

30-015-38673

# **Mewbourne Oil Co**

**Eddy County, New Mexico**

**Section 1-26S-29E**

**Brushy Draw 1 Fed. #1H**

**Wellbore #1**

**Survey: Brushy Draw 1 Fed #1H**

## **DDC Survey Report**

**27 June, 2011**



# DDC Survey Report



|                  |                         |                                     |                                       |
|------------------|-------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Co.       | <b>Local Co-ordinate Reference:</b> | Well Brushy Draw 1 Fed. #1H           |
| <b>Project:</b>  | Eddy County, New Mexico | <b>TVD Reference:</b>               | WELL @ 3117.0usft (Patterson UTI #45) |
| <b>Site:</b>     | Section 1-26S-29E       | <b>MD Reference:</b>                | WELL @ 3117.0usft (Patterson UTI #45) |
| <b>Well:</b>     | Brushy Draw 1 Fed. #1H  | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | Wellbore #1             | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | Wellbore #1             | <b>Database:</b>                    | EDM 5000 1 Single User Db             |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project:</b>    | Eddy County, New Mexico              |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico East 3001                 |                      |                |

|                              |                   |                          |                   |
|------------------------------|-------------------|--------------------------|-------------------|
| <b>Site:</b>                 | Section 1-26S-29E |                          |                   |
| <b>Site Position:</b>        |                   | <b>Northing:</b>         | 392,317.03 usft   |
| <b>From:</b>                 | Map               | <b>Easting:</b>          | 624,936.17 usft   |
| <b>Position Uncertainty:</b> | 0.0 usft          | <b>Slot Radius:</b>      | 13-3/16 "         |
|                              |                   | <b>Latitude:</b>         | 32° 4' 40.631 N   |
|                              |                   | <b>Longitude:</b>        | 103° 55' 47.879 W |
|                              |                   | <b>Grid Convergence:</b> | 0.21 °            |

|                             |                        |                            |                                  |
|-----------------------------|------------------------|----------------------------|----------------------------------|
| <b>Well:</b>                | Brushy Draw 1 Fed. #1H |                            |                                  |
| <b>Well Position</b>        | <b>+N/-S</b>           | 0.0 usft                   | <b>Northing:</b> 392,317.03 usft |
|                             | <b>+E/-W</b>           | 0.0 usft                   | <b>Easting:</b> 624,936.17 usft  |
| <b>Position Uncertainty</b> | 0.0 usft               | <b>Wellhead Elevation:</b> | usft                             |
|                             |                        | <b>Latitude:</b>           | 32° 4' 40.631 N                  |
|                             |                        | <b>Longitude:</b>          | 103° 55' 47.879 W                |
|                             |                        | <b>Ground Level:</b>       | 3,099.0 usft                     |

|                  |             |  |  |
|------------------|-------------|--|--|
| <b>Wellbore:</b> | Wellbore #1 |  |  |
|------------------|-------------|--|--|

| Magnetics | Model Name | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|-----------|------------|-------------|--------------------|------------------|------------------------|
|           | IGRF2010   | 5/25/2011   | 7.75               | 59.99            | 48,496                 |

|                |             |  |  |
|----------------|-------------|--|--|
| <b>Design:</b> | Wellbore #1 |  |  |
|----------------|-------------|--|--|

|                     |     |                      |        |
|---------------------|-----|----------------------|--------|
| <b>Audit Notes:</b> |     |                      |        |
| <b>Version:</b>     | 1.0 | <b>Phase:</b>        | ACTUAL |
|                     |     | <b>Tie On Depth:</b> | 0.0    |

| Vertical Section: | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°) |
|-------------------|----------------------------|-----------------|-----------------|------------------|
|                   | 0.0                        | 0.0             | 0.0             | 268.86           |

| Survey Program |              | Date: 6/27/2011                     |             |                |
|----------------|--------------|-------------------------------------|-------------|----------------|
| From<br>(usft) | To<br>(usft) | Survey (Wellbore)                   | Tool Name   | Description    |
| 100.0          | 7,164.0      | GYRO (Wellbore #1)                  | Good_gyro   | Good Gyro      |
| 7,248.0        | 12,191.0     | Brushy Draw 1 Fed #1H (Wellbore #1) | MWD default | MWD - Standard |

| 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) |
| <b>Tie into Gyro</b>        |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 7,164.0                     | 0.84               | 219.75         | 7,161.8                     | -64.5           | -48.6           | 49.9                          | 0.00                          | 0.00                         | 0.00                        |
| 7,248.0                     | 1.40               | 205.70         | 7,245.8                     | -65.9           | -49.5           | 50.8                          | 0.74                          | 0.67                         | -16.73                      |
| 7,267.0                     | 1.50               | 198.10         | 7,264.8                     | -66.4           | -49.6           | 51.0                          | 1.14                          | 0.53                         | -40.00                      |
| 7,298.0                     | 1.80               | 229.00         | 7,295.8                     | -67.1           | -50.1           | 51.5                          | 2.98                          | 0.97                         | 99.68                       |
| 7,330.0                     | 4.00               | 258.40         | 7,327.7                     | -67.6           | -51.6           | 52.9                          | 8.08                          | 6.88                         | 91.88                       |
| 7,362.0                     | 7.50               | 269.40         | 7,359.6                     | -67.9           | -54.8           | 56.1                          | 11.42                         | 10.94                        | 34.38                       |
| 7,394.0                     | 10.50              | 272.00         | 7,391.2                     | -67.8           | -59.8           | 61.1                          | 9.46                          | 9.38                         | 8.13                        |
| 7,425.0                     | 13.40              | 269.30         | 7,421.5                     | -67.8           | -66.2           | 67.5                          | 9.52                          | 9.35                         | -8.71                       |
| 7,457.0                     | 16.60              | 269.60         | 7,452.4                     | -67.8           | -74.5           | 75.8                          | 10.00                         | 10.00                        | 0.94                        |

# DDC Survey Report



|           |                         |                              |                                       |
|-----------|-------------------------|------------------------------|---------------------------------------|
| Company:  | Mewbourne Oil Co.       | Local Co-ordinate Reference: | Well Brushy Draw 1 Fed. #1H           |
| Project:  | Eddy County, New Mexico | TVD Reference:               | WELL @ 3117.0usft (Patterson UTI #45) |
| Site:     | Section 1-26S-29E       | MD Reference:                | WELL @ 3117.0usft (Patterson UTI #45) |
| Well:     | Brushy Draw 1 Fed. #1H  | North Reference:             | Grid                                  |
| Wellbore: | Wellbore #1             | Survey Calculation Method:   | Minimum Curvature                     |
| Design:   | Wellbore #1             | Database:                    | EDM 5000.1 Single User Db             |

| 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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 7,489.0               | 19.30           | 270.60      | 7,482.8               | -67.8        | -84.3        | 85.7                    | 8.49                    | 8.44                   | 3.13                  |
| 7,521.0               | 21.00           | 271.40      | 7,512.9               | -67.6        | -95.4        | 96.7                    | 5.38                    | 5.31                   | 2.50                  |
| 7,552.0               | 23.00           | 272.10      | 7,541.6               | -67.3        | -107.0       | 108.3                   | 6.51                    | 6.45                   | 2.26                  |
| 7,584.0               | 25.60           | 272.10      | 7,570.8               | -66.8        | -120.1       | 121.4                   | 8.13                    | 8.13                   | 0.00                  |
| 7,616.0               | 28.80           | 271.90      | 7,599.2               | -66.3        | -134.8       | 136.0                   | 10.00                   | 10.00                  | -0.63                 |
| 7,647.0               | 32.10           | 270.80      | 7,626.0               | -65.9        | -150.5       | 151.7                   | 10.80                   | 10.65                  | -3.55                 |
| 7,679.0               | 35.40           | 270.90      | 7,652.6               | -65.6        | -168.2       | 169.5                   | 10.31                   | 10.31                  | 0.31                  |
| 7,711.0               | 38.70           | 271.40      | 7,678.1               | -65.2        | -187.5       | 188.8                   | 10.36                   | 10.31                  | 1.56                  |
| 7,742.0               | 41.10           | 270.10      | 7,701.9               | -65.0        | -207.4       | 208.6                   | 8.20                    | 7.74                   | -4.19                 |
| 7,774.0               | 43.70           | 267.90      | 7,725.5               | -65.4        | -229.0       | 230.2                   | 9.35                    | 8.13                   | -6.88                 |
| 7,806.0               | 45.60           | 266.50      | 7,748.3               | -66.5        | -251.4       | 252.7                   | 6.69                    | 5.94                   | -4.38                 |
| 7,837.0               | 47.40           | 266.00      | 7,769.6               | -68.0        | -273.9       | 275.1                   | 5.92                    | 5.81                   | -1.61                 |
| 7,869.0               | 49.40           | 265.70      | 7,790.9               | -69.7        | -297.7       | 299.0                   | 6.29                    | 6.25                   | -0.94                 |
| 7,901.0               | 51.00           | 265.40      | 7,811.3               | -71.6        | -322.2       | 323.6                   | 5.05                    | 5.00                   | -0.94                 |
| 7,933.0               | 55.30           | 265.80      | 7,830.5               | -73.6        | -347.8       | 349.1                   | 13.47                   | 13.44                  | 1.25                  |
| 7,964.0               | 60.80           | 266.10      | 7,846.9               | -75.4        | -374.0       | 375.4                   | 17.76                   | 17.74                  | 0.97                  |
| 7,996.0               | 67.50           | 267.60      | 7,860.9               | -77.0        | -402.7       | 404.2                   | 21.36                   | 20.94                  | 4.69                  |
| 8,078.0               | 77.60           | 268.30      | 7,885.4               | -79.8        | -480.8       | 482.3                   | 12.34                   | 12.32                  | 0.85                  |
| 8,110.0               | 79.50           | 269.40      | 7,891.8               | -80.4        | -512.1       | 513.6                   | 6.83                    | 5.94                   | 3.44                  |
| 8,142.0               | 82.60           | 269.80      | 7,896.8               | -80.6        | -543.8       | 545.2                   | 9.77                    | 9.69                   | 1.25                  |
| 8,174.0               | 85.80           | 270.30      | 7,900.0               | -80.6        | -575.6       | 577.1                   | 10.12                   | 10.00                  | 1.56                  |
| 8,206.0               | 87.70           | 270.30      | 7,901.8               | -80.4        | -607.5       | 609.0                   | 5.94                    | 5.94                   | 0.00                  |
| 8,237.0               | 90.80           | 270.60      | 7,902.2               | -80.2        | -638.5       | 640.0                   | 10.05                   | 10.00                  | 0.97                  |
| 8,269.0               | 93.80           | 270.50      | 7,900.9               | -79.9        | -670.5       | 671.9                   | 9.38                    | 9.38                   | -0.31                 |
| 8,301.0               | 94.20           | 270.50      | 7,898.7               | -79.6        | -702.4       | 703.9                   | 1.25                    | 1.25                   | 0.00                  |
| 8,333.0               | 94.60           | 270.50      | 7,896.2               | -79.3        | -734.3       | 735.8                   | 1.25                    | 1.25                   | 0.00                  |
| 8,364.0               | 93.00           | 270.10      | 7,894.2               | -79.1        | -765.2       | 766.7                   | 5.32                    | -5.16                  | -1.29                 |
| 8,396.0               | 90.60           | 269.40      | 7,893.2               | -79.3        | -797.2       | 798.6                   | 7.81                    | -7.50                  | -2.19                 |
| 8,428.0               | 90.60           | 269.30      | 7,892.8               | -79.6        | -829.2       | 830.6                   | 0.31                    | 0.00                   | -0.31                 |
| 8,460.0               | 91.10           | 269.30      | 7,892.4               | -80.0        | -861.2       | 862.6                   | 1.56                    | 1.56                   | 0.00                  |
| 8,491.0               | 91.40           | 269.00      | 7,891.7               | -80.5        | -892.2       | 893.6                   | 1.37                    | 0.97                   | -0.97                 |
| 8,523.0               | 89.50           | 268.60      | 7,891.4               | -81.2        | -924.2       | 925.6                   | 6.07                    | -5.94                  | -1.25                 |
| 8,555.0               | 88.90           | 268.00      | 7,891.9               | -82.1        | -956.2       | 957.6                   | 2.65                    | -1.88                  | -1.88                 |
| 8,587.0               | 88.70           | 268.20      | 7,892.6               | -83.2        | -988.2       | 989.6                   | 0.88                    | -0.63                  | 0.63                  |
| 8,618.0               | 91.10           | 269.40      | 7,892.6               | -83.8        | -1,019.1     | 1,020.6                 | 8.66                    | 7.74                   | 3.87                  |
| 8,649.0               | 93.20           | 270.50      | 7,891.5               | -83.9        | -1,050.1     | 1,051.6                 | 7.65                    | 6.77                   | 3.55                  |
| 8,681.0               | 93.10           | 270.40      | 7,889.7               | -83.6        | -1,082.1     | 1,083.5                 | 0.44                    | -0.31                  | -0.31                 |
| 8,713.0               | 91.20           | 269.90      | 7,888.5               | -83.5        | -1,114.0     | 1,115.5                 | 6.14                    | -5.94                  | -1.56                 |
| 8,745.0               | 91.10           | 269.70      | 7,887.9               | -83.6        | -1,146.0     | 1,147.5                 | 0.70                    | -0.31                  | -0.63                 |
| 8,776.0               | 91.60           | 269.70      | 7,887.1               | -83.8        | -1,177.0     | 1,178.5                 | 1.61                    | 1.61                   | 0.00                  |
| 8,808.0               | 91.60           | 269.40      | 7,886.2               | -84.0        | -1,209.0     | 1,210.5                 | 0.94                    | 0.00                   | -0.94                 |
| 8,840.0               | 90.60           | 269.50      | 7,885.6               | -84.4        | -1,241.0     | 1,242.4                 | 3.14                    | -3.13                  | 0.31                  |
| 8,872.0               | 89.70           | 269.30      | 7,885.5               | -84.7        | -1,273.0     | 1,274.4                 | 2.88                    | -2.81                  | -0.63                 |

# DDC Survey Report



|           |                         |                              |                                       |
|-----------|-------------------------|------------------------------|---------------------------------------|
| Company:  | Mewbourne Oil Co        | Local Co-ordinate Reference: | Well Brushy Draw 1 Fed: #1H           |
| Project:  | Eddy County, New Mexico | TVD Reference:               | WELL @ 3117.0usft (Patterson UTI #45) |
| Site:     | Section 1-26S-29E       | MD Reference:                | WELL @ 3117.0usft (Patterson UTI #45) |
| Well:     | Brushy Draw 1 Fed #1H   | North Reference:             | Grid                                  |
| Wellbore: | Wellbore #1             | Survey Calculation Method:   | Minimum Curvature                     |
| Design:   | Wellbore #1             | Database:                    | 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) |
| 8,903.0               | 89.90           | 269.10      | 7,885.6               | -85.1        | -1,304.0     | 1,305.4                 | 0.91                    | 0.65                   | -0.65                 |
| 8,935.0               | 89.70           | 268.60      | 7,885.8               | -85.8        | -1,336.0     | 1,337.4                 | 1.68                    | -0.63                  | -1.56                 |
| 8,967.0               | 89.30           | 268.80      | 7,886.0               | -86.5        | -1,368.0     | 1,369.4                 | 1.40                    | -1.25                  | 0.63                  |
| 8,998.0               | 89.00           | 268.40      | 7,886.5               | -87.2        | -1,399.0     | 1,400.4                 | 1.61                    | -0.97                  | -1.29                 |
| 9,030.0               | 90.10           | 269.90      | 7,886.7               | -87.7        | -1,431.0     | 1,432.4                 | 5.81                    | 3.44                   | 4.69                  |
| 9,062.0               | 89.90           | 269.50      | 7,886.7               | -87.9        | -1,463.0     | 1,464.4                 | 1.40                    | -0.63                  | -1.25                 |
| 9,094.0               | 90.20           | 269.40      | 7,886.7               | -88.2        | -1,495.0     | 1,496.4                 | 0.99                    | 0.94                   | -0.31                 |
| 9,126.0               | 91.40           | 269.40      | 7,886.3               | -88.5        | -1,527.0     | 1,528.4                 | 3.75                    | 3.75                   | 0.00                  |
| 9,158.0               | 91.60           | 268.80      | 7,885.4               | -89.0        | -1,558.9     | 1,560.4                 | 1.98                    | 0.63                   | -1.88                 |
| 9,189.0               | 91.30           | 268.70      | 7,884.6               | -89.7        | -1,589.9     | 1,591.4                 | 1.02                    | -0.97                  | -0.32                 |
| 9,221.0               | 90.60           | 268.70      | 7,884.1               | -90.4        | -1,621.9     | 1,623.4                 | 2.19                    | -2.19                  | 0.00                  |
| 9,253.0               | 90.30           | 269.30      | 7,883.9               | -91.0        | -1,653.9     | 1,655.4                 | 2.10                    | -0.94                  | 1.88                  |
| 9,285.0               | 90.60           | 270.70      | 7,883.6               | -91.0        | -1,685.9     | 1,687.4                 | 4.47                    | 0.94                   | 4.38                  |
| 9,317.0               | 90.60           | 270.80      | 7,883.3               | -90.6        | -1,717.9     | 1,719.4                 | 0.31                    | 0.00                   | 0.31                  |
| 9,348.0               | 90.70           | 270.80      | 7,882.9               | -90.1        | -1,748.9     | 1,750.3                 | 0.32                    | 0.32                   | 0.00                  |
| 9,380.0               | 92.00           | 270.10      | 7,882.2               | -89.9        | -1,780.9     | 1,782.3                 | 4.61                    | 4.06                   | -2.19                 |
| 9,412.0               | 92.20           | 270.10      | 7,881.0               | -89.8        | -1,812.9     | 1,814.3                 | 0.63                    | 0.63                   | 0.00                  |
| 9,443.0               | 92.10           | 270.10      | 7,879.8               | -89.8        | -1,843.8     | 1,845.3                 | 0.32                    | -0.32                  | 0.00                  |
| 9,475.0               | 92.00           | 269.90      | 7,878.7               | -89.8        | -1,875.8     | 1,877.2                 | 0.70                    | -0.31                  | -0.63                 |
| 9,507.0               | 92.00           | 270.10      | 7,877.6               | -89.8        | -1,907.8     | 1,909.2                 | 0.62                    | 0.00                   | 0.63                  |
| 9,539.0               | 92.20           | 269.90      | 7,876.4               | -89.8        | -1,939.8     | 1,941.2                 | 0.88                    | 0.63                   | -0.63                 |
| 9,571.0               | 90.20           | 270.10      | 7,875.7               | -89.8        | -1,971.8     | 1,973.2                 | 6.28                    | -6.25                  | 0.63                  |
| 9,603.0               | 90.10           | 270.00      | 7,875.6               | -89.8        | -2,003.8     | 2,005.2                 | 0.44                    | -0.31                  | -0.31                 |
| 9,635.0               | 89.70           | 270.10      | 7,875.7               | -89.7        | -2,035.8     | 2,037.2                 | 1.29                    | -1.25                  | 0.31                  |
| 9,667.0               | 88.90           | 269.60      | 7,876.1               | -89.8        | -2,067.8     | 2,069.2                 | 2.95                    | -2.50                  | -1.56                 |
| 9,698.0               | 89.50           | 268.80      | 7,876.5               | -90.2        | -2,098.8     | 2,100.1                 | 3.23                    | 1.94                   | -2.58                 |
| 9,730.0               | 90.50           | 269.30      | 7,876.5               | -90.8        | -2,130.8     | 2,132.1                 | 3.49                    | 3.13                   | 1.56                  |
| 9,762.0               | 91.40           | 268.70      | 7,876.0               | -91.3        | -2,162.8     | 2,164.1                 | 3.38                    | 2.81                   | -1.88                 |
| 9,794.0               | 91.10           | 268.60      | 7,875.3               | -92.1        | -2,194.7     | 2,196.1                 | 0.99                    | -0.94                  | -0.31                 |
| 9,826.0               | 90.90           | 268.50      | 7,874.7               | -92.9        | -2,226.7     | 2,228.1                 | 0.70                    | -0.63                  | -0.31                 |
| 9,858.0               | 92.00           | 270.20      | 7,873.9               | -93.3        | -2,258.7     | 2,260.1                 | 6.33                    | 3.44                   | 5.31                  |
| 9,890.0               | 92.40           | 270.40      | 7,872.7               | -93.1        | -2,290.7     | 2,292.1                 | 1.40                    | 1.25                   | 0.63                  |
| 9,921.0               | 92.60           | 270.00      | 7,871.4               | -93.0        | -2,321.7     | 2,323.0                 | 1.44                    | 0.65                   | -1.29                 |
| 9,953.0               | 91.60           | 268.40      | 7,870.2               | -93.4        | -2,353.6     | 2,355.0                 | 5.89                    | -3.13                  | -5.00                 |
| 9,985.0               | 91.80           | 268.40      | 7,869.2               | -94.3        | -2,385.6     | 2,387.0                 | 0.63                    | 0.63                   | 0.00                  |
| 10,016.0              | 91.70           | 268.30      | 7,868.3               | -95.2        | -2,416.6     | 2,418.0                 | 0.46                    | -0.32                  | -0.32                 |
| 10,048.0              | 91.30           | 270.10      | 7,867.4               | -95.7        | -2,448.6     | 2,450.0                 | 5.76                    | -1.25                  | 5.63                  |
| 10,080.0              | 91.20           | 269.80      | 7,866.7               | -95.7        | -2,480.6     | 2,482.0                 | 0.99                    | -0.31                  | -0.94                 |
| 10,111.0              | 90.80           | 268.90      | 7,866.2               | -96.0        | -2,511.5     | 2,513.0                 | 3.18                    | -1.29                  | -2.90                 |
| 10,142.0              | 90.60           | 268.20      | 7,865.8               | -96.8        | -2,542.5     | 2,544.0                 | 2.35                    | -0.65                  | -2.26                 |
| 10,174.0              | 91.60           | 269.60      | 7,865.2               | -97.4        | -2,574.5     | 2,575.9                 | 5.38                    | 3.13                   | 4.38                  |
| 10,206.0              | 91.60           | 269.30      | 7,864.3               | -97.7        | -2,606.5     | 2,607.9                 | 0.94                    | 0.00                   | -0.94                 |
| 10,237.0              | 92.70           | 269.70      | 7,863.2               | -98.0        | -2,637.5     | 2,638.9                 | 3.78                    | 3.55                   | 1.29                  |

# DDC Survey Report



|                  |                         |                                     |                                       |
|------------------|-------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Co        | <b>Local Co-ordinate Reference:</b> | Well Brushy Draw 1 Fed. #1H           |
| <b>Project:</b>  | Eddy County, New Mexico | <b>TVD Reference:</b>               | WELL @ 3117.0usft (Patterson UTI #45) |
| <b>Site:</b>     | Section 1-26S-29E       | <b>MD Reference:</b>                | WELL @ 3117.0usft (Patterson UTI #45) |
| <b>Well:</b>     | Brushy Draw 1 Fed. #1H  | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | Wellbore #1             | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | Wellbore #1             | <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) |
| 10,269.0              | 91.80           | 269.90      | 7,861.9               | -98.1        | -2,669.5     | 2,670.9                 | 2.88                    | -2.81                  | 0.63                  |
| 10,301.0              | 89.70           | 270.90      | 7,861.5               | -97.9        | -2,701.4     | 2,702.9                 | 7.27                    | -6.56                  | 3.13                  |
| 10,333.0              | 89.90           | 270.50      | 7,861.6               | -97.5        | -2,733.4     | 2,734.8                 | 1.40                    | 0.63                   | -1.25                 |
| 10,364.0              | 89.90           | 269.60      | 7,861.6               | -97.5        | -2,764.4     | 2,765.8                 | 2.90                    | 0.00                   | -2.90                 |
| 10,396.0              | 90.10           | 270.00      | 7,861.6               | -97.6        | -2,796.4     | 2,797.8                 | 1.40                    | 0.63                   | 1.25                  |
| 10,428.0              | 90.70           | 270.10      | 7,861.4               | -97.6        | -2,828.4     | 2,829.8                 | 1.90                    | 1.88                   | 0.31                  |
| 10,460.0              | 90.90           | 270.10      | 7,861.0               | -97.5        | -2,860.4     | 2,861.8                 | 0.63                    | 0.63                   | 0.00                  |
| 10,492.0              | 91.10           | 270.10      | 7,860.4               | -97.5        | -2,892.4     | 2,893.8                 | 0.63                    | 0.63                   | 0.00                  |
| 10,524.0              | 91.60           | 270.70      | 7,859.7               | -97.2        | -2,924.4     | 2,925.8                 | 2.44                    | 1.56                   | 1.88                  |
| 10,555.0              | 92.80           | 270.60      | 7,858.5               | -96.9        | -2,955.4     | 2,956.7                 | 3.88                    | 3.87                   | -0.32                 |
| 10,587.0              | 92.80           | 270.70      | 7,856.9               | -96.5        | -2,987.4     | 2,988.7                 | 0.31                    | 0.00                   | 0.31                  |
| 10,618.0              | 92.60           | 270.10      | 7,855.5               | -96.3        | -3,018.3     | 3,019.6                 | 2.04                    | -0.65                  | -1.94                 |
| 10,650.0              | 90.30           | 269.40      | 7,854.6               | -96.4        | -3,050.3     | 3,051.6                 | 7.51                    | -7.19                  | -2.19                 |
| 10,682.0              | 90.20           | 269.90      | 7,854.5               | -96.6        | -3,082.3     | 3,083.6                 | 1.59                    | -0.31                  | 1.56                  |
| 10,714.0              | 91.30           | 270.10      | 7,854.1               | -96.6        | -3,114.3     | 3,115.6                 | 3.49                    | 3.44                   | 0.63                  |
| 10,746.0              | 92.00           | 270.30      | 7,853.2               | -96.5        | -3,146.3     | 3,147.6                 | 2.27                    | 2.19                   | 0.63                  |
| 10,777.0              | 91.60           | 270.10      | 7,852.2               | -96.4        | -3,177.3     | 3,178.6                 | 1.44                    | -1.29                  | -0.65                 |
| 10,809.0              | 92.00           | 270.70      | 7,851.2               | -96.2        | -3,209.3     | 3,210.5                 | 2.25                    | 1.25                   | 1.88                  |
| 10,840.0              | 92.10           | 270.90      | 7,850.1               | -95.8        | -3,240.2     | 3,241.5                 | 0.72                    | 0.32                   | 0.65                  |
| 10,872.0              | 92.10           | 270.90      | 7,848.9               | -95.3        | -3,272.2     | 3,273.5                 | 0.00                    | 0.00                   | 0.00                  |
| 10,904.0              | 92.70           | 270.90      | 7,847.6               | -94.8        | -3,304.2     | 3,305.4                 | 1.88                    | 1.88                   | 0.00                  |
| 10,936.0              | 92.30           | 270.70      | 7,846.2               | -94.3        | -3,336.1     | 3,337.4                 | 1.40                    | -1.25                  | -0.63                 |
| 10,968.0              | 92.20           | 271.00      | 7,844.9               | -93.8        | -3,368.1     | 3,369.3                 | 0.99                    | -0.31                  | 0.94                  |
| 11,000.0              | 90.90           | 270.00      | 7,844.0               | -93.6        | -3,400.1     | 3,401.3                 | 5.12                    | -4.06                  | -3.13                 |
| 11,032.0              | 90.80           | 270.30      | 7,843.6               | -93.5        | -3,432.1     | 3,433.3                 | 0.99                    | -0.31                  | 0.94                  |
| 11,063.0              | 88.20           | 269.10      | 7,843.8               | -93.6        | -3,463.1     | 3,464.3                 | 9.24                    | -8.39                  | -3.87                 |
| 11,095.0              | 88.30           | 269.40      | 7,844.8               | -94.1        | -3,495.1     | 3,496.3                 | 0.99                    | 0.31                   | 0.94                  |
| 11,126.0              | 90.10           | 269.10      | 7,845.2               | -94.5        | -3,526.1     | 3,527.3                 | 5.89                    | 5.81                   | -0.97                 |
| 11,158.0              | 91.40           | 269.50      | 7,844.8               | -94.9        | -3,558.1     | 3,559.3                 | 4.25                    | 4.06                   | 1.25                  |
| 11,190.0              | 91.50           | 269.00      | 7,844.0               | -95.3        | -3,590.1     | 3,591.2                 | 1.59                    | 0.31                   | -1.56                 |
| 11,222.0              | 91.40           | 268.60      | 7,843.2               | -95.9        | -3,622.0     | 3,623.2                 | 1.29                    | -0.31                  | -1.25                 |
| 11,253.0              | 91.70           | 268.60      | 7,842.4               | -96.7        | -3,653.0     | 3,654.2                 | 0.97                    | 0.97                   | 0.00                  |
| 11,285.0              | 92.60           | 269.10      | 7,841.2               | -97.3        | -3,685.0     | 3,686.2                 | 3.22                    | 2.81                   | 1.56                  |
| 11,317.0              | 92.10           | 268.40      | 7,839.9               | -98.0        | -3,717.0     | 3,718.2                 | 2.69                    | -1.56                  | -2.19                 |
| 11,347.0              | 90.80           | 268.20      | 7,839.1               | -98.9        | -3,746.9     | 3,748.2                 | 4.38                    | -4.33                  | -0.67                 |
| 11,379.0              | 91.60           | 268.50      | 7,838.4               | -99.8        | -3,778.9     | 3,780.1                 | 2.67                    | 2.50                   | 0.94                  |
| 11,411.0              | 93.30           | 269.90      | 7,837.1               | -100.3       | -3,810.9     | 3,812.1                 | 6.88                    | 5.31                   | 4.38                  |
| 11,443.0              | 93.20           | 269.70      | 7,835.2               | -100.4       | -3,842.8     | 3,844.1                 | 0.70                    | -0.31                  | -0.63                 |
| 11,475.0              | 92.60           | 268.60      | 7,833.6               | -100.9       | -3,874.8     | 3,876.0                 | 3.91                    | -1.88                  | -3.44                 |
| 11,507.0              | 91.70           | 268.60      | 7,832.4               | -101.7       | -3,906.7     | 3,908.0                 | 2.81                    | -2.81                  | 0.00                  |
| 11,539.0              | 90.90           | 267.90      | 7,831.7               | -102.6       | -3,938.7     | 3,940.0                 | 3.32                    | -2.50                  | -2.19                 |
| 11,570.0              | 91.70           | 268.00      | 7,831.0               | -103.7       | -3,969.7     | 3,971.0                 | 2.60                    | 2.58                   | 0.32                  |
| 11,602.0              | 91.00           | 268.00      | 7,830.2               | -104.9       | -4,001.7     | 4,003.0                 | 2.19                    | -2.19                  | 0.00                  |
| 11,634.0              | 90.90           | 268.30      | 7,829.7               | -105.9       | -4,033.6     | 4,035.0                 | 0.99                    | -0.31                  | 0.94                  |

DDC  
Survey Report



|           |                         |                              |                                       |
|-----------|-------------------------|------------------------------|---------------------------------------|
| Company:  | Mewbourne Oil Co        | Local Co-ordinate Reference: | Well Brushy Draw 1 Fed: #1H           |
| Project:  | Eddy County, New Mexico | TVD Reference:               | WELL @ 3117.0usft (Patterson UTI #45) |
| Site:     | Section 1-26S-29E       | MD Reference:                | WELL @ 3117.0usft (Patterson UTI #45) |
| Well:     | Brushy Draw 1 Fed: #1H  | North Reference:             | Grid                                  |
| Wellbore: | Wellbore #1             | Survey Calculation Method:   | Minimum Curvature                     |
| Design:   | Wellbore #1             | Database:                    | EDM 5000.1 Single User Db             |

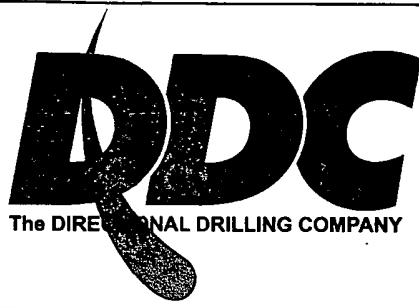
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 11,666.0              | 91.50           | 269.40      | 7,829.0               | -106.5       | -4,065.6     | 4,066.9                 | 3.91                    | 1.88                   | 3.44                  |
| 11,698.0              | 92.00           | 269.30      | 7,828.1               | -106.9       | -4,097.6     | 4,098.9                 | 1.59                    | 1.56                   | -0.31                 |
| 11,730.0              | 92.20           | 269.20      | 7,826.9               | -107.3       | -4,129.6     | 4,130.9                 | 0.70                    | 0.63                   | -0.31                 |
| 11,761.0              | 91.20           | 269.10      | 7,826.0               | -107.8       | -4,160.6     | 4,161.9                 | 3.24                    | -3.23                  | -0.32                 |
| 11,792.0              | 89.90           | 270.20      | 7,825.7               | -108.0       | -4,191.6     | 4,192.9                 | 5.49                    | -4.19                  | 3.55                  |
| 11,824.0              | 89.40           | 269.70      | 7,825.9               | -108.0       | -4,223.6     | 4,224.9                 | 2.21                    | -1.56                  | -1.56                 |
| 11,856.0              | 90.20           | 269.90      | 7,826.0               | -108.1       | -4,255.6     | 4,256.9                 | 2.58                    | 2.50                   | 0.63                  |
| 11,888.0              | 88.80           | 270.40      | 7,826.3               | -108.0       | -4,287.6     | 4,288.9                 | 4.65                    | -4.38                  | 1.56                  |
| 11,920.0              | 87.00           | 270.10      | 7,827.4               | -107.9       | -4,319.5     | 4,320.8                 | 5.70                    | -5.63                  | -0.94                 |
| 11,952.0              | 88.10           | 270.10      | 7,828.8               | -107.8       | -4,351.5     | 4,352.8                 | 3.44                    | 3.44                   | 0.00                  |
| 11,983.0              | 89.30           | 271.00      | 7,829.5               | -107.5       | -4,382.5     | 4,383.8                 | 4.84                    | 3.87                   | 2.90                  |
| 12,015.0              | 89.40           | 271.30      | 7,829.9               | -106.9       | -4,414.5     | 4,415.7                 | 0.99                    | 0.31                   | 0.94                  |
| 12,047.0              | 90.20           | 269.90      | 7,830.0               | -106.6       | -4,446.5     | 4,447.7                 | 5.04                    | 2.50                   | -4.38                 |
| 12,078.0              | 90.50           | 270.10      | 7,829.8               | -106.6       | -4,477.5     | 4,478.7                 | 1.16                    | 0.97                   | 0.65                  |
| 12,110.0              | 87.70           | 269.30      | 7,830.3               | -106.7       | -4,509.5     | 4,510.7                 | 9.10                    | -8.75                  | -2.50                 |
| 12,142.0              | 86.50           | 268.90      | 7,831.9               | -107.2       | -4,541.4     | 4,542.7                 | 3.95                    | -3.75                  | -1.25                 |
| TD:                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,191.0              | 86.50           | 268.90      | 7,834.9               | -108.2       | -4,590.3     | 4,591.6                 | 0.00                    | 0.00                   | 0.00                  |

| Measured Depth (usft) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Comment       |
|-----------------------|-----------------------|--------------|--------------|---------------|
| 7,164.0               | 7,161.8               | -64.5        | -48.6        | Tie into Gyro |
| 12,191.0              | 7,834.9               | -108.2       | -4,590.3     | TD            |

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

Brushy Draw 1 Fed. #1H  
Eddy County, New Mexico  
Q100879 & WT-11298

Company Name: Mewbourne Oil Co  
Brushy Draw 1 Fed. #1H  
Eddy County, New Mexico  
Rig: Patterson UTI #46  
Created By: Shane Robbins  
Date: 6/27/2011



PROJECT DETAILS: Eddy County, New Mexico

Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: New Mexico East 3001  
System Datum: Mean Sea Level



Azimuths to Grid North

Correction: 7.53°

Magnetic Field  
Strength: 48496.0snT  
Dip Angle: 59.99°  
Date: 5/25/2011  
Model: IGRF2010

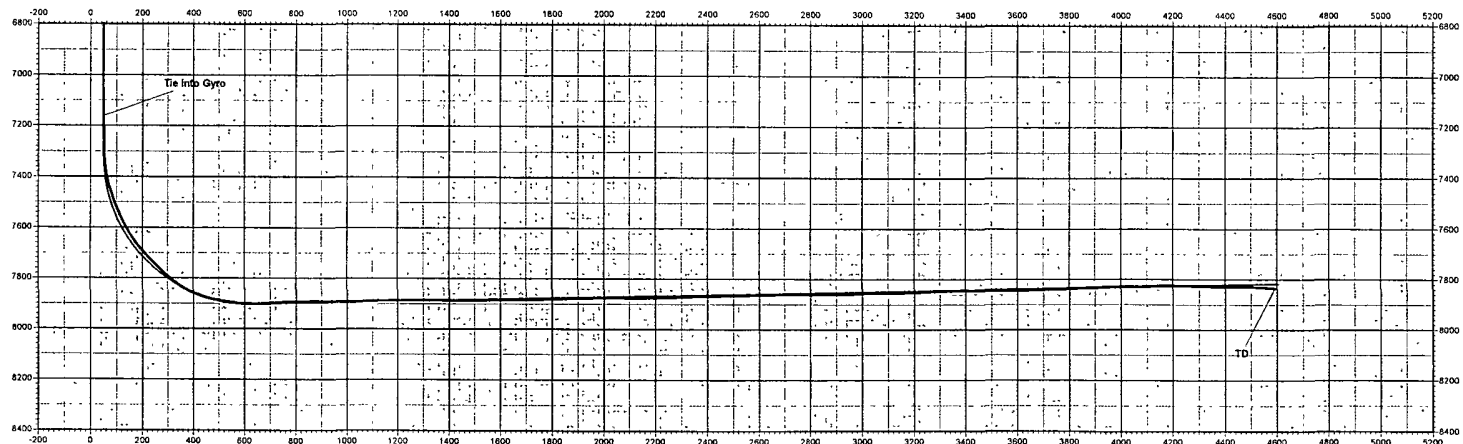
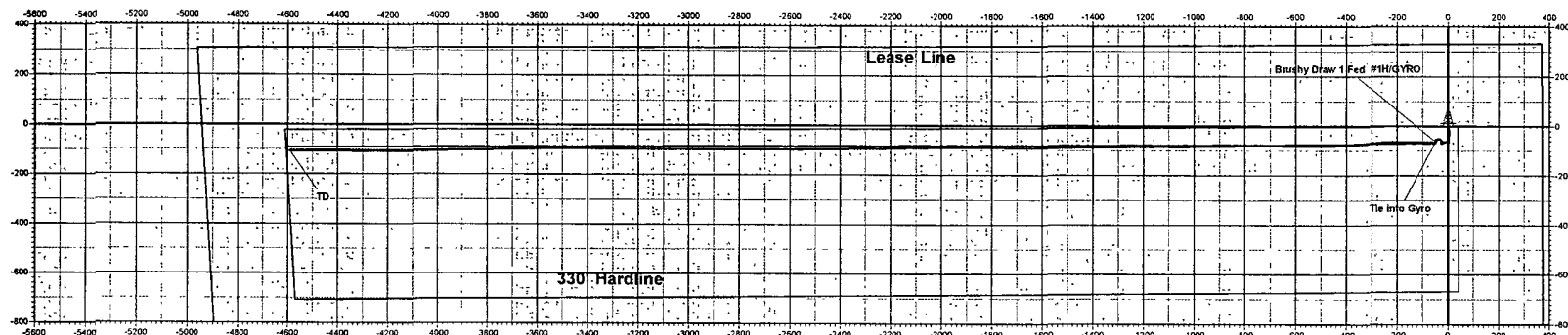
# Mewbourne Oil Co.

WELL DETAILS: Brushy Draw 1 Fed. #1H

|      |      |              |           |                 |                   |
|------|------|--------------|-----------|-----------------|-------------------|
| +N-S | +E-W | Ground Level | 3099.0    |                 |                   |
| 0.0  | 0.0  | North        | East      | Latitude        | Longitude         |
|      |      | 392317.03    | 624936.17 | 32° 4' 40.631 N | 103° 55' 47.879 W |

ANNOTATIONS

| MD      | Inc   | Azi    | TVD    | +N-S   | +E-W    | Vsect  | Departure | Annotation    |
|---------|-------|--------|--------|--------|---------|--------|-----------|---------------|
| 7164.0  | 0.84  | 219.75 | 7161.8 | -64.6  | -48.6   | 49.9   | 138.2     | Tie Into Gyro |
| 12191.0 | 86.50 | 268.90 | 7834.9 | -108.2 | -4590.3 | 4591.6 | 4682.5    | TD            |



Vertical Section at 268.86° (200 usft/in)