11                   | 1,041.28        | 481.50          | 1,067.13                      | 1.17                          | 0.34                         | -1.12                       |
| 13,100.00                   | 89.61              | 358.32         | 12,094.61                   | 1,141.26        | 479.54          | 1,166.83                      | 1.57                          | -0.24                        | -1.55                       |
| 13,200.00                   | 89.69              | 358.59         | 12,095.34                   | 1,241.22        | 476.90          | 1,266.47                      | 0.29                          | 0.08                         | 0.27                        |
| 13,300.00                   | 89.99              | 358.56         | 12,095.45                   | 1,341.19        | 474.49          | 1,366.14                      | 0.29                          | 0.29                         | -0.03                       |
| 13,400.00                   | 89.96              | 358.47         | 12,095.62                   | 1,441.16        | 471.82          | 1,465.79                      | 0.10                          | -0.03                        | -0.09                       |
| 13,500.00                   | 90.23              | 358.47         | 12,095.45                   | 1,541.12        | 469.20          | 1,565.44                      | 0.27                          | 0.27                         | 0.00                        |
| 13,600.00                   | 90.19              | 358.69         | 12,094.98                   | 1,641.09        | 466.59          | 1,665.09                      | 0.23                          | -0.04                        | 0.23                        |
| 13,700.00                   | 90.17              | 358.63         | 12,094.75                   | 1,741.06        | 464.44          | 1,764.78                      | 0.07                          | -0.01                        | -0.06                       |
| 13,800.00                   | 90.12              | 358.65         | 12,094.44                   | 1,841.03        | 461.95          | 1,864.45                      | 0.06                          | -0.06                        | 0.02                        |

|                  |                       |                                     |                                       |
|------------------|-----------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company | <b>Local Co-ordinate Reference:</b> | Well W1FC Fed Com 3H                  |
| <b>Project:</b>  | Lea Co., NM (NAD 83)  | <b>TVD Reference:</b>               | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Site:</b>     | Paduca 7-6            | <b>MD Reference:</b>                | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Well:</b>     | W1FC Fed Com 3H       | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db             |

**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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 13,900.00             | 90.02           | 358.43      | 12,094.34             | 1,941.00     | 459.49       | 1,964.11                | 0.24                    | -0.10                  | -0.21                 |
| 14,000.00             | 90.20           | 358.89      | 12,094.19             | 2,040.97     | 457.03       | 2,063.78                | 0.49                    | 0.19                   | 0.46                  |
| 14,100.00             | 90.14           | 358.14      | 12,093.86             | 2,140.94     | 454.57       | 2,163.44                | 0.76                    | -0.06                  | -0.75                 |
| 14,200.00             | 90.11           | 357.71      | 12,093.64             | 2,240.87     | 450.89       | 2,263.00                | 0.43                    | -0.03                  | -0.43                 |
| 14,300.00             | 90.14           | 358.97      | 12,093.39             | 2,340.83     | 448.03       | 2,362.63                | 1.27                    | 0.03                   | 1.27                  |
| 14,400.00             | 89.81           | 359.63      | 12,093.45             | 2,440.82     | 446.86       | 2,462.39                | 0.74                    | -0.33                  | 0.66                  |
| 14,500.00             | 89.80           | 359.70      | 12,093.86             | 2,540.82     | 446.38       | 2,562.19                | 0.07                    | -0.02                  | 0.06                  |
| 14,600.00             | 89.99           | 359.22      | 12,093.94             | 2,640.81     | 445.40       | 2,661.97                | 0.52                    | 0.20                   | -0.48                 |
| 14,700.00             | 89.94           | 359.29      | 12,094.11             | 2,740.80     | 443.88       | 2,761.71                | 0.09                    | -0.06                  | 0.07                  |
| 14,800.00             | 90.09           | 359.42      | 12,093.99             | 2,840.80     | 443.12       | 2,861.50                | 0.20                    | 0.15                   | 0.13                  |
| 14,900.00             | 90.27           | 359.82      | 12,093.81             | 2,940.79     | 441.84       | 2,961.25                | 0.44                    | 0.17                   | 0.40                  |
| 15,000.00             | 89.85           | 1.18        | 12,093.34             | 3,040.78     | 442.95       | 3,061.14                | 1.41                    | -0.42                  | 1.35                  |
| 15,100.00             | 90.09           | 3.06        | 12,093.93             | 3,140.71     | 446.26       | 3,161.10                | 1.90                    | 0.24                   | 1.88                  |
| 15,200.00             | 89.95           | 3.25        | 12,093.45             | 3,240.52     | 452.53       | 3,261.10                | 0.23                    | -0.14                  | 0.19                  |
| 15,300.00             | 90.00           | 1.28        | 12,093.76             | 3,340.42     | 456.69       | 3,361.08                | 1.97                    | 0.05                   | -1.97                 |
| 15,400.00             | 89.95           | 0.19        | 12,093.69             | 3,440.42     | 457.73       | 3,460.97                | 1.09                    | -0.04                  | -1.09                 |
| 15,500.00             | 90.14           | 359.92      | 12,093.67             | 3,540.42     | 457.76       | 3,560.81                | 0.33                    | 0.19                   | -0.27                 |
| 15,600.00             | 90.04           | 358.31      | 12,093.48             | 3,640.40     | 456.35       | 3,660.55                | 1.61                    | -0.10                  | -1.61                 |
| 15,700.00             | 90.07           | 358.45      | 12,093.40             | 3,740.36     | 453.39       | 3,760.17                | 0.15                    | 0.03                   | 0.14                  |
| 15,800.00             | 90.32           | 1.12        | 12,093.01             | 3,840.35     | 453.35       | 3,859.99                | 2.68                    | 0.26                   | 2.67                  |
| 15,900.00             | 90.02           | 359.77      | 12,092.81             | 3,940.34     | 453.65       | 3,959.84                | 1.39                    | -0.31                  | -1.35                 |
| 16,000.00             | 90.28           | 1.42        | 12,092.36             | 4,040.32     | 455.30       | 4,059.75                | 1.67                    | 0.27                   | 1.65                  |
| 16,100.00             | 89.74           | 0.13        | 12,092.58             | 4,140.31     | 456.20       | 4,159.63                | 1.40                    | -0.54                  | -1.29                 |
| 16,200.00             | 90.09           | 0.56        | 12,092.61             | 4,240.31     | 457.02       | 4,259.51                | 0.55                    | 0.35                   | 0.42                  |
| 16,300.00             | 90.06           | 0.14        | 12,092.49             | 4,340.31     | 457.65       | 4,359.38                | 0.42                    | -0.03                  | -0.42                 |
| 16,400.00             | 90.03           | 359.99      | 12,092.39             | 4,440.31     | 457.61       | 4,459.21                | 0.15                    | -0.03                  | -0.15                 |
| 16,500.00             | 90.02           | 0.91        | 12,092.37             | 4,540.30     | 458.12       | 4,559.08                | 0.92                    | -0.01                  | 0.92                  |
| 16,600.00             | 90.03           | 359.83      | 12,092.32             | 4,640.29     | 459.66       | 4,658.99                | 1.08                    | 0.01                   | -1.08                 |
| 16,700.00             | 90.15           | 356.62      | 12,092.20             | 4,740.23     | 456.69       | 4,758.60                | 3.21                    | 0.12                   | -3.21                 |
| 16,800.00             | 90.18           | 358.54      | 12,091.87             | 4,840.08     | 451.31       | 4,857.97                | 1.92                    | 0.02                   | 1.92                  |
| 16,900.00             | 89.46           | 358.30      | 12,092.09             | 4,940.05     | 449.14       | 4,957.65                | 0.75                    | -0.71                  | -0.25                 |
| 17,000.00             | 89.55           | 356.35      | 12,093.03             | 5,039.93     | 444.54       | 5,057.11                | 1.95                    | 0.08                   | -1.94                 |
| 17,100.00             | 89.72           | 358.45      | 12,093.66             | 5,139.82     | 439.99       | 5,156.58                | 2.11                    | 0.18                   | 2.10                  |
| 17,200.00             | 89.81           | 359.27      | 12,094.09             | 5,239.80     | 438.16       | 5,256.29                | 0.82                    | 0.09                   | 0.82                  |
| 17,300.00             | 89.95           | 359.07      | 12,094.20             | 5,339.79     | 436.30       | 5,356.00                | 0.25                    | 0.14                   | -0.20                 |
| 17,400.00             | 89.64           | 0.43        | 12,094.61             | 5,439.78     | 436.43       | 5,455.84                | 1.40                    | -0.32                  | 1.36                  |
| 17,500.00             | 89.67           | 358.89      | 12,095.28             | 5,539.77     | 436.06       | 5,555.65                | 1.53                    | 0.03                   | -1.53                 |
| 17,600.00             | 89.95           | 358.68      | 12,095.62             | 5,639.72     | 432.86       | 5,655.25                | 0.35                    | 0.28                   | -0.21                 |
| 17,700.00             | 89.90           | 1.13        | 12,095.59             | 5,739.71     | 432.90       | 5,755.08                | 2.45                    | -0.05                  | 2.45                  |
| 17,800.00             | 89.63           | 3.07        | 12,096.07             | 5,839.64     | 436.56       | 5,855.05                | 1.96                    | -0.27                  | 1.94                  |
| 17,900.00             | 89.47           | 2.82        | 12,096.85             | 5,939.46     | 442.48       | 5,955.05                | 0.30                    | -0.16                  | -0.25                 |
| 18,000.00             | 88.89           | 1.41        | 12,098.17             | 6,039.38     | 446.06       | 6,055.01                | 1.52                    | -0.58                  | -1.41                 |
| 18,100.00             | 89.49           | 1.55        | 12,099.91             | 6,139.34     | 448.32       | 6,154.94                | 0.61                    | 0.60                   | 0.13                  |

|                  |                       |                                     |                                       |
|------------------|-----------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company | <b>Local Co-ordinate Reference:</b> | Well W1FC Fed Com 3H                  |
| <b>Project:</b>  | Lea Co., NM (NAD 83)  | <b>TVD Reference:</b>               | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Site:</b>     | Paduca 7-6            | <b>MD Reference:</b>                | RKB=27' @ 3275.00usft (Patterson 244) |
| <b>Well:</b>     | W1FC Fed Com 3H       | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db             |

| 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) |
| 18,200.00                       | 89.55           | 359.64      | 12,100.56             | 6,239.32     | 449.82       | 6,254.84                | 1.91                    | 0.06                   | -1.90                 |
| 18,300.00                       | 89.68           | 358.89      | 12,101.28             | 6,339.31     | 448.32       | 6,354.57                | 0.76                    | 0.13                   | -0.75                 |
| 18,400.00                       | 89.61           | 355.49      | 12,101.88             | 6,439.18     | 443.60       | 6,454.01                | 3.41                    | -0.07                  | -3.41                 |
| 18,500.00                       | 90.04           | 354.45      | 12,102.16             | 6,538.79     | 434.79       | 6,552.95                | 1.12                    | 0.43                   | -1.04                 |
| 18,600.00                       | 89.57           | 354.18      | 12,102.49             | 6,638.25     | 424.46       | 6,651.66                | 0.54                    | -0.47                  | -0.27                 |
| 18,700.00                       | 89.13           | 358.12      | 12,103.73             | 6,738.00     | 417.70       | 6,750.86                | 3.96                    | -0.44                  | 3.94                  |
| 18,800.00                       | 89.50           | 1.90        | 12,104.98             | 6,837.97     | 418.07       | 6,850.68                | 3.79                    | 0.37                   | 3.77                  |
| 18,900.00                       | 89.71           | 3.82        | 12,105.39             | 6,937.83     | 423.09       | 6,950.68                | 1.94                    | 0.21                   | 1.93                  |
| 19,000.00                       | 88.74           | 3.89        | 12,106.70             | 7,037.52     | 430.81       | 7,050.65                | 0.97                    | -0.97                  | 0.07                  |
| 19,100.00                       | 89.12           | 1.98        | 12,109.33             | 7,137.38     | 435.28       | 7,150.60                | 1.95                    | 0.38                   | -1.91                 |
| 19,200.00                       | 91.56           | 2.19        | 12,108.70             | 7,237.31     | 438.76       | 7,250.56                | 2.45                    | 2.44                   | 0.21                  |
| 19,300.00                       | 93.64           | 2.80        | 12,104.04             | 7,337.10     | 443.10       | 7,350.44                | 2.17                    | 2.08                   | 0.61                  |
| 19,400.00                       | 94.58           | 2.20        | 12,096.55             | 7,436.71     | 447.89       | 7,450.15                | 1.11                    | 0.94                   | -0.60                 |
| 19,500.00                       | 94.34           | 359.76      | 12,088.61             | 7,536.36     | 449.89       | 7,549.76                | 2.44                    | -0.24                  | -2.43                 |
| 19,600.00                       | 89.83           | 355.59      | 12,084.04             | 7,636.13     | 446.12       | 7,649.15                | 6.15                    | -4.51                  | -4.18                 |
| 19,679.00                       | 85.73           | 352.70      | 12,087.21             | 7,714.62     | 437.94       | 7,727.04                | 6.34                    | -5.19                  | -3.65                 |
| <b>Last MWD Survey @ 19679'</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 19,700.00                       | 85.73           | 352.70      | 12,088.77             | 7,735.39     | 435.28       | 7,747.62                | 0.00                    | 0.00                   | 0.00                  |
| <b>3H PBHL</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |

| Design Annotations    |                       |                   |              |                          |
|-----------------------|-----------------------|-------------------|--------------|--------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                          |
| 181.00                | 180.99                | 1.42              | 0.02         | First MWD Survey         |
| 19,679.00             | 12,087.21             | 7,714.62          | 437.94       | Last MWD Survey @ 19679' |
| 19,718.00             | 12,090.11             | 7,753.19          | 433.00       | PTB @ 19718'             |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_