

# MEWBOURNE OIL

Cemetery Yeso  
Eddy County, NM  
Long Draw "4J #1  
VH - Job #32K1110927

30-015-37585

Survey: Actual

## SDI Standard Survey Report

26 December, 2010

This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notorized this date 26th of December, 2010.

Carrie Reed

Notary Signature  
County of Midland  
State of Texas



# Scientific Drilling International, Inc.

## SDI Standard Survey Report

|                  |                      |                                     |                                     |
|------------------|----------------------|-------------------------------------|-------------------------------------|
| <b>Company:</b>  | MEWBOURNE OIL        | <b>Local Co-ordinate Reference:</b> | Well Long Draw "4J #1               |
| <b>Project:</b>  | Cemetery Yeso        | <b>TVD Reference:</b>               | WELL @ 0.0usft (Original Well Elev) |
| <b>Site:</b>     | Eddy County, NM      | <b>MD Reference:</b>                | WELL @ 0.0usft (Original Well Elev) |
| <b>Well:</b>     | Long Draw "4J #1     | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | VH - Job #32K1110927 | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | VH - Job #32K1110927 | <b>Database:</b>                    | EDM-Regulatory                      |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | Cemetery Yeso                        |                      |                |
| <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                 |                      |                |

|                       |          |                 |                 |                   |                   |
|-----------------------|----------|-----------------|-----------------|-------------------|-------------------|
| Site                  |          | Eddy County, NM |                 |                   |                   |
| Site Position:        |          | Northing:       | 579,246.37 usft | Latitude:         | 32° 35' 32.490 N  |
| From:                 | Lat/Long | Easting:        | 452,285.36 usft | Longitude:        | 104° 29' 17.730 W |
| Position Uncertainty: | 0.0 usft | Slot Radius:    | 0"              | Grid Convergence: | -0.08 °           |

|                             |                                     |          |                            |                 |                                    |
|-----------------------------|-------------------------------------|----------|----------------------------|-----------------|------------------------------------|
| <b>Well</b>                 | Long Draw "4J #1, Directional (DDC) |          |                            |                 |                                    |
| <b>Well Position</b>        | <b>+N/-S</b>                        | 0.0 usft | <b>Northing:</b>           | 581,877.85 usft | <b>Latitude:</b> 32° 35' 58.540 N  |
|                             | <b>+E/-W</b>                        | 0.0 usft | <b>Easting:</b>            | 452,953.02 usft | <b>Longitude:</b> 104° 29' 9.970 W |
| <b>Position Uncertainty</b> |                                     | 0.0 usft | <b>Wellhead Elevation:</b> | usft            | <b>Ground Level:</b> 0.0 usft      |

|           |                      |             |                 |               |                     |
|-----------|----------------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | VH - Job #32K1110927 |             |                 |               |                     |
| Magnetics | Model Name           | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | BGGM2010             | 11/25/2010  | 8.16            | 60.39         | 48,847              |

|                   |  |                      |        |        |                   |
|-------------------|--|----------------------|--------|--------|-------------------|
| Design            |  | VH - Job #32K1110927 |        |        |                   |
| Audit Notes:      |  |                      |        |        |                   |
| Version:          |  | 1.0                  | Phase: | ACTUAL | Tie On Depth: 0.0 |
| Vertical Section: |  | Depth From (TVD)     | +N/-S  | +E/-W  | Direction         |
|                   |  | (usft)               | (usft) | (usft) | (°)               |
|                   |  | 0.0                  | 0.0    | 0.0    | 270.83            |

|                |              |                               |           |             |
|----------------|--------------|-------------------------------|-----------|-------------|
| Survey Program |              | Date 12/26/2010               |           |             |
| From<br>(usft) | To<br>(usft) | Survey (Wellbore)             | Tool Name | Description |
| 100.0          | 1,786.0      | Actual (VH - Job #32K1110927) | Keeper    | Keeper Gyro |

| Survey                   |                    |                |                        |                       |                     |                        |                            |
|--------------------------|--------------------|----------------|------------------------|-----------------------|---------------------|------------------------|----------------------------|
| Measured Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | True Vertical<br>Depth | North/South<br>(usft) | East/West<br>(usft) | Closure Azimuth<br>(°) | Closure Distance<br>(usft) |
| 0.0                      | 0.00               | 0.00           | 0.0                    | 0.0                   | 0.0                 | 0.00                   | 0.0                        |
| 100.0                    | 0.25               | 61.27          | 100.0                  | 0.1                   | 0.2                 | 61.27                  | 0.2                        |
| 200.0                    | 0.12               | 74.15          | 200.0                  | 0.2                   | 0.5                 | 63.75                  | 0.5                        |
| 300.0                    | 0.13               | 196.24         | 300.0                  | 0.2                   | 0.6                 | 74.04                  | 0.6                        |
| 400.0                    | 0.63               | 84.71          | 400.0                  | 0.1                   | 1.1                 | 84.66                  | 1.1                        |
| 500.0                    | 0.68               | 91.41          | 500.0                  | 0.1                   | 2.2                 | 86.48                  | 2.2                        |
| 600.0                    | 0.45               | 82.43          | 600.0                  | 0.2                   | 3.2                 | 86.90                  | 3.2                        |
| 700.0                    | 0.60               | 78.88          | 700.0                  | 0.3                   | 4.1                 | 85.45                  | 4.1                        |
| 800.0                    | 0.58               | 71.62          | 800.0                  | 0.6                   | 5.1                 | 83.43                  | 5.1                        |
| 900.0                    | 0.61               | 86.39          | 900.0                  | 0.8                   | 6.1                 | 82.72                  | 6.1                        |
| 1,000.0                  | 0.59               | 77.28          | 1,000.0                | 0.9                   | 7.1                 | 82.60                  | 7.2                        |
| 1,100.0                  | 0.57               | 82.63          | 1,100.0                | 1.1                   | 8.1                 | 82.27                  | 8.2                        |

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### Survey

| Measured Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | True Vertical<br>Depth | North/South<br>(usft) | East/West<br>(usft) | Closure Azimuth<br>(°) | Closure Distance<br>(usft) |
|--------------------------|--------------------|----------------|------------------------|-----------------------|---------------------|------------------------|----------------------------|
| 1,200.0                  | 0.37               | 81.12          | 1,200.0                | 1.2                   | 8.9                 | 82.25                  | 9.0                        |
| 1,300.0                  | 0.40               | 100.29         | 1,300.0                | 1.2                   | 9.6                 | 82.85                  | 9.7                        |
| 1,400.0                  | 0.33               | 71.82          | 1,400.0                | 1.2                   | 10.2                | 83.13                  | 10.3                       |
| 1,500.0                  | 0.10               | 81.65          | 1,500.0                | 1.3                   | 10.6                | 82.81                  | 10.7                       |
| 1,600.0                  | 0.17               | 38.59          | 1,600.0                | 1.5                   | 10.8                | 82.26                  | 10.9                       |
| 1,700.0                  | 0.25               | 82.58          | 1,700.0                | 1.6                   | 11.1                | 81.74                  | 11.2                       |
| 1,786.0                  | 0.27               | 350.09         | 1,786.0                | 1.8                   | 11.2                | 80.73                  | 11.4                       |