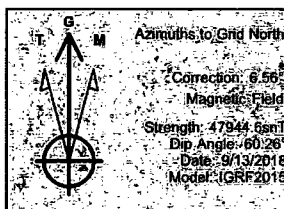


Company Name: Mewbourne Oil Company  
 Caper 20/29 B3CN Fed Com #2H  
 Lea County, New Mexico (Rad 83)  
 Rig: Patterson #228  
 Created By: Shana Robinson  
 Date: 12/04/2018

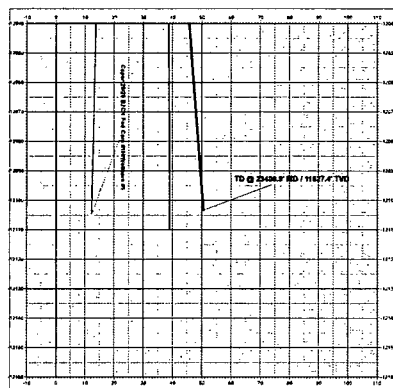
Caper 20/29 B3CN Fed Com #2H  
 Lea County, New Mexico (Rad 83)  
 Q181567 & WT-181318  
 Design #1



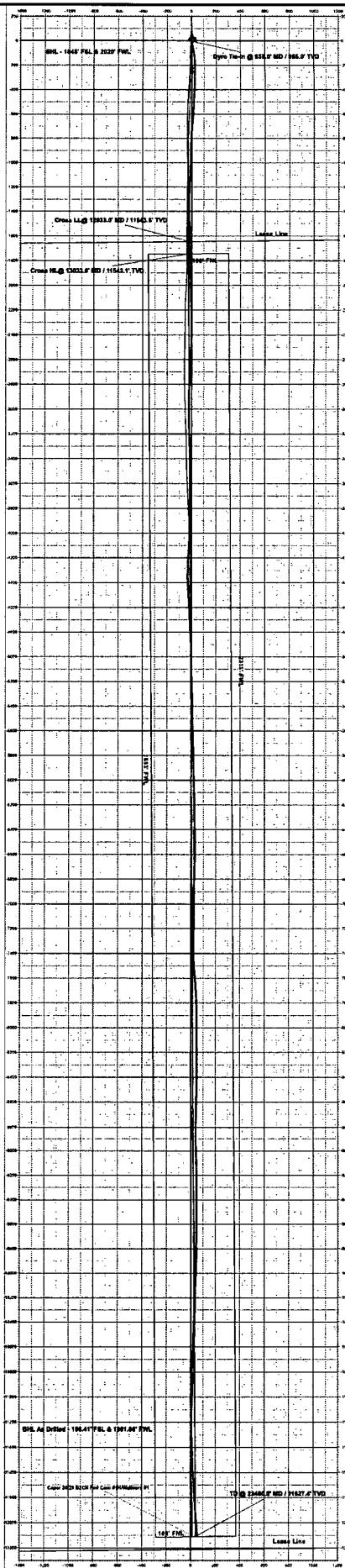
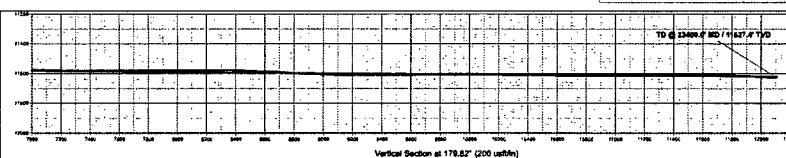
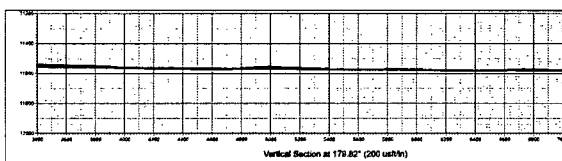
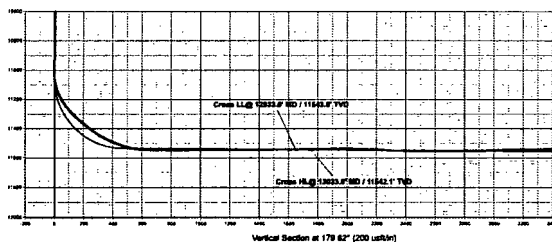
PROJECT DETAILS: Lea County, New Mexico (Rad 83)  
 Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: New Mexico Eastern Zone  
 System Datum: Mean Sea Level

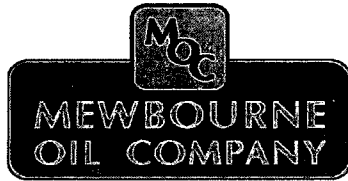
| WELL DETAILS: Caper 20/29 B3CN Fed Com #2H |      |      |        |                  |                   |
|--------------------------------------------|------|------|--------|------------------|-------------------|
| MD                                         | Inc  | Surf | Depth  | Latitude         | Longitude         |
| 1156.0                                     | 0.00 | 0.00 | 3539.0 | 33° 27' 33.413 N | 107° 47' 55.800 W |

| DESIGN ANNOTATIONS |       |        |         |          |       |             |                                          |    |     |
|--------------------|-------|--------|---------|----------|-------|-------------|------------------------------------------|----|-----|
| MD                 | Inc   | Surf   | TD      | MD-S     | MD-W  | VSDeparture | Annotation                               | MD | Inc |
| 1156.0             | 0.00  | 0.00   | 1156.0  | 0.0      | 0.0   | 0.0         | Built 17792'                             |    |     |
| 1183.0             | 89.30 | 183.00 | 1183.0  | -47.1    | -20.9 | 471.9       | EDS @ 89.30° Inc / 183.0° TD / Turn 271° |    |     |
| 1199.0             | 89.30 | 179.00 | 1199.0  | -46.3    | -24.2 | 666.2       | ECT @ 179.00° TD                         |    |     |
| 23449.0            | 89.30 | 179.00 | 11929.0 | -42196.0 | 33.1  | 12109.0     | TD @ 23449' MD / 11929' TD               |    |     |



| ANNOTATIONS |       |        |         |          |       |             |                                          |    |     |
|-------------|-------|--------|---------|----------|-------|-------------|------------------------------------------|----|-----|
| MD          | Inc   | Surf   | TD      | MD-S     | MD-W  | VSDeparture | Annotation                               | MD | Inc |
| 1156.0      | 0.00  | 0.00   | 1156.0  | 0.0      | 0.0   | 0.0         | Built 17792'                             |    |     |
| 1183.0      | 89.30 | 183.00 | 1183.0  | -47.1    | -20.9 | 471.9       | EDS @ 89.30° Inc / 183.0° TD / Turn 271° |    |     |
| 1199.0      | 89.30 | 179.00 | 1199.0  | -46.3    | -24.2 | 666.2       | ECT @ 179.00° TD                         |    |     |
| 23449.0     | 89.30 | 179.00 | 11929.0 | -42196.0 | 33.1  | 12109.0     | TD @ 23449' MD / 11929' TD               |    |     |





# **Mewbourne Oil Company**

**Lea County, New Mexico (Nad 83)**

**Sec 17, T21S, R32E**

**Caper 20/29 B3CN Fed Com #2H**

**Wellbore #1**

**Design: Wellbore #1**

## **QES Survey Report**

**04 December, 2018**





## Survey Report



|           |                                 |                              |                                    |
|-----------|---------------------------------|------------------------------|------------------------------------|
| Company:  | Mewbourne Oil Company           | Local Co-ordinate Reference: | Well Caper 20/29 B3CN Fed Com #2H  |
| Project:  | Lea County, New Mexico (Nad 83) | TVD Reference:               | WELL @ 3665.0usft (Patterson #250) |
| Site:     | Sec 17, T21S, R32E              | MD Reference:                | WELL @ 3665.0usft (Patterson #250) |
| Well:     | Caper 20/29 B3CN Fed Com #2H    | North Reference:             | Grid                               |
| Wellbore: | Wellbore #1                     | Survey Calculation Method:   | Minimum Curvature                  |
| Design:   | Wellbore #1                     | Database:                    | EDM 5000.1 Single User Db          |

|             |                                 |               |                |
|-------------|---------------------------------|---------------|----------------|
| Project     | Lea County, New Mexico (Nad 83) |               |                |
| Map System: | US State Plane 1983             | System Datum: | Mean Sea Level |
| Geo Datum:  | North American Datum 1983       |               |                |
| Map Zone:   | New Mexico Eastern Zone         |               |                |

|                       |                    |              |                 |                   |                   |
|-----------------------|--------------------|--------------|-----------------|-------------------|-------------------|
| Site                  | Sec 17, T21S, R32E |              |                 |                   |                   |
| Site Position:        |                    | Northing:    | 537,432.50 usft | Latitude:         | 32° 28' 33.117 N  |
| From:                 | Map                | Easting:     | 736,986.90 usft | Longitude:        | 103° 41' 56.000 W |
| Position Uncertainty: | 0.0 usft           | Slot Radius: | 13-3/16 "       | Grid Convergence: | 0.34 °            |

|                      |                              |          |                     |                 |               |                   |
|----------------------|------------------------------|----------|---------------------|-----------------|---------------|-------------------|
| Well                 | Caper 20/29 B3CN Fed Com #2H |          |                     |                 |               |                   |
| Well Position        | +N/-S                        | 0.0 usft | Northing:           | 537,462.40 usft | Latitude:     | 32° 28' 33.413 N  |
|                      | +E/-W                        | 0.0 usft | Easting:            | 736,986.70 usft | Longitude:    | 103° 41' 56.000 W |
| Position Uncertainty |                              | 0.0 usft | Wellhead Elevation: | usft            | Ground Level: | 3,638.0 usft      |

|           |             |             |                 |               |                     |
|-----------|-------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | Wellbore #1 |             |                 |               |                     |
| Magnetics | Model Name  | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | IGRF2015    | 9/13/2018   | 6.90            | 60.26         | 47,944.64633610     |

|                   |                         |              |              |               |     |
|-------------------|-------------------------|--------------|--------------|---------------|-----|
| Design            | Wellbore #1             |              |              |               |     |
| Audit Notes:      |                         |              |              |               |     |
| Version:          | 1.0                     | Phase:       | ACTUAL       | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |     |
|                   | 0.0                     | 0.0          | 0.0          | 179.82        |     |

|                |                |                                           |                 |                       |  |
|----------------|----------------|-------------------------------------------|-----------------|-----------------------|--|
| Survey Program | Date 12/3/2018 |                                           |                 |                       |  |
| From (usft)    | To (usft)      | Survey (Wellbore)                         | Tool Name       | Description           |  |
| 100.0          | 955.0          | Phoenix Tech - Surface Gyro's (Wellbore # | GYRO-NS         | OWSG Gyrocompass Gyro |  |
| 1,125.0        | 23,400.0       | QES MWD Surveys (Wellbore #1)             | OWSG (Rev2) MWD | OWSG MWD - Standard   |  |

|                       |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |  |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |  |
| 100.0                 | 0.51            | 161.06      | 100.0                 | -0.4         | 0.1          | 0.4                     | 0.51                    | 0.51                   | 0.00                  |  |
| 200.0                 | 0.48            | 155.05      | 200.0                 | -1.2         | 0.5          | 1.2                     | 0.06                    | -0.03                  | -6.01                 |  |
| 300.0                 | 0.19            | 114.72      | 300.0                 | -1.7         | 0.8          | 1.7                     | 0.36                    | -0.29                  | -40.33                |  |
| 400.0                 | 0.37            | 189.20      | 400.0                 | -2.1         | 0.9          | 2.1                     | 0.37                    | 0.18                   | 74.48                 |  |
| 500.0                 | 0.34            | 147.91      | 500.0                 | -2.6         | 1.0          | 2.6                     | 0.25                    | -0.03                  | -41.29                |  |
| 600.0                 | 0.42            | 134.11      | 600.0                 | -3.1         | 1.4          | 3.1                     | 0.12                    | 0.08                   | -13.80                |  |
| 700.0                 | 0.34            | 139.36      | 700.0                 | -3.6         | 1.9          | 3.6                     | 0.09                    | -0.08                  | 5.25                  |  |
| 800.0                 | 0.23            | 175.84      | 800.0                 | -4.0         | 2.1          | 4.0                     | 0.21                    | -0.11                  | 36.48                 |  |
| 900.0                 | 0.46            | 202.84      | 900.0                 | -4.6         | 1.9          | 4.6                     | 0.28                    | 0.23                   | 27.00                 |  |

|                  |                                 |                                     |                                    |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company           | <b>Local Co-ordinate Reference:</b> | Well Caper 20/29 B3CN Fed Com #2H  |
| <b>Project:</b>  | Lea County, New Mexico (Nad 83) | <b>TVD Reference:</b>               | WELL @ 3665.0usft (Patterson #250) |
| <b>Site:</b>     | Sec 17, T21S, R32E              | <b>MD Reference:</b>                | WELL @ 3665.0usft (Patterson #250) |
| <b>Well:</b>     | Caper 20/29 B3CN Fed Com #2H    | <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) |
|---------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| <b>Gyro Tie-in @ 955.0' MD / 955.0' TVD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 955.0                                       | 0.60            | 240.23      | 955.0                 | -5.0         | 1.6          | 5.0                     | 0.66                    | 0.25                   | 67.98                 |
| 1,125.0                                     | 1.10            | 223.60      | 1,125.0               | -6.6         | -0.3         | 6.6                     | 0.32                    | 0.29                   | -9.78                 |
| 1,310.0                                     | 1.10            | 206.10      | 1,309.9               | -9.5         | -2.3         | 9.5                     | 0.18                    | 0.00                   | -9.46                 |
| 1,496.0                                     | 1.10            | 197.50      | 1,495.9               | -12.8        | -3.6         | 12.8                    | 0.09                    | 0.00                   | -4.62                 |
| 1,683.0                                     | 1.10            | 188.50      | 1,682.9               | -16.3        | -4.4         | 16.2                    | 0.09                    | 0.00                   | -4.81                 |
| 1,870.0                                     | 1.00            | 190.90      | 1,869.8               | -19.6        | -5.0         | 19.6                    | 0.06                    | -0.05                  | 1.28                  |
| 2,056.0                                     | 1.30            | 30.30       | 2,055.8               | -19.4        | -4.2         | 19.4                    | 1.22                    | 0.16                   | -86.34                |
| 2,242.0                                     | 1.90            | 39.10       | 2,241.7               | -15.2        | -1.2         | 15.2                    | 0.35                    | 0.32                   | 4.73                  |
| 2,428.0                                     | 2.50            | 51.60       | 2,427.6               | -10.3        | 3.9          | 10.3                    | 0.41                    | 0.32                   | 6.72                  |
| 2,614.0                                     | 3.40            | 59.10       | 2,613.4               | -4.9         | 11.8         | 5.0                     | 0.53                    | 0.48                   | 4.03                  |
| 2,800.0                                     | 1.80            | 48.60       | 2,799.2               | -0.2         | 18.7         | 0.2                     | 0.89                    | -0.86                  | -5.65                 |
| 2,987.0                                     | 2.00            | 15.00       | 2,986.1               | 4.9          | 21.8         | -4.9                    | 0.60                    | 0.11                   | -17.97                |
| 3,173.0                                     | 1.10            | 26.10       | 3,172.0               | 9.7          | 23.4         | -9.6                    | 0.51                    | -0.48                  | 5.97                  |
| 3,360.0                                     | 0.90            | 39.40       | 3,359.0               | 12.4         | 25.1         | -12.3                   | 0.16                    | -0.11                  | 7.11                  |
| 3,544.0                                     | 0.80            | 52.60       | 3,542.9               | 14.3         | 27.1         | -14.2                   | 0.12                    | -0.05                  | 7.17                  |
| 3,731.0                                     | 0.90            | 38.00       | 3,729.9               | 16.3         | 29.0         | -16.2                   | 0.13                    | 0.05                   | -7.81                 |
| 3,900.0                                     | 0.60            | 28.00       | 3,898.9               | 18.1         | 30.2         | -18.0                   | 0.19                    | -0.18                  | -5.92                 |
| 4,012.0                                     | 1.00            | 16.60       | 4,010.9               | 19.5         | 30.8         | -19.5                   | 0.38                    | 0.36                   | -10.18                |
| 4,198.0                                     | 1.10            | 273.60      | 4,196.9               | 21.2         | 29.5         | -21.1                   | 0.88                    | 0.05                   | -55.38                |
| 4,385.0                                     | 1.00            | 270.10      | 4,383.8               | 21.3         | 26.0         | -21.2                   | 0.06                    | -0.05                  | -1.87                 |
| 4,572.0                                     | 1.10            | 270.10      | 4,570.8               | 21.3         | 22.6         | -21.3                   | 0.05                    | 0.05                   | 0.00                  |
| 4,759.0                                     | 1.10            | 264.60      | 4,757.8               | 21.2         | 19.0         | -21.1                   | 0.06                    | 0.00                   | -2.94                 |
| 4,946.0                                     | 1.10            | 247.90      | 4,944.7               | 20.3         | 15.6         | -20.3                   | 0.17                    | 0.00                   | -8.93                 |
| 5,132.0                                     | 1.30            | 242.50      | 5,130.7               | 18.7         | 12.1         | -18.6                   | 0.12                    | 0.11                   | -2.90                 |
| 5,318.0                                     | 1.20            | 236.00      | 5,316.7               | 16.6         | 8.6          | -16.6                   | 0.09                    | -0.05                  | -3.49                 |
| 5,505.0                                     | 1.20            | 241.90      | 5,503.6               | 14.6         | 5.2          | -14.6                   | 0.07                    | 0.00                   | 3.16                  |
| 5,692.0                                     | 1.00            | 236.10      | 5,690.6               | 12.8         | 2.1          | -12.8                   | 0.12                    | -0.11                  | -3.10                 |
| 5,879.0                                     | 0.90            | 227.30      | 5,877.6               | 10.9         | -0.3         | -10.9                   | 0.09                    | -0.05                  | -4.71                 |
| 6,066.0                                     | 0.60            | 233.00      | 6,064.5               | 9.3          | -2.2         | -9.3                    | 0.17                    | -0.16                  | 3.05                  |
| 6,253.0                                     | 0.50            | 236.80      | 6,251.5               | 8.2          | -3.6         | -8.3                    | 0.06                    | -0.05                  | 2.03                  |
| 6,441.0                                     | 0.70            | 242.30      | 6,439.5               | 7.3          | -5.3         | -7.3                    | 0.11                    | 0.11                   | 2.93                  |
| 6,628.0                                     | 0.80            | 243.70      | 6,626.5               | 6.1          | -7.5         | -6.2                    | 0.05                    | 0.05                   | 0.75                  |
| 6,815.0                                     | 1.10            | 261.10      | 6,813.5               | 5.3          | -10.4        | -5.3                    | 0.22                    | 0.16                   | 9.30                  |
| 7,001.0                                     | 1.30            | 249.50      | 6,999.4               | 4.3          | -14.2        | -4.3                    | 0.17                    | 0.11                   | -6.24                 |
| 7,188.0                                     | 1.30            | 248.10      | 7,186.4               | 2.7          | -18.1        | -2.8                    | 0.02                    | 0.00                   | -0.75                 |
| 7,374.0                                     | 1.10            | 24.00       | 7,372.4               | 3.6          | -19.4        | -3.6                    | 1.20                    | -0.11                  | 73.06                 |
| 7,561.0                                     | 1.00            | 356.40      | 7,559.3               | 6.9          | -18.7        | -6.9                    | 0.27                    | -0.05                  | -14.76                |
| 7,748.0                                     | 1.00            | 359.50      | 7,746.3               | 10.1         | -18.9        | -10.2                   | 0.03                    | 0.00                   | 1.66                  |
| 7,934.0                                     | 0.70            | 358.50      | 7,932.3               | 12.9         | -18.9        | -12.9                   | 0.16                    | -0.16                  | -0.54                 |
| 8,121.0                                     | 0.70            | 2.70        | 8,119.3               | 15.2         | -18.9        | -15.2                   | 0.03                    | 0.00                   | 2.25                  |
| 8,307.0                                     | 0.80            | 39.60       | 8,305.3               | 17.3         | -18.0        | -17.3                   | 0.26                    | 0.05                   | 19.84                 |
| 8,494.0                                     | 0.90            | 74.60       | 8,492.3               | 18.7         | -15.8        | -18.7                   | 0.28                    | 0.05                   | 18.72                 |

|                  |                                 |                                     |                                    |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company           | <b>Local Co-ordinate Reference:</b> | Well Caper 20/29 B3CN Fed Com #2H  |
| <b>Project:</b>  | Lea County, New Mexico (Nad 83) | <b>TVD Reference:</b>               | WELL @ 3665.0usft (Patterson #250) |
| <b>Site:</b>     | Sec 17, T21S, R32E              | <b>MD Reference:</b>                | WELL @ 3665.0usft (Patterson #250) |
| <b>Well:</b>     | Caper 20/29 B3CN Fed Com #2H    | <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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 8,681.0               | 0.40            | 67.00       | 8,679.2               | 19.3         | -13.7        | -19.4                   | 0.27                    | -0.27                  | -4.06                 |
| 8,668.0               | 0.50            | 57.40       | 8,666.2               | 20.0         | -12.4        | -20.1                   | 0.07                    | 0.05                   | -5.13                 |
| 9,055.0               | 1.20            | 254.90      | 9,053.2               | 20.0         | -13.6        | -20.0                   | 0.90                    | 0.37                   | -86.90                |
| 9,241.0               | 1.80            | 99.90       | 9,239.2               | 18.9         | -12.7        | -19.0                   | 1.58                    | 0.32                   | -83.33                |
| 9,427.0               | 1.10            | 148.80      | 9,425.1               | 16.9         | -8.8         | -16.9                   | 0.73                    | -0.38                  | 26.29                 |
| 9,614.0               | 0.80            | 141.70      | 9,612.1               | 14.4         | -7.1         | -14.4                   | 0.17                    | -0.16                  | -3.80                 |
| 9,800.0               | 1.30            | 142.60      | 9,798.1               | 11.7         | -5.0         | -11.7                   | 0.27                    | 0.27                   | 0.48                  |
| 9,999.0               | 1.10            | 144.60      | 9,997.0               | 8.3          | -2.5         | -8.3                    | 0.10                    | -0.10                  | 1.01                  |
| 10,186.0              | 1.00            | 149.60      | 10,184.0              | 5.4          | -0.7         | -5.4                    | 0.07                    | -0.05                  | 2.67                  |
| 10,372.0              | 1.50            | 196.40      | 10,370.0              | 1.7          | -0.5         | -1.7                    | 0.59                    | 0.27                   | 25.16                 |
| 10,558.0              | 1.10            | 184.40      | 10,555.9              | -2.4         | -1.4         | 2.4                     | 0.26                    | -0.22                  | -6.45                 |
| 10,745.0              | 1.30            | 18.70       | 10,742.9              | -2.2         | -0.8         | 2.2                     | 1.27                    | 0.11                   | -88.61                |
| 10,931.0              | 1.10            | 298.70      | 10,928.9              | 0.7          | -1.7         | -0.7                    | 0.83                    | -0.11                  | -43.01                |
| 10,994.0              | 1.00            | 293.10      | 10,991.9              | 1.2          | -2.8         | -1.2                    | 0.23                    | -0.16                  | -8.89                 |
| 11,047.0              | 2.00            | 181.10      | 11,044.9              | 0.4          | -3.2         | -0.4                    | 4.81                    | 1.89                   | -211.32               |
| 11,078.0              | 6.90            | 167.40      | 11,075.8              | -1.9         | -2.8         | 1.9                     | 16.06                   | 15.81                  | -44.19                |
| 11,109.0              | 12.50           | 166.40      | 11,106.3              | -7.0         | -1.6         | 7.0                     | 18.07                   | 18.06                  | -3.23                 |
| 11,140.0              | 18.80           | 165.30      | 11,136.1              | -15.1        | 0.5          | 15.1                    | 20.34                   | 20.32                  | -3.55                 |
| 11,171.0              | 25.10           | 168.10      | 11,164.9              | -26.4        | 3.1          | 26.4                    | 20.60                   | 20.32                  | 9.03                  |
| 11,202.0              | 30.10           | 170.00      | 11,192.3              | -40.5        | 5.8          | 40.5                    | 16.38                   | 16.13                  | 6.13                  |
| 11,233.0              | 33.90           | 170.00      | 11,218.6              | -56.7        | 8.6          | 56.7                    | 12.26                   | 12.26                  | 0.00                  |
| 11,264.0              | 37.10           | 170.00      | 11,243.9              | -74.4        | 11.8         | 74.4                    | 10.32                   | 10.32                  | 0.00                  |
| 11,296.0              | 40.50           | 170.70      | 11,268.8              | -94.2        | 15.1         | 94.2                    | 10.71                   | 10.63                  | 2.19                  |
| 11,327.0              | 43.60           | 172.50      | 11,291.8              | -114.7       | 18.1         | 114.7                   | 10.73                   | 10.00                  | 5.81                  |
| 11,358.0              | 45.70           | 174.40      | 11,313.9              | -136.3       | 20.6         | 136.4                   | 8.03                    | 6.77                   | 6.13                  |
| 11,389.0              | 48.20           | 176.40      | 11,335.0              | -158.9       | 22.4         | 159.0                   | 9.34                    | 8.06                   | 6.45                  |
| 11,404.0              | 49.30           | 177.60      | 11,344.9              | -170.2       | 23.0         | 170.2                   | 9.48                    | 7.33                   | 8.00                  |
| 11,472.0              | 52.20           | 181.10      | 11,387.9              | -222.8       | 23.6         | 222.9                   | 5.84                    | 4.26                   | 5.15                  |
| 11,503.0              | 53.40           | 181.10      | 11,406.7              | -247.5       | 23.1         | 247.6                   | 3.87                    | 3.87                   | 0.00                  |
| 11,534.0              | 55.80           | 180.60      | 11,424.6              | -272.8       | 22.7         | 272.8                   | 7.85                    | 7.74                   | -1.61                 |
| 11,565.0              | 58.10           | 180.10      | 11,441.5              | -298.7       | 22.6         | 298.8                   | 7.54                    | 7.42                   | -1.61                 |
| 11,596.0              | 61.10           | 180.40      | 11,457.2              | -325.5       | 22.5         | 325.5                   | 9.71                    | 9.68                   | 0.97                  |
| 11,627.0              | 63.20           | 180.40      | 11,471.7              | -352.9       | 22.3         | 352.9                   | 6.77                    | 6.77                   | 0.00                  |
| 11,657.0              | 65.00           | 181.80      | 11,484.8              | -379.9       | 21.7         | 379.9                   | 7.32                    | 6.00                   | 4.67                  |
| 11,689.0              | 68.20           | 182.20      | 11,497.5              | -409.2       | 20.7         | 409.3                   | 10.07                   | 10.00                  | 1.25                  |
| 11,720.0              | 68.90           | 182.70      | 11,508.9              | -438.0       | 19.5         | 438.1                   | 2.71                    | 2.26                   | 1.61                  |
| 11,751.0              | 71.80           | 182.30      | 11,519.3              | -467.2       | 18.2         | 467.3                   | 9.43                    | 9.35                   | -1.29                 |
| 11,781.0              | 75.70           | 182.20      | 11,527.7              | -496.0       | 17.1         | 496.0                   | 13.00                   | 13.00                  | -0.33                 |
| 11,811.0              | 78.30           | 183.40      | 11,534.4              | -525.2       | 15.7         | 525.2                   | 9.50                    | 8.67                   | 4.00                  |
| 11,842.0              | 82.20           | 183.20      | 11,539.7              | -555.7       | 13.9         | 555.7                   | 12.60                   | 12.58                  | -0.65                 |
| 11,873.0              | 84.90           | 183.70      | 11,543.2              | -586.4       | 12.0         | 586.4                   | 8.86                    | 8.71                   | 1.61                  |
| 11,904.0              | 86.00           | 185.10      | 11,545.6              | -617.2       | 9.7          | 617.2                   | 5.73                    | 3.55                   | 4.52                  |
| 11,935.0              | 88.40           | 185.50      | 11,547.1              | -648.0       | 6.8          | 648.1                   | 7.85                    | 7.74                   | 1.29                  |

|                  |                                 |                                     |                                    |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company           | <b>Local Co-ordinate Reference:</b> | Well Caper 20/29 B3CN Fed Com #2H  |
| <b>Project:</b>  | Lea County, New Mexico (Nad 83) | <b>TVD Reference:</b>               | WELL @ 3665.0usft (Patterson #250) |
| <b>Site:</b>     | Sec 17, T21S, R32E              | <b>MD Reference:</b>                | WELL @ 3665.0usft (Patterson #250) |
| <b>Well:</b>     | Caper 20/29 B3CN Fed Com #2H    | <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) |
|---------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 12,027.0                                    | 90.30           | 183.40      | 11,548.2              | -739.8       | -0.3         | 739.7                   | 3.08                    | 2.07                   | -2.28                 |
| 12,120.0                                    | 90.20           | 182.90      | 11,547.8              | -832.6       | -5.4         | 832.6                   | 0.55                    | -0.11                  | -0.54                 |
| 12,213.0                                    | 90.50           | 182.20      | 11,547.2              | -925.5       | -9.6         | 925.5                   | 0.82                    | 0.32                   | -0.75                 |
| 12,306.0                                    | 90.80           | 181.40      | 11,546.1              | -1,018.5     | -12.5        | 1,018.4                 | 0.92                    | 0.32                   | -0.86                 |
| 12,399.0                                    | 90.20           | 182.50      | 11,545.3              | -1,111.4     | -15.7        | 1,111.3                 | 1.35                    | -0.65                  | 1.18                  |
| 12,493.0                                    | 90.00           | 182.30      | 11,545.2              | -1,205.3     | -19.6        | 1,205.3                 | 0.30                    | -0.21                  | -0.21                 |
| 12,585.0                                    | 89.60           | 181.10      | 11,545.5              | -1,297.3     | -22.3        | 1,297.2                 | 1.37                    | -0.43                  | -1.30                 |
| 12,678.0                                    | 90.70           | 179.50      | 11,545.2              | -1,390.3     | -22.8        | 1,390.2                 | 2.09                    | 1.18                   | -1.72                 |
| 12,772.0                                    | 90.40           | 177.90      | 11,544.3              | -1,484.2     | -20.7        | 1,484.2                 | 1.73                    | -0.32                  | -1.70                 |
| 12,865.0                                    | 90.00           | 179.00      | 11,544.0              | -1,577.2     | -18.2        | 1,577.1                 | 1.26                    | -0.43                  | 1.18                  |
| <b>Cross LL@ 12933.0' MD / 11543.5' TVD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,933.0                                    | 90.80           | 180.32      | 11,543.5              | -1,645.2     | -17.8        | 1,645.1                 | 2.27                    | 1.18                   | 1.94                  |
| 12,958.0                                    | 91.10           | 180.80      | 11,543.1              | -1,670.2     | -18.0        | 1,670.1                 | 2.27                    | 1.18                   | 1.94                  |
| <b>Cross HL@ 13033.0' MD / 11542.1' TVD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 13,033.0                                    | 90.54           | 180.32      | 11,542.1              | -1,745.2     | -18.7        | 1,745.1                 | 0.99                    | -0.75                  | -0.65                 |
| 13,051.0                                    | 90.40           | 180.20      | 11,541.9              | -1,763.2     | -18.8        | 1,763.1                 | 0.99                    | -0.75                  | -0.65                 |
| 13,144.0                                    | 90.60           | 177.90      | 11,541.1              | -1,856.2     | -17.3        | 1,856.1                 | 2.48                    | 0.22                   | -2.47                 |
| 13,237.0                                    | 90.30           | 176.50      | 11,540.4              | -1,949.0     | -12.7        | 1,949.0                 | 1.54                    | -0.32                  | -1.51                 |
| 13,329.0                                    | 89.20           | 178.30      | 11,540.8              | -2,040.9     | -8.6         | 2,040.9                 | 2.29                    | -1.20                  | 1.96                  |
| 13,422.0                                    | 87.80           | 176.90      | 11,543.2              | -2,133.8     | -4.7         | 2,133.8                 | 2.13                    | -1.51                  | -1.51                 |
| 13,515.0                                    | 88.30           | 179.70      | 11,546.4              | -2,226.7     | -1.9         | 2,226.7                 | 3.06                    | 0.54                   | 3.01                  |
| 13,608.0                                    | 88.10           | 179.30      | 11,549.3              | -2,319.7     | -1.1         | 2,319.7                 | 0.48                    | -0.22                  | -0.43                 |
| 13,701.0                                    | 87.80           | 181.60      | 11,552.6              | -2,412.6     | -1.8         | 2,412.6                 | 2.49                    | -0.32                  | 2.47                  |
| 13,794.0                                    | 90.40           | 183.20      | 11,554.1              | -2,505.5     | -5.7         | 2,505.5                 | 3.28                    | 2.80                   | 1.72                  |
| 13,887.0                                    | 89.80           | 182.50      | 11,553.9              | -2,598.4     | -10.3        | 2,598.3                 | 0.99                    | -0.65                  | -0.75                 |
| 13,980.0                                    | 89.30           | 182.00      | 11,554.6              | -2,691.3     | -14.0        | 2,691.2                 | 0.76                    | -0.54                  | -0.54                 |
| 14,073.0                                    | 91.10           | 182.90      | 11,554.3              | -2,784.2     | -18.0        | 2,784.1                 | 2.16                    | 1.94                   | 0.97                  |
| 14,167.0                                    | 90.80           | 180.90      | 11,552.8              | -2,878.1     | -21.1        | 2,878.1                 | 2.15                    | -0.32                  | -2.13                 |
| 14,260.0                                    | 91.40           | 180.10      | 11,551.0              | -2,971.1     | -21.9        | 2,971.0                 | 1.08                    | 0.65                   | -0.86                 |
| 14,354.0                                    | 92.50           | 179.90      | 11,547.8              | -3,065.1     | -21.9        | 3,065.0                 | 1.19                    | 1.17                   | -0.21                 |
| 14,448.0                                    | 90.70           | 179.00      | 11,545.2              | -3,159.0     | -21.0        | 3,158.9                 | 2.14                    | -1.91                  | -0.96                 |
| 14,541.0                                    | 90.90           | 177.90      | 11,543.9              | -3,252.0     | -18.5        | 3,251.9                 | 1.20                    | 0.22                   | -1.18                 |
| 14,633.0                                    | 90.30           | 178.10      | 11,542.9              | -3,343.9     | -15.3        | 3,343.9                 | 0.69                    | -0.65                  | 0.22                  |
| 14,726.0                                    | 88.00           | 180.20      | 11,544.3              | -3,436.9     | -13.9        | 3,436.8                 | 3.35                    | -2.47                  | 2.26                  |
| 14,819.0                                    | 87.60           | 179.20      | 11,547.8              | -3,529.8     | -13.4        | 3,529.8                 | 1.16                    | -0.43                  | -1.08                 |
| 14,912.0                                    | 87.50           | 178.60      | 11,551.8              | -3,622.7     | -11.6        | 3,622.7                 | 0.65                    | -0.11                  | -0.65                 |
| 15,005.0                                    | 90.10           | 181.10      | 11,553.8              | -3,715.7     | -11.4        | 3,715.6                 | 3.88                    | 2.80                   | 2.69                  |
| 15,098.0                                    | 88.90           | 181.40      | 11,554.6              | -3,808.6     | -13.4        | 3,808.6                 | 1.33                    | -1.29                  | 0.32                  |
| 15,191.0                                    | 86.20           | 179.90      | 11,558.6              | -3,901.5     | -14.5        | 3,901.5                 | 3.32                    | -2.90                  | -1.61                 |
| 15,285.0                                    | 89.30           | 182.20      | 11,562.2              | -3,995.4     | -16.2        | 3,995.4                 | 4.11                    | 3.30                   | 2.45                  |
| 15,378.0                                    | 89.30           | 182.70      | 11,563.4              | -4,088.3     | -20.2        | 4,088.3                 | 0.54                    | 0.00                   | 0.54                  |
| 15,471.0                                    | 88.00           | 182.90      | 11,565.6              | -4,181.2     | -24.7        | 4,181.1                 | 1.41                    | -1.40                  | 0.22                  |
| 15,565.0                                    | 90.10           | 182.70      | 11,567.1              | -4,275.1     | -29.3        | 4,275.0                 | 2.24                    | 2.23                   | -0.21                 |
| 15,658.0                                    | 89.60           | 179.20      | 11,567.4              | -4,368.0     | -30.8        | 4,367.9                 | 3.80                    | -0.54                  | -3.76                 |



# Survey Report



|                  |                                 |                                     |                                    |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company           | <b>Local Co-ordinate Reference:</b> | Well Caper 20/29 B3CN Fed Com #2H  |
| <b>Project:</b>  | Lea County, New Mexico (Nad 83) | <b>TVD Reference:</b>               | WELL @ 3665.0usft (Patterson #250) |
| <b>Site:</b>     | Sec 17, T21S, R32E              | <b>MD Reference:</b>                | WELL @ 3665.0usft (Patterson #250) |
| <b>Well:</b>     | Caper 20/29 B3CN Fed Com #2H    | <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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 15,751.0              | 88.40           | 176.50      | 11,569.0              | -4,461.0     | -27.3        | 4,460.9                 | 3.18                    | -1.29                  | -2.90                 |
| 15,845.0              | 89.90           | 176.40      | 11,570.4              | -4,554.8     | -21.5        | 4,554.7                 | 1.60                    | 1.60                   | -0.11                 |
| 15,938.0              | 89.90           | 176.90      | 11,570.6              | -4,647.6     | -16.1        | 4,647.5                 | 0.54                    | 0.00                   | 0.54                  |
| 16,031.0              | 92.00           | 177.20      | 11,569.0              | -4,740.5     | -11.3        | 4,740.4                 | 2.28                    | 2.26                   | 0.32                  |
| 16,125.0              | 93.00           | 178.10      | 11,564.9              | -4,834.3     | -7.4         | 4,834.2                 | 1.43                    | 1.06                   | 0.96                  |
| 16,219.0              | 91.50           | 177.60      | 11,561.2              | -4,928.2     | -3.9         | 4,928.1                 | 1.68                    | -1.60                  | -0.53                 |
| 16,313.0              | 88.60           | 179.70      | 11,561.1              | -5,022.1     | -1.7         | 5,022.1                 | 3.81                    | -3.09                  | 2.23                  |
| 16,407.0              | 87.90           | 179.50      | 11,564.0              | -5,116.1     | -1.1         | 5,116.0                 | 0.77                    | -0.74                  | -0.21                 |
| 16,501.0              | 87.80           | 178.60      | 11,567.5              | -5,210.0     | 0.5          | 5,210.0                 | 0.96                    | -0.11                  | -0.96                 |
| 16,595.0              | 88.60           | 178.80      | 11,570.5              | -5,303.9     | 2.6          | 5,303.9                 | 0.88                    | 0.85                   | 0.21                  |
| 16,689.0              | 89.50           | 179.20      | 11,572.0              | -5,397.9     | 4.3          | 5,397.9                 | 1.05                    | 0.96                   | 0.43                  |
| 16,784.0              | 88.80           | 177.90      | 11,573.5              | -5,492.8     | 6.7          | 5,492.8                 | 1.55                    | -0.74                  | -1.37                 |
| 16,878.0              | 89.50           | 178.80      | 11,574.8              | -5,586.8     | 9.4          | 5,586.8                 | 1.21                    | 0.74                   | 0.96                  |
| 16,972.0              | 90.30           | 178.50      | 11,575.0              | -5,680.8     | 11.6         | 5,680.8                 | 0.91                    | 0.85                   | -0.32                 |
| 17,066.0              | 91.40           | 178.30      | 11,573.6              | -5,774.7     | 14.2         | 5,774.7                 | 1.19                    | 1.17                   | -0.21                 |
| 17,159.0              | 89.50           | 179.50      | 11,572.9              | -5,867.7     | 16.0         | 5,867.7                 | 2.42                    | -2.04                  | 1.29                  |
| 17,254.0              | 89.00           | 178.80      | 11,574.1              | -5,962.7     | 17.4         | 5,962.7                 | 0.91                    | -0.53                  | -0.74                 |
| 17,348.0              | 88.10           | 177.60      | 11,576.5              | -6,056.6     | 20.4         | 6,056.6                 | 1.60                    | -0.96                  | -1.28                 |
| 17,442.0              | 88.90           | 178.50      | 11,579.0              | -6,150.5     | 23.6         | 6,150.5                 | 1.28                    | 0.85                   | 0.96                  |
| 17,536.0              | 88.90           | 179.70      | 11,580.8              | -6,244.5     | 25.0         | 6,244.5                 | 1.28                    | 0.00                   | 1.28                  |
| 17,630.0              | 90.50           | 179.00      | 11,581.3              | -6,338.5     | 26.1         | 6,338.5                 | 1.86                    | 1.70                   | -0.74                 |
| 17,723.0              | 90.00           | 177.90      | 11,580.9              | -6,431.4     | 28.6         | 6,431.5                 | 1.30                    | -0.54                  | -1.18                 |
| 17,817.0              | 90.80           | 180.60      | 11,580.2              | -6,525.4     | 29.9         | 6,525.5                 | 3.00                    | 0.85                   | 2.87                  |
| 17,911.0              | 92.70           | 181.80      | 11,577.3              | -6,619.3     | 27.9         | 6,619.4                 | 2.39                    | 2.02                   | 1.28                  |
| 18,006.0              | 89.60           | 181.60      | 11,575.4              | -6,714.3     | 25.1         | 6,714.3                 | 3.27                    | -3.26                  | -0.21                 |
| 18,100.0              | 89.10           | 182.30      | 11,576.5              | -6,808.2     | 21.9         | 6,808.2                 | 0.92                    | -0.53                  | 0.74                  |
| 18,194.0              | 88.20           | 183.40      | 11,578.7              | -6,902.1     | 17.2         | 6,902.1                 | 1.51                    | -0.96                  | 1.17                  |
| 18,288.0              | 90.20           | 181.80      | 11,580.0              | -6,995.9     | 12.9         | 6,995.9                 | 2.72                    | 2.13                   | -1.70                 |
| 18,381.0              | 89.20           | 180.90      | 11,580.5              | -7,088.9     | 10.7         | 7,088.9                 | 1.45                    | -1.08                  | -0.97                 |
| 18,475.0              | 88.90           | 180.10      | 11,582.1              | -7,182.9     | 9.9          | 7,182.9                 | 0.91                    | -0.32                  | -0.85                 |
| 18,569.0              | 89.70           | 178.60      | 11,583.2              | -7,276.9     | 11.0         | 7,276.9                 | 1.81                    | 0.85                   | -1.60                 |
| 18,663.0              | 89.70           | 177.20      | 11,583.7              | -7,370.8     | 14.4         | 7,370.8                 | 1.49                    | 0.00                   | -1.49                 |
| 18,757.0              | 90.40           | 176.70      | 11,583.6              | -7,464.7     | 19.4         | 7,464.7                 | 0.92                    | 0.74                   | -0.53                 |
| 18,852.0              | 90.30           | 175.30      | 11,583.0              | -7,559.4     | 26.1         | 7,559.5                 | 1.48                    | -0.11                  | -1.47                 |
| 18,947.0              | 90.00           | 174.90      | 11,582.8              | -7,654.1     | 34.2         | 7,654.2                 | 0.53                    | -0.32                  | -0.42                 |
| 19,038.0              | 89.90           | 176.90      | 11,582.9              | -7,744.9     | 40.7         | 7,744.9                 | 2.20                    | -0.11                  | 2.20                  |
| 19,132.0              | 89.30           | 178.60      | 11,583.5              | -7,838.8     | 44.4         | 7,838.9                 | 1.92                    | -0.64                  | 1.81                  |
| 19,226.0              | 89.60           | 180.60      | 11,584.4              | -7,932.8     | 45.0         | 7,932.9                 | 2.15                    | 0.32                   | 2.13                  |
| 19,320.0              | 90.50           | 179.50      | 11,584.4              | -8,026.8     | 44.9         | 8,026.9                 | 1.51                    | 0.96                   | -1.17                 |
| 19,414.0              | 90.40           | 179.00      | 11,583.6              | -8,120.8     | 46.2         | 8,120.9                 | 0.54                    | -0.11                  | -0.53                 |
| 19,508.0              | 91.20           | 179.50      | 11,582.3              | -8,214.7     | 47.4         | 8,214.8                 | 1.00                    | 0.85                   | 0.53                  |
| 19,602.0              | 90.20           | 179.90      | 11,581.2              | -8,308.7     | 47.9         | 8,308.8                 | 1.15                    | -1.06                  | 0.43                  |
| 19,697.0              | 88.50           | 181.40      | 11,582.2              | -8,403.7     | 46.8         | 8,403.8                 | 2.39                    | -1.79                  | 1.58                  |



## Survey Report



|           |                                 |                              |                                    |
|-----------|---------------------------------|------------------------------|------------------------------------|
| Company:  | Mewbourne Oil Company           | Local Co-ordinate Reference: | Well Caper 20/29 B3CN Fed Com #2H  |
| Project:  | Lea County, New Mexico (Nad 83) | TVD Reference:               | WELL @ 3665.0usft (Patterson #250) |
| Site:     | Sec 17, T21S, R32E              | MD Reference:                | WELL @ 3665.0usft (Patterson #250) |
| Well:     | Caper 20/29 B3CN Fed Com #2H    | North Reference:             | Grid                               |
| Wellbore: | Wellbore #1                     | Survey Calculation Method:   | Minimum Curvature                  |
| Design:   | Wellbore #1                     | Database:                    | EDM 5000.1 Single User Db          |

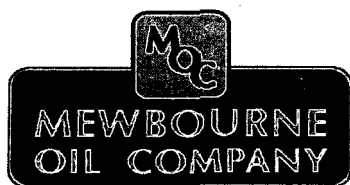
## Survey

| 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) |
|---------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 19,790.0                        | 87.50           | 181.40      | 11,585.5              | -8,496.6     | 44.6         | 8,496.7                 | 1.08                    | -1.08                  | 0.00                  |
| 19,885.0                        | 86.90           | 181.10      | 11,590.1              | -8,591.5     | 42.5         | 8,591.6                 | 0.71                    | -0.63                  | -0.32                 |
| 19,980.0                        | 89.10           | 181.80      | 11,593.4              | -8,686.4     | 40.1         | 8,686.5                 | 2.43                    | 2.32                   | 0.74                  |
| 20,075.0                        | 87.80           | 181.10      | 11,596.0              | -8,781.3     | 37.7         | 8,781.4                 | 1.55                    | -1.37                  | -0.74                 |
| 20,170.0                        | 87.80           | 179.90      | 11,599.6              | -8,876.2     | 36.8         | 8,876.3                 | 1.26                    | 0.00                   | -1.26                 |
| 20,265.0                        | 87.60           | 178.10      | 11,603.5              | -8,971.2     | 38.5         | 8,971.2                 | 1.90                    | -0.21                  | -1.89                 |
| 20,360.0                        | 87.90           | 177.90      | 11,607.2              | -9,066.0     | 41.8         | 9,066.1                 | 0.38                    | 0.32                   | -0.21                 |
| 20,455.0                        | 89.40           | 179.20      | 11,609.4              | -9,161.0     | 44.2         | 9,161.1                 | 2.09                    | 1.58                   | 1.37                  |
| 20,550.0                        | 89.70           | 179.70      | 11,610.2              | -9,255.9     | 45.1         | 9,256.0                 | 0.61                    | 0.32                   | 0.53                  |
| 20,645.0                        | 90.80           | 180.10      | 11,609.8              | -9,350.9     | 45.3         | 9,351.0                 | 1.23                    | 1.16                   | 0.42                  |
| 20,740.0                        | 90.40           | 179.90      | 11,608.8              | -9,445.9     | 45.3         | 9,446.0                 | 0.47                    | -0.42                  | -0.21                 |
| 20,835.0                        | 90.50           | 180.40      | 11,608.0              | -9,540.9     | 45.0         | 9,541.0                 | 0.54                    | 0.11                   | 0.53                  |
| 20,930.0                        | 90.70           | 180.20      | 11,607.0              | -9,635.9     | 44.6         | 9,636.0                 | 0.30                    | 0.21                   | -0.21                 |
| 21,025.0                        | 90.00           | 180.60      | 11,606.4              | -9,730.9     | 43.9         | 9,731.0                 | 0.85                    | -0.74                  | 0.42                  |
| 21,119.0                        | 90.20           | 180.90      | 11,606.3              | -9,824.9     | 42.7         | 9,825.0                 | 0.38                    | 0.21                   | 0.32                  |
| 21,214.0                        | 89.90           | 181.10      | 11,606.2              | -9,919.9     | 41.0         | 9,920.0                 | 0.38                    | -0.32                  | 0.21                  |
| 21,309.0                        | 89.90           | 181.60      | 11,606.4              | -10,014.9    | 38.8         | 10,014.9                | 0.53                    | 0.00                   | 0.53                  |
| 21,404.0                        | 89.90           | 181.80      | 11,606.5              | -10,109.8    | 35.9         | 10,109.9                | 0.21                    | 0.00                   | 0.21                  |
| 21,499.0                        | 88.90           | 181.80      | 11,607.5              | -10,204.8    | 33.0         | 10,204.8                | 1.05                    | -1.05                  | 0.00                  |
| 21,594.0                        | 89.50           | 182.00      | 11,608.9              | -10,299.7    | 29.8         | 10,299.8                | 0.67                    | 0.63                   | 0.21                  |
| 21,689.0                        | 89.70           | 183.00      | 11,609.5              | -10,394.6    | 25.7         | 10,394.7                | 1.07                    | 0.21                   | 1.05                  |
| 21,784.0                        | 89.60           | 183.00      | 11,610.1              | -10,489.5    | 20.7         | 10,489.5                | 0.11                    | -0.11                  | 0.00                  |
| 21,879.0                        | 88.80           | 182.50      | 11,611.4              | -10,584.4    | 16.1         | 10,584.4                | 0.99                    | -0.84                  | -0.53                 |
| 21,974.0                        | 88.40           | 182.00      | 11,613.7              | -10,679.3    | 12.4         | 10,679.3                | 0.67                    | -0.42                  | -0.53                 |
| 22,069.0                        | 89.70           | 182.00      | 11,615.3              | -10,774.2    | 9.1          | 10,774.2                | 1.37                    | 1.37                   | 0.00                  |
| 22,164.0                        | 90.80           | 182.20      | 11,614.9              | -10,869.1    | 5.6          | 10,869.1                | 1.18                    | 1.16                   | 0.21                  |
| 22,259.0                        | 90.30           | 182.20      | 11,614.0              | -10,964.1    | 2.0          | 10,964.0                | 0.53                    | -0.53                  | 0.00                  |
| 22,353.0                        | 90.80           | 179.50      | 11,613.1              | -11,058.0    | 0.6          | 11,058.0                | 2.92                    | 0.53                   | -2.87                 |
| 22,448.0                        | 90.80           | 179.00      | 11,611.8              | -11,153.0    | 1.8          | 11,153.0                | 0.53                    | 0.00                   | -0.53                 |
| 22,543.0                        | 90.30           | 178.80      | 11,610.9              | -11,248.0    | 3.6          | 11,248.0                | 0.57                    | -0.53                  | -0.21                 |
| 22,638.0                        | 90.00           | 178.50      | 11,610.6              | -11,343.0    | 5.9          | 11,342.9                | 0.45                    | -0.32                  | -0.32                 |
| 22,733.0                        | 90.00           | 177.80      | 11,610.6              | -11,437.9    | 8.9          | 11,437.9                | 0.74                    | 0.00                   | -0.74                 |
| 22,829.0                        | 89.50           | 177.20      | 11,611.0              | -11,533.8    | 13.1         | 11,533.8                | 0.81                    | -0.52                  | -0.63                 |
| 22,924.0                        | 89.00           | 177.20      | 11,612.3              | -11,628.7    | 17.8         | 11,628.7                | 0.53                    | -0.53                  | 0.00                  |
| 23,019.0                        | 89.00           | 176.70      | 11,613.9              | -11,723.6    | 22.8         | 11,723.6                | 0.53                    | 0.00                   | -0.53                 |
| 23,114.0                        | 88.40           | 176.00      | 11,616.1              | -11,818.3    | 28.9         | 11,818.4                | 0.97                    | -0.63                  | -0.74                 |
| 23,209.0                        | 88.10           | 175.60      | 11,619.0              | -11,913.0    | 35.8         | 11,913.1                | 0.53                    | -0.32                  | -0.42                 |
| 23,304.0                        | 87.40           | 175.60      | 11,622.7              | -12,007.7    | 43.1         | 12,007.8                | 0.74                    | -0.74                  | 0.00                  |
| 23,340.0                        | 87.20           | 175.60      | 11,624.4              | -12,043.5    | 45.9         | 12,043.6                | 0.56                    | -0.56                  | 0.00                  |
| TD @ 23400.0' MD / 11627.4' TVD |                 |             |                       |              |              |                         |                         |                        |                       |
| 23,400.0                        | 87.20           | 175.60      | 11,627.3              | -12,103.3    | 50.5         | 12,103.4                | 0.00                    | 0.00                   | 0.00                  |

|                  |                                 |                                     |                                    |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company           | <b>Local Co-ordinate Reference:</b> | Well Caper 20/29 B3CN Fed Com #2H  |
| <b>Project:</b>  | Lea County, New Mexico (Nad 83) | <b>TVD Reference:</b>               | WELL @ 3665.0usft (Patterson #250) |
| <b>Site:</b>     | Sec 17, T21S, R32E              | <b>MD Reference:</b>                | WELL @ 3665.0usft (Patterson #250) |
| <b>Well:</b>     | Caper 20/29 B3CN Fed Com #2H    | <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          |

**Design Annotations**

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                              |
|-----------------------------|-----------------------------|-------------------|-----------------|--------------------------------------|
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                      |
| 955.0                       | 955.0                       | -5.0              | 1.6             | Gyro Tie-in @ 955.0' MD / 955.0' TVD |
| 12,933.0                    | 11,543.5                    | -1,645.2          | -17.8           | Cross LL@ 12933.0' MD / 11543.5' TVD |
| 13,033.0                    | 11,542.1                    | -1,745.2          | -18.7           | Cross HL@ 13033.0' MD / 11542.1' TVD |
| 23,400.0                    | 11,627.3                    | -12,103.3         | 50.5            | TD @ 23400.0' MD / 11627.4' TVD      |



# **Mewbourne Oil Company**

**Lea County, New Mexico (Nad 83)**

**Sec 17, T21S, R32E**

**Caper 20/29 B3CN Fed Com #2H**

**Wellbore #1**

**Design: Wellbore #1**

## **QES Survey Certification Report**

**03 December, 2018**



## Quintana Energy Services

11390 FM 830  
Willis, TX 77318  
Phone: (936) 856-4332  
Fax: (936) 856-8678



### Survey Certification Sheet

| Company               | Job Number | Date      |
|-----------------------|------------|-----------|
| Mewbourne Oil Company | WT-181318  | 2/14/2019 |

| Lease              | Well Name                    | County & State |
|--------------------|------------------------------|----------------|
| SEC 17, T21S, R32E | Caper 20-29 B3CN Fed Com #2H | Lea County, NM |

| API No.      | Survey Depth Range        | Survey Type |
|--------------|---------------------------|-------------|
| 30-025-45156 | 955 feet to 23400 feet MD | MWD         |

| Sidetrack Information     | Directional Supervisor/Surveyor |
|---------------------------|---------------------------------|
| Click here to enter text. | Brad Reed                       |

### Certification Statement

The data and calculations for this survey have been checked by me and conform to the standards and procedures set forth by Quintana Energy Services (QES). This report represents a true and correct directional survey of this well based on the original data obtained at the well site. Wellbore coordinates are calculated using minimum curvature.

Christopher Hughes  
MWD Compliance Manager

Quintana Energy Sources

Christophe  
r Hughes

Digitally signed by Christopher Hughes  
DN: cn=Christopher Hughes,  
o=QES, ou=compliance,  
email=chrish@qeslp.com, c=US  
Date: 2019.02.14 14:36:49 -06'00'



## QES Survey Certification Report



|                  |                                 |                                     |                                    |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company           | <b>Local Co-ordinate Reference:</b> | Well Caper 20/29 B3CN Fed Com #2H  |
| <b>Project:</b>  | Lea County, New Mexico (Nad 83) | <b>TVD Reference:</b>               | WELL @ 3665.0usft (Patterson #250) |
| <b>Site:</b>     | Sec 17, T21S, R32E              | <b>MD Reference:</b>                | WELL @ 3665.0usft (Patterson #250) |
| <b>Well:</b>     | Caper 20/29 B3CN Fed Com #2H    | <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>     | Lea County, New Mexico (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                  |          | Sec 17, T21S, R32E |                 |                   |                   |
| Site Position:        |          | Northing:          | 537,432.50 usft | Latitude:         | 32° 28' 33.117 N  |
| From:                 | Map      | Easting:           | 736,986.90 usft | Longitude:        | 103° 41' 56.000 W |
| Position Uncertainty: | 0.0 usft | Slot Radius:       | 13-3/16"        | Grid Convergence: | 0.34 °            |

|                      |                              |          |                     |                 |               |                   |
|----------------------|------------------------------|----------|---------------------|-----------------|---------------|-------------------|
| Well                 | Caper 20/29 B3CN Fed Com #2H |          |                     |                 |               |                   |
| Well Position        | +N/-S                        | 0.0 usft | Northing:           | 537,462.40 usft | Latitude:     | 32° 28' 33.413 N  |
|                      | +E/-W                        | 0.0 usft | Easting:            | 736,986.70 usft | Longitude:    | 103° 41' 56.000 W |
| Position Uncertainty |                              | 0.0 usft | Wellhead Elevation: | usft            | Ground Level: | 3,638.0 usft      |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2015          | 9/13/2018          | 6.90                   | 60.26                | 47,944.64633610            |

|                   |                            |                 |                 |                  |     |
|-------------------|----------------------------|-----------------|-----------------|------------------|-----|
| Design            | Wellbore #1                |                 |                 |                  |     |
| Audit Notes:      |                            |                 |                 |                  |     |
| Version:          | 1.0                        | Phase:          | ACTUAL          | Tie On Depth:    | 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             | 179.8            |     |

|                       |                  |                                           |                  |                       |  |
|-----------------------|------------------|-------------------------------------------|------------------|-----------------------|--|
| <b>Survey Program</b> | <b>Date</b>      | 12/3/2018                                 |                  |                       |  |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b>                  | <b>Tool Name</b> | <b>Description</b>    |  |
| 100.0                 | 955.0            | Phoenix Tech - Surface Gyro's (Wellbore # | GYRO-NS          | OWSG Gyrocompass Gyro |  |
| 1,125.0               | 23,400.0         | QES MWD Surveys (Wellbore #1)             | OWSG (Rev2) MWD  | OWSG MWD - Standard   |  |

| Survey                               |            |                      |               |               |               |                            |                        |  |
|--------------------------------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|--|
| MD<br>(usft)                         | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) |  |
| 955.0                                | 0.60       | 240.23               | 955.0         | -5.0          | 1.6           | 5.2                        | 162.05                 |  |
| Gyro Tie-in @ 955.0' MD / 955.0' TVD |            |                      |               |               |               |                            |                        |  |
| 1,125.0                              | 1.10       | 223.60               | 1,125.0       | -6.6          | -0.3          | 6.6                        | 182.54                 |  |
| 1,310.0                              | 1.10       | 206.10               | 1,309.9       | -9.5          | -2.3          | 9.7                        | 193.65                 |  |
| 1,496.0                              | 1.10       | 197.50               | 1,495.9       | -12.8         | -3.6          | 13.3                       | 195.83                 |  |
| 1,683.0                              | 1.10       | 188.50               | 1,682.9       | -16.3         | -4.4          | 16.8                       | 195.23                 |  |
| 1,870.0                              | 1.00       | 190.90               | 1,869.8       | -19.6         | -5.0          | 20.3                       | 194.29                 |  |
| 2,056.0                              | 1.30       | 30.30                | 2,055.8       | -19.4         | -4.2          | 19.9                       | 192.33                 |  |
| 2,242.0                              | 1.90       | 39.10                | 2,241.7       | -15.2         | -1.2          | 15.2                       | 184.64                 |  |
| 2,428.0                              | 2.50       | 51.60                | 2,427.6       | -10.3         | 3.9           | 11.0                       | 159.26                 |  |
| 2,614.0                              | 3.40       | 59.10                | 2,613.4       | -4.9          | 11.8          | 12.8                       | 112.65                 |  |



## QES Survey Certification Report



|                  |                                 |                                     |                                    |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company           | <b>Local Co-ordinate Reference:</b> | Well Caper 20/29 B3CN Fed Com #2H  |
| <b>Project:</b>  | Lea County, New Mexico (Nad 83) | <b>TVD Reference:</b>               | WELL @ 3665.0usft (Patterson #250) |
| <b>Site:</b>     | Sec 17, T21S, R32E              | <b>MD Reference:</b>                | WELL @ 3665.0usft (Patterson #250) |
| <b>Well:</b>     | Caper 20/29 B3CN Fed Com #2H    | <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

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) |
|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|
| 2,800.0      | 1.80       | 48.60                | 2,799.2       | -0.2          | 18.7          | 18.7                       | 90.49                  |
| 2,987.0      | 2.00       | 15.00                | 2,986.1       | 4.9           | 21.8          | 22.3                       | 77.23                  |
| 3,173.0      | 1.10       | 26.10                | 3,172.0       | 9.7           | 23.4          | 25.3                       | 67.54                  |
| 3,360.0      | 0.90       | 39.40                | 3,359.0       | 12.4          | 25.1          | 28.0                       | 63.70                  |
| 3,544.0      | 0.80       | 52.60                | 3,542.9       | 14.3          | 27.1          | 30.6                       | 62.12                  |
| 3,731.0      | 0.90       | 38.00                | 3,729.9       | 16.3          | 29.0          | 33.3                       | 60.71                  |
| 3,900.0      | 0.60       | 28.00                | 3,898.9       | 18.1          | 30.2          | 35.2                       | 59.10                  |
| 4,012.0      | 1.00       | 16.60                | 4,010.9       | 19.5          | 30.8          | 36.5                       | 57.59                  |
| 4,198.0      | 1.10       | 273.60               | 4,196.9       | 21.2          | 29.5          | 36.3                       | 54.25                  |
| 4,385.0      | 1.00       | 270.10               | 4,383.8       | 21.3          | 26.0          | 33.7                       | 50.69                  |
| 4,572.0      | 1.10       | 270.10               | 4,570.8       | 21.3          | 22.6          | 31.1                       | 46.67                  |
| 4,759.0      | 1.10       | 264.60               | 4,757.8       | 21.2          | 19.0          | 28.5                       | 41.96                  |
| 4,946.0      | 1.10       | 247.90               | 4,944.7       | 20.3          | 15.6          | 25.6                       | 37.48                  |
| 5,132.0      | 1.30       | 242.50               | 5,130.7       | 18.7          | 12.1          | 22.2                       | 32.85                  |
| 5,318.0      | 1.20       | 236.00               | 5,316.7       | 16.6          | 8.6           | 18.7                       | 27.30                  |
| 5,505.0      | 1.20       | 241.90               | 5,503.6       | 14.6          | 5.2           | 15.5                       | 19.70                  |
| 5,692.0      | 1.00       | 236.10               | 5,690.6       | 12.8          | 2.1           | 12.9                       | 9.53                   |
| 5,879.0      | 0.90       | 227.30               | 5,877.6       | 10.9          | -0.3          | 10.9                       | 358.47                 |
| 6,066.0      | 0.60       | 233.00               | 6,064.5       | 9.3           | -2.2          | 9.5                        | 346.95                 |
| 6,253.0      | 0.50       | 236.80               | 6,251.5       | 8.2           | -3.6          | 9.0                        | 336.31                 |
| 6,441.0      | 0.70       | 242.30               | 6,439.5       | 7.3           | -5.3          | 9.0                        | 323.77                 |
| 6,628.0      | 0.80       | 243.70               | 6,626.5       | 6.1           | -7.5          | 9.7                        | 309.34                 |
| 6,815.0      | 1.10       | 261.10               | 6,813.5       | 5.3           | -10.4         | 11.7                       | 296.87                 |
| 7,001.0      | 1.30       | 249.50               | 6,999.4       | 4.3           | -14.2         | 14.8                       | 286.78                 |
| 7,188.0      | 1.30       | 248.10               | 7,186.4       | 2.7           | -18.1         | 18.3                       | 278.60                 |
| 7,374.0      | 1.10       | 24.00                | 7,372.4       | 3.6           | -19.4         | 19.7                       | 280.49                 |
| 7,561.0      | 1.00       | 356.40               | 7,559.3       | 6.9           | -18.7         | 20.0                       | 290.09                 |
| 7,748.0      | 1.00       | 359.50               | 7,746.3       | 10.1          | -18.9         | 21.4                       | 298.21                 |
| 7,934.0      | 0.70       | 358.50               | 7,932.3       | 12.9          | -18.9         | 22.9                       | 304.26                 |
| 8,121.0      | 0.70       | 2.70                 | 8,119.3       | 15.2          | -18.9         | 24.2                       | 308.76                 |
| 8,307.0      | 0.80       | 39.60                | 8,305.3       | 17.3          | -18.0         | 25.0                       | 313.85                 |
| 8,494.0      | 0.90       | 74.60                | 8,492.3       | 18.7          | -15.8         | 24.4                       | 319.88                 |
| 8,681.0      | 0.40       | 67.00                | 8,679.2       | 19.3          | -13.7         | 23.7                       | 324.61                 |
| 8,868.0      | 0.50       | 57.40                | 8,866.2       | 20.0          | -12.4         | 23.6                       | 328.14                 |
| 9,055.0      | 1.20       | 254.90               | 9,053.2       | 20.0          | -13.6         | 24.2                       | 325.63                 |
| 9,241.0      | 1.80       | 99.90                | 9,239.2       | 18.9          | -12.7         | 22.8                       | 326.27                 |
| 9,427.0      | 1.10       | 148.80               | 9,425.1       | 16.9          | -8.8          | 19.1                       | 332.39                 |
| 9,614.0      | 0.80       | 141.70               | 9,612.1       | 14.4          | -7.1          | 16.0                       | 333.66                 |
| 9,800.0      | 1.30       | 142.60               | 9,798.1       | 11.7          | -5.0          | 12.7                       | 336.70                 |
| 9,999.0      | 1.10       | 144.60               | 9,997.0       | 8.3           | -2.5          | 8.7                        | 342.97                 |
| 10,186.0     | 1.00       | 149.60               | 10,184.0      | 5.4           | -0.7          | 5.5                        | 352.88                 |
| 10,372.0     | 1.50       | 196.40               | 10,370.0      | 1.7           | -0.5          | 1.8                        | 342.26                 |
| 10,558.0     | 1.10       | 184.40               | 10,555.9      | -2.4          | -1.4          | 2.8                        | 209.64                 |
| 10,745.0     | 1.30       | 18.70                | 10,742.9      | -2.2          | -0.8          | 2.3                        | 200.72                 |
| 10,931.0     | 1.10       | 298.70               | 10,928.9      | 0.7           | -1.7          | 1.8                        | 291.23                 |



## QES Survey Certification Report



|                  |                                 |                                     |                                    |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company           | <b>Local Co-ordinate Reference:</b> | Well Caper 20/29 B3CN Fed Com #2H  |
| <b>Project:</b>  | Lea County, New Mexico (Nad 83) | <b>TVD Reference:</b>               | WELL @ 3665.0usft (Patterson #250) |
| <b>Site:</b>     | Sec 17, T21S, R32E              | <b>MD Reference:</b>                | WELL @ 3665.0usft (Patterson #250) |
| <b>Well:</b>     | Caper 20/29 B3CN Fed Com #2H    | <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

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) |
|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|
| 10,994.0     | 1.00       | 293.10               | 10,991.9      | 1.2           | -2.8          | 3.0                        | 293.08                 |
| 11,047.0     | 2.00       | 181.10               | 11,044.9      | 0.4           | -3.2          | 3.2                        | 277.66                 |
| 11,078.0     | 6.90       | 167.40               | 11,075.8      | -1.9          | -2.8          | 3.4                        | 235.44                 |
| 11,109.0     | 12.50      | 166.40               | 11,106.3      | -7.0          | -1.6          | 7.2                        | 192.89                 |
| 11,140.0     | 18.80      | 165.30               | 11,136.1      | -15.1         | 0.5           | 15.1                       | 178.28                 |
| 11,171.0     | 25.10      | 168.10               | 11,164.9      | -26.4         | 3.1           | 26.6                       | 173.34                 |
| 11,202.0     | 30.10      | 170.00               | 11,192.3      | -40.5         | 5.8           | 40.9                       | 171.87                 |
| 11,233.0     | 33.90      | 170.00               | 11,218.6      | -56.7         | 8.6           | 57.3                       | 171.33                 |
| 11,264.0     | 37.10      | 170.00               | 11,243.9      | -74.4         | 11.8          | 75.3                       | 171.01                 |
| 11,296.0     | 40.50      | 170.70               | 11,268.8      | -94.2         | 15.1          | 95.4                       | 170.88                 |
| 11,327.0     | 43.60      | 172.50               | 11,291.8      | -114.7        | 18.1          | 116.1                      | 171.01                 |
| 11,358.0     | 45.70      | 174.40               | 11,313.9      | -136.3        | 20.6          | 137.9                      | 171.40                 |
| 11,389.0     | 48.20      | 176.40               | 11,335.0      | -158.9        | 22.4          | 160.5                      | 171.97                 |
| 11,404.0     | 49.30      | 177.60               | 11,344.9      | -170.2        | 23.0          | 171.7                      | 172.30                 |
| 11,472.0     | 52.20      | 181.10               | 11,387.9      | -222.8        | 23.6          | 224.1                      | 173.96                 |
| 11,503.0     | 53.40      | 181.10               | 11,406.7      | -247.5        | 23.1          | 248.6                      | 174.67                 |
| 11,534.0     | 55.80      | 180.60               | 11,424.6      | -272.8        | 22.7          | 273.7                      | 175.24                 |
| 11,565.0     | 58.10      | 180.10               | 11,441.5      | -298.7        | 22.6          | 299.6                      | 175.68                 |
| 11,596.0     | 61.10      | 180.40               | 11,457.2      | -325.5        | 22.5          | 326.2                      | 176.05                 |
| 11,627.0     | 63.20      | 180.40               | 11,471.7      | -352.9        | 22.3          | 353.6                      | 176.39                 |
| 11,657.0     | 65.00      | 181.80               | 11,484.8      | -379.9        | 21.7          | 380.5                      | 176.72                 |
| 11,689.0     | 68.20      | 182.20               | 11,497.5      | -409.2        | 20.7          | 409.7                      | 177.10                 |
| 11,720.0     | 68.90      | 182.70               | 11,508.9      | -438.0        | 19.5          | 438.5                      | 177.45                 |
| 11,751.0     | 71.80      | 182.30               | 11,519.3      | -467.2        | 18.2          | 467.6                      | 177.77                 |
| 11,781.0     | 75.70      | 182.20               | 11,527.7      | -496.0        | 17.1          | 496.3                      | 178.03                 |
| 11,811.0     | 78.30      | 183.40               | 11,534.4      | -525.2        | 15.7          | 525.4                      | 178.29                 |
| 11,842.0     | 82.20      | 183.20               | 11,539.7      | -555.7        | 13.9          | 555.8                      | 178.57                 |
| 11,873.0     | 84.90      | 183.70               | 11,543.2      | -586.4        | 12.0          | 586.5                      | 178.82                 |
| 11,904.0     | 86.00      | 185.10               | 11,545.6      | -617.2        | 9.7           | 617.3                      | 179.10                 |
| 11,935.0     | 88.40      | 185.50               | 11,547.1      | -648.0        | 6.8           | 648.1                      | 179.40                 |
| 12,027.0     | 90.30      | 183.40               | 11,548.2      | -739.8        | -0.3          | 739.8                      | 180.02                 |
| 12,120.0     | 90.20      | 182.90               | 11,547.8      | -832.6        | -5.4          | 832.6                      | 180.37                 |
| 12,213.0     | 90.50      | 182.20               | 11,547.2      | -925.5        | -9.6          | 925.6                      | 180.59                 |
| 12,306.0     | 90.80      | 181.40               | 11,546.1      | -1,018.5      | -12.5         | 1,018.5                    | 180.70                 |
| 12,399.0     | 90.20      | 182.50               | 11,545.3      | -1,111.4      | -15.7         | 1,111.5                    | 180.81                 |
| 12,493.0     | 90.00      | 182.30               | 11,545.2      | -1,205.3      | -19.6         | 1,205.5                    | 180.93                 |
| 12,585.0     | 89.60      | 181.10               | 11,545.5      | -1,297.3      | -22.3         | 1,297.5                    | 180.99                 |
| 12,678.0     | 90.70      | 179.50               | 11,545.2      | -1,390.3      | -22.8         | 1,390.5                    | 180.94                 |
| 12,772.0     | 90.40      | 177.90               | 11,544.3      | -1,484.2      | -20.7         | 1,484.4                    | 180.80                 |
| 12,865.0     | 90.00      | 179.00               | 11,544.0      | -1,577.2      | -18.2         | 1,577.3                    | 180.66                 |
| 12,958.0     | 91.10      | 180.80               | 11,543.1      | -1,670.2      | -18.0         | 1,670.3                    | 180.62                 |
| 13,051.0     | 90.40      | 180.20               | 11,541.9      | -1,763.2      | -18.8         | 1,763.3                    | 180.61                 |
| 13,144.0     | 90.60      | 177.90               | 11,541.1      | -1,856.2      | -17.3         | 1,856.2                    | 180.53                 |
| 13,237.0     | 90.30      | 176.50               | 11,540.4      | -1,949.0      | -12.7         | 1,949.1                    | 180.37                 |



## QES Survey Certification Report



|                  |                                 |                                     |                                    |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Mewbourne Oil Company           | <b>Local Co-ordinate Reference:</b> | Well Caper 20/29 B3CN Fed Com #2H  |
| <b>Project:</b>  | Lea County, New Mexico (Nad 83) | <b>TVD Reference:</b>               | WELL @ 3665.0usft (Patterson #250) |
| <b>Site:</b>     | Sec 17, T21S, R32E              | <b>MD Reference:</b>                | WELL @ 3665.0usft (Patterson #250) |
| <b>Well:</b>     | Caper 20/29 B3CN Fed Com #2H    | <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

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) |
|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|
| 13,329.0     | 89.20      | 178.30               | 11,540.8      | -2,040.9      | -8.6          | 2,041.0                    | 180.24                 |
| 13,422.0     | 87.80      | 176.90               | 11,543.2      | -2,133.8      | -4.7          | 2,133.8                    | 180.13                 |
| 13,515.0     | 88.30      | 179.70               | 11,546.4      | -2,226.7      | -1.9          | 2,226.7                    | 180.05                 |
| 13,608.0     | 88.10      | 179.30               | 11,549.3      | -2,319.7      | -1.1          | 2,319.7                    | 180.03                 |
| 13,701.0     | 87.80      | 181.60               | 11,552.6      | -2,412.6      | -1.8          | 2,412.6                    | 180.04                 |
| 13,794.0     | 90.40      | 183.20               | 11,554.1      | -2,505.5      | -5.7          | 2,505.5                    | 180.13                 |
| 13,887.0     | 89.80      | 182.50               | 11,553.9      | -2,598.4      | -10.3         | 2,598.4                    | 180.23                 |
| 13,980.0     | 89.30      | 182.00               | 11,554.6      | -2,691.3      | -14.0         | 2,691.3                    | 180.30                 |
| 14,073.0     | 91.10      | 182.90               | 11,554.3      | -2,784.2      | -18.0         | 2,784.3                    | 180.37                 |
| 14,167.0     | 90.80      | 180.90               | 11,552.8      | -2,878.1      | -21.1         | 2,878.2                    | 180.42                 |
| 14,260.0     | 91.40      | 180.10               | 11,551.0      | -2,971.1      | -21.9         | 2,971.2                    | 180.42                 |
| 14,354.0     | 92.50      | 179.90               | 11,547.8      | -3,065.1      | -21.9         | 3,065.1                    | 180.41                 |
| 14,448.0     | 90.70      | 179.00               | 11,545.2      | -3,159.0      | -21.0         | 3,159.1                    | 180.38                 |
| 14,541.0     | 90.90      | 177.90               | 11,543.9      | -3,252.0      | -18.5         | 3,252.0                    | 180.33                 |
| 14,633.0     | 90.30      | 178.10               | 11,542.9      | -3,343.9      | -15.3         | 3,344.0                    | 180.26                 |
| 14,726.0     | 88.00      | 180.20               | 11,544.3      | -3,436.9      | -13.9         | 3,436.9                    | 180.23                 |
| 14,819.0     | 87.60      | 179.20               | 11,547.8      | -3,529.8      | -13.4         | 3,529.8                    | 180.22                 |
| 14,912.0     | 87.50      | 178.60               | 11,551.8      | -3,622.7      | -11.6         | 3,622.7                    | 180.18                 |
| 15,005.0     | 90.10      | 181.10               | 11,553.8      | -3,715.7      | -11.4         | 3,715.7                    | 180.18                 |
| 15,098.0     | 88.90      | 181.40               | 11,554.6      | -3,808.6      | -13.4         | 3,808.7                    | 180.20                 |
| 15,191.0     | 86.20      | 179.90               | 11,558.6      | -3,901.5      | -14.5         | 3,901.6                    | 180.21                 |
| 15,285.0     | 89.30      | 182.20               | 11,562.2      | -3,995.4      | -16.2         | 3,995.5                    | 180.23                 |
| 15,378.0     | 89.30      | 182.70               | 11,563.4      | -4,088.3      | -20.2         | 4,088.4                    | 180.28                 |
| 15,471.0     | 88.00      | 182.90               | 11,565.6      | -4,181.2      | -24.7         | 4,181.3                    | 180.34                 |
| 15,565.0     | 90.10      | 182.70               | 11,567.1      | -4,275.1      | -29.3         | 4,275.2                    | 180.39                 |
| 15,658.0     | 89.60      | 179.20               | 11,567.4      | -4,368.0      | -30.8         | 4,368.2                    | 180.40                 |
| 15,751.0     | 88.40      | 176.50               | 11,569.0      | -4,461.0      | -27.3         | 4,461.0                    | 180.35                 |
| 15,845.0     | 89.90      | 176.40               | 11,570.4      | -4,554.8      | -21.5         | 4,554.8                    | 180.27                 |
| 15,938.0     | 89.90      | 176.90               | 11,570.6      | -4,647.6      | -16.1         | 4,647.6                    | 180.20                 |
| 16,031.0     | 92.00      | 177.20               | 11,569.0      | -4,740.5      | -11.3         | 4,740.5                    | 180.14                 |
| 16,125.0     | 93.00      | 178.10               | 11,564.9      | -4,834.3      | -7.4          | 4,834.3                    | 180.09                 |
| 16,219.0     | 91.50      | 177.60               | 11,561.2      | -4,928.2      | -3.9          | 4,928.2                    | 180.05                 |
| 16,313.0     | 88.60      | 179.70               | 11,561.1      | -5,022.1      | -1.7          | 5,022.1                    | 180.02                 |
| 16,407.0     | 87.90      | 179.50               | 11,564.0      | -5,116.1      | -1.1          | 5,116.1                    | 180.01                 |
| 16,501.0     | 87.80      | 178.60               | 11,567.5      | -5,210.0      | 0.5           | 5,210.0                    | 179.99                 |
| 16,595.0     | 88.60      | 178.80               | 11,570.5      | -5,303.9      | 2.6           | 5,303.9                    | 179.97                 |
| 16,689.0     | 89.50      | 179.20               | 11,572.0      | -5,397.9      | 4.3           | 5,397.9                    | 179.95                 |
| 16,784.0     | 88.80      | 177.90               | 11,573.5      | -5,492.8      | 6.7           | 5,492.8                    | 179.93                 |
| 16,878.0     | 89.50      | 178.80               | 11,574.8      | -5,586.8      | 9.4           | 5,586.8                    | 179.90                 |
| 16,972.0     | 90.30      | 178.50               | 11,575.0      | -5,680.8      | 11.6          | 5,680.8                    | 179.88                 |
| 17,066.0     | 91.40      | 178.30               | 11,573.6      | -5,774.7      | 14.2          | 5,774.7                    | 179.86                 |
| 17,159.0     | 89.50      | 179.50               | 11,572.9      | -5,867.7      | 16.0          | 5,867.7                    | 179.84                 |
| 17,254.0     | 89.00      | 178.80               | 11,574.1      | -5,962.7      | 17.4          | 5,962.7                    | 179.83                 |
| 17,348.0     | 88.10      | 177.60               | 11,576.5      | -6,056.6      | 20.4          | 6,056.6                    | 179.81                 |



## QES Survey Certification Report



|           |                                 |                              |                                    |
|-----------|---------------------------------|------------------------------|------------------------------------|
| Company:  | Mewbourne Oil Company           | Local Co-ordinate Reference: | Well Caper 20/29 B3CN Fed Com #2H  |
| Project:  | Lea County, New Mexico (Nad 83) | TVD Reference:               | WELL @ 3665.0usft (Patterson #250) |
| Site:     | Sec 17, T21S, R32E              | MD Reference:                | WELL @ 3665.0usft (Patterson #250) |
| Well:     | Caper 20/29 B3CN Fed Com #2H    | North Reference:             | Grid                               |
| Wellbore: | Wellbore #1                     | Survey Calculation Method:   | Minimum Curvature                  |
| Design:   | Wellbore #1                     | Database:                    | EDM 5000.1 Single User Db          |

## Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) |
|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|
| 17,442.0     | 88.90      | 178.50               | 11,579.0      | -6,150.5      | 23.6          | 6,150.5                    | 179.78                 |
| 17,536.0     | 88.90      | 179.70               | 11,580.8      | -6,244.5      | 25.0          | 6,244.5                    | 179.77                 |
| 17,630.0     | 90.50      | 179.00               | 11,581.3      | -6,338.5      | 26.1          | 6,338.5                    | 179.76                 |
| 17,723.0     | 90.00      | 177.90               | 11,580.9      | -6,431.4      | 28.6          | 6,431.5                    | 179.75                 |
| 17,817.0     | 90.80      | 180.60               | 11,580.2      | -6,525.4      | 29.9          | 6,525.5                    | 179.74                 |
| 17,911.0     | 92.70      | 181.80               | 11,577.3      | -6,619.3      | 27.9          | 6,619.4                    | 179.76                 |
| 18,006.0     | 89.60      | 181.60               | 11,575.4      | -6,714.3      | 25.1          | 6,714.3                    | 179.79                 |
| 18,100.0     | 89.10      | 182.30               | 11,576.5      | -6,808.2      | 21.9          | 6,808.2                    | 179.82                 |
| 18,194.0     | 88.20      | 183.40               | 11,578.7      | -6,902.1      | 17.2          | 6,902.1                    | 179.86                 |
| 18,288.0     | 90.20      | 181.80               | 11,580.0      | -6,995.9      | 12.9          | 6,996.0                    | 179.89                 |
| 18,381.0     | 89.20      | 180.90               | 11,580.5      | -7,088.9      | 10.7          | 7,088.9                    | 179.91                 |
| 18,475.0     | 88.90      | 180.10               | 11,582.1      | -7,182.9      | 9.9           | 7,182.9                    | 179.92                 |
| 18,569.0     | 89.70      | 178.60               | 11,583.2      | -7,276.9      | 11.0          | 7,276.9                    | 179.91                 |
| 18,663.0     | 89.70      | 177.20               | 11,583.7      | -7,370.8      | 14.4          | 7,370.8                    | 179.89                 |
| 18,757.0     | 90.40      | 176.70               | 11,583.6      | -7,464.7      | 19.4          | 7,464.7                    | 179.85                 |
| 18,852.0     | 90.30      | 175.30               | 11,583.0      | -7,559.4      | 26.1          | 7,559.5                    | 179.80                 |
| 18,947.0     | 90.00      | 174.90               | 11,582.8      | -7,654.1      | 34.2          | 7,654.2                    | 179.74                 |
| 19,038.0     | 89.90      | 176.90               | 11,582.9      | -7,744.9      | 40.7          | 7,745.0                    | 179.70                 |
| 19,132.0     | 89.30      | 178.60               | 11,583.5      | -7,838.8      | 44.4          | 7,838.9                    | 179.68                 |
| 19,226.0     | 89.60      | 180.60               | 11,584.4      | -7,932.8      | 45.0          | 7,932.9                    | 179.67                 |
| 19,320.0     | 90.50      | 179.50               | 11,584.4      | -8,026.8      | 44.9          | 8,026.9                    | 179.68                 |
| 19,414.0     | 90.40      | 179.00               | 11,583.6      | -8,120.8      | 46.2          | 8,120.9                    | 179.67                 |
| 19,508.0     | 91.20      | 179.50               | 11,582.3      | -8,214.7      | 47.4          | 8,214.9                    | 179.67                 |
| 19,602.0     | 90.20      | 179.90               | 11,581.2      | -8,308.7      | 47.9          | 8,308.9                    | 179.67                 |
| 19,697.0     | 88.50      | 181.40               | 11,582.2      | -8,403.7      | 46.8          | 8,403.8                    | 179.68                 |
| 19,790.0     | 87.50      | 181.40               | 11,585.5      | -8,496.6      | 44.6          | 8,496.7                    | 179.70                 |
| 19,885.0     | 86.90      | 181.10               | 11,590.1      | -8,591.5      | 42.5          | 8,591.6                    | 179.72                 |
| 19,980.0     | 89.10      | 181.80               | 11,593.4      | -8,686.4      | 40.1          | 8,686.5                    | 179.74                 |
| 20,075.0     | 87.80      | 181.10               | 11,596.0      | -8,781.3      | 37.7          | 8,781.4                    | 179.75                 |
| 20,170.0     | 87.80      | 179.90               | 11,599.7      | -8,876.2      | 36.8          | 8,876.3                    | 179.76                 |
| 20,265.0     | 87.60      | 178.10               | 11,603.5      | -8,971.2      | 38.5          | 8,971.2                    | 179.75                 |
| 20,360.0     | 87.90      | 177.90               | 11,607.2      | -9,066.0      | 41.8          | 9,066.1                    | 179.74                 |
| 20,455.0     | 89.40      | 179.20               | 11,609.4      | -9,161.0      | 44.2          | 9,161.1                    | 179.72                 |
| 20,550.0     | 89.70      | 179.70               | 11,610.2      | -9,256.0      | 45.1          | 9,256.1                    | 179.72                 |
| 20,645.0     | 90.80      | 180.10               | 11,609.8      | -9,350.9      | 45.3          | 9,351.1                    | 179.72                 |
| 20,740.0     | 90.40      | 179.90               | 11,608.8      | -9,445.9      | 45.3          | 9,446.1                    | 179.73                 |
| 20,835.0     | 90.50      | 180.40               | 11,608.0      | -9,540.9      | 45.0          | 9,541.0                    | 179.73                 |
| 20,930.0     | 90.70      | 180.20               | 11,607.0      | -9,635.9      | 44.6          | 9,636.0                    | 179.74                 |
| 21,025.0     | 90.00      | 180.60               | 11,606.4      | -9,730.9      | 43.9          | 9,731.0                    | 179.74                 |
| 21,119.0     | 90.20      | 180.90               | 11,606.3      | -9,824.9      | 42.7          | 9,825.0                    | 179.75                 |
| 21,214.0     | 89.90      | 181.10               | 11,606.2      | -9,919.9      | 41.0          | 9,920.0                    | 179.76                 |
| 21,309.0     | 89.90      | 181.60               | 11,606.4      | -10,014.9     | 38.8          | 10,015.0                   | 179.78                 |
| 21,404.0     | 89.90      | 181.80               | 11,606.5      | -10,109.8     | 35.9          | 10,109.9                   | 179.80                 |
| 21,499.0     | 88.90      | 181.80               | 11,607.5      | -10,204.8     | 33.0          | 10,204.8                   | 179.81                 |



## QES Survey Certification Report



|           |                                 |                              |                                    |
|-----------|---------------------------------|------------------------------|------------------------------------|
| Company:  | Mewbourne Oil Company           | Local Co-ordinate Reference: | Well Caper 20/29 B3CN Fed Com #2H  |
| Project:  | Lea County, New Mexico (Nad 83) | TVD Reference:               | WELL @ 3665.0usft (Patterson #250) |
| Site:     | Sec 17, T21S, R32E              | MD Reference:                | WELL @ 3665.0usft (Patterson #250) |
| Well:     | Caper 20/29 B3CN Fed Com #2H    | North Reference:             | Grid                               |
| Wellbore: | Wellbore #1                     | Survey Calculation Method:   | Minimum Curvature                  |
| Design:   | Wellbore #1                     | Database:                    | EDM 5000.1 Single User Db          |

## Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) |
|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|
| 21,594.0     | 89.50      | 182.00               | 11,608.9      | -10,299.7     | 29.8          | 10,299.8                   | 179.83                 |
| 21,689.0     | 89.70      | 183.00               | 11,609.5      | -10,394.6     | 25.7          | 10,394.7                   | 179.86                 |
| 21,784.0     | 89.60      | 183.00               | 11,610.1      | -10,489.5     | 20.7          | 10,489.5                   | 179.89                 |
| 21,879.0     | 88.80      | 182.50               | 11,611.4      | -10,584.4     | 16.1          | 10,584.4                   | 179.91                 |
| 21,974.0     | 88.40      | 182.00               | 11,613.7      | -10,679.3     | 12.4          | 10,679.3                   | 179.93                 |
| 22,069.0     | 89.70      | 182.00               | 11,615.3      | -10,774.2     | 9.1           | 10,774.2                   | 179.95                 |
| 22,164.0     | 90.80      | 182.20               | 11,614.9      | -10,869.1     | 5.6           | 10,869.1                   | 179.97                 |
| 22,259.0     | 90.30      | 182.20               | 11,614.0      | -10,964.1     | 2.0           | 10,964.1                   | 179.99                 |
| 22,353.0     | 90.80      | 179.50               | 11,613.1      | -11,058.0     | 0.6           | 11,058.0                   | 180.00                 |
| 22,448.0     | 90.80      | 179.00               | 11,611.8      | -11,153.0     | 1.8           | 11,153.0                   | 179.99                 |
| 22,543.0     | 90.30      | 178.80               | 11,610.9      | -11,248.0     | 3.6           | 11,248.0                   | 179.98                 |
| 22,638.0     | 90.00      | 178.50               | 11,610.6      | -11,343.0     | 5.9           | 11,343.0                   | 179.97                 |
| 22,733.0     | 90.00      | 177.80               | 11,610.6      | -11,437.9     | 8.9           | 11,437.9                   | 179.96                 |
| 22,829.0     | 89.50      | 177.20               | 11,611.0      | -11,533.8     | 13.1          | 11,533.8                   | 179.93                 |
| 22,924.0     | 89.00      | 177.20               | 11,612.3      | -11,628.7     | 17.8          | 11,628.7                   | 179.91                 |
| 23,019.0     | 89.00      | 176.70               | 11,613.9      | -11,723.6     | 22.8          | 11,723.6                   | 179.89                 |
| 23,114.0     | 88.40      | 176.00               | 11,616.1      | -11,818.3     | 28.9          | 11,818.4                   | 179.86                 |
| 23,209.0     | 88.10      | 175.60               | 11,619.0      | -11,913.0     | 35.8          | 11,913.1                   | 179.83                 |
| 23,304.0     | 87.40      | 175.60               | 11,622.7      | -12,007.7     | 43.1          | 12,007.8                   | 179.79                 |
| 23,340.0     | 87.20      | 175.60               | 11,624.4      | -12,043.5     | 45.9          | 12,043.6                   | 179.78                 |
| 23,400.0     | 87.20      | 175.60               | 11,627.3      | -12,103.3     | 50.5          | 12,103.4                   | 179.76                 |

TD @ 23400.0' MD / 11627.4' TVD

## Design Annotations

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                              |
|-----------------------------|-----------------------------|-------------------|-----------------|--------------------------------------|
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                      |
| 955.0                       | 955.0                       | -5.0              | 1.8             | Gyro Tie-in @ 955.0' MD / 955.0' TVD |
| 23,400.0                    | 11,627.3                    | -12,103.3         | 50.5            | TD @ 23400.0' MD / 11627.4' TVD      |