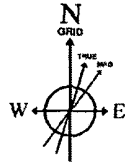


# Mewbourne Oil Company

Location: Eddy County, NM  
Field: (Lakewood) Sec 34, T19S, R25E  
Facility: Lakewood 34 IP Fed No 1H

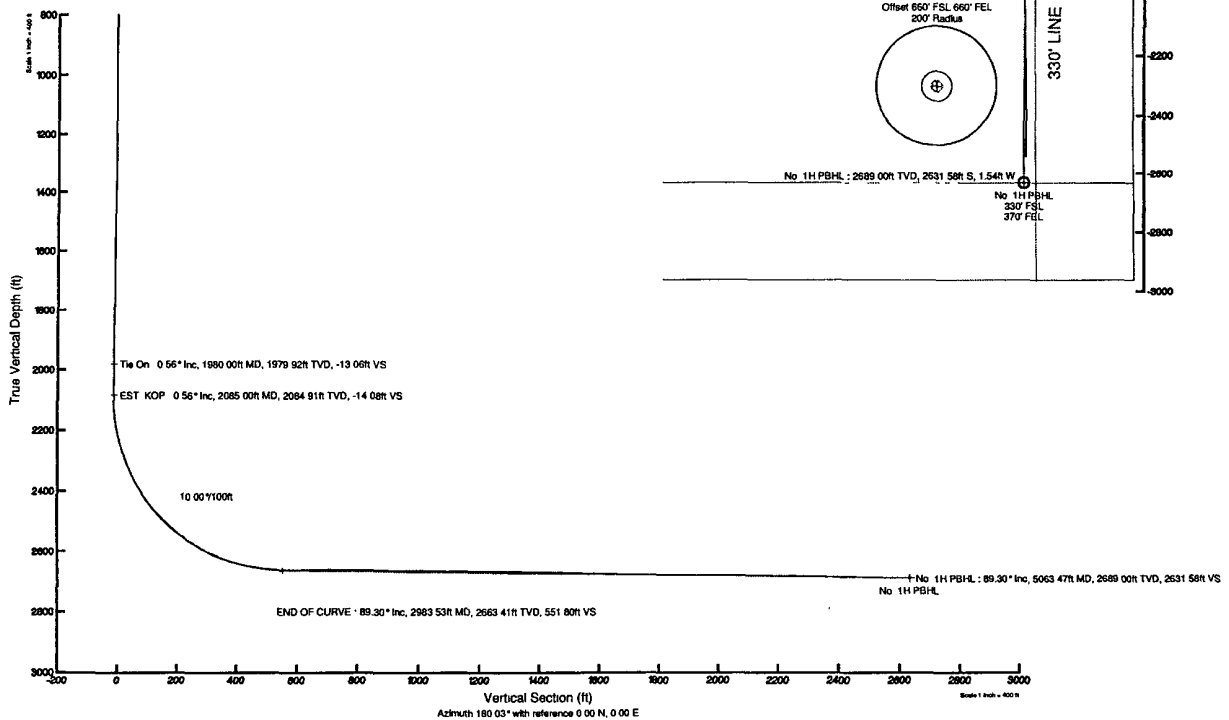
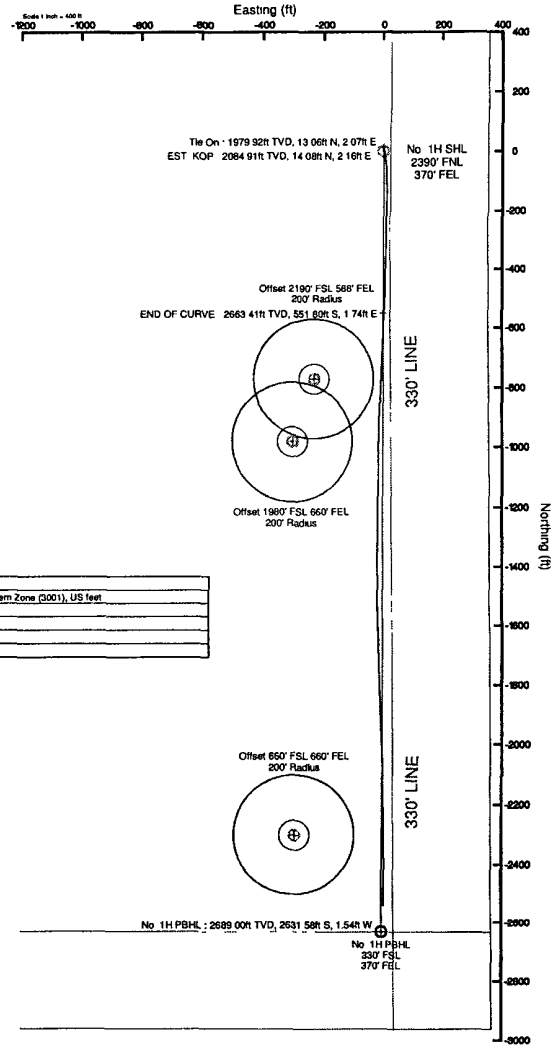
Slot: No. 1H SHL  
Well: No. 1H  
Wellbore: No. 1H PWB

| Well Profile Data |         |         |         |          |              |              |               |         |
|-------------------|---------|---------|---------|----------|--------------|--------------|---------------|---------|
| Design Comment    | MD (ft) | Inc (°) | Az (°)  | TVD (ft) | Local N (ft) | Local E (ft) | DLS (°/100ft) | VS (ft) |
| Tie On            | 1980 00 | 0.560   | 4.970   | 1979 92  | 13.06        | 2.07         | 0.13          | -13.06  |
| EST KOP           | 2085 00 | 0.560   | 4.970   | 2084 91  | 14.08        | 2.16         | 0.00          | -14.08  |
| END OF CURVE      | 2983 53 | 89.295  | 180.090 | 2663.41  | -551.80      | 1.74         | 10.00         | 551.80  |
| No 1H PBLH        | 5063.47 | 89.295  | 180.090 | 2689.00  | -2631.58     | -1.54        | 0.00          | 2631.58 |



BGGM (1945 0 to 2011 0) Dip 60.43° Field 48915.3 nT  
Magnetic North is 8.23 degrees East of True North (at 5/19/2010)  
Grid North is 0.07 degrees West of True North  
To correct azimuth from True to Grid add 0.07 degrees  
To correct azimuth from Magnetic to Grid add 8.27 degrees  
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 8.27 = 98.27

|                                                                            |                                                                               |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Plot reference wellpath is Plan #1 vs Actual <FINAL>                       |                                                                               |
| True vertical depths are referenced to Rig on No. 1H SHL (KB)              | Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (2001), US feet |
| Measured depths are referenced to Rig on No. 1H SHL (KB)                   | North Reference: Grid north                                                   |
| Rig on No. 1H SHL (KB) to Mean Sea Level: 3533 feet                        | Scale: True distance                                                          |
| Mean Sea Level to Mud line (Facility: Lakewood 34 IP Fed No 1H) -3519 feet | Depths are in feet                                                            |
| Coordinates are in feet referenced to Slot                                 | Created by: Victor Hernandez on 5/24/2010                                     |



## Actual Wellpath Report

No. 1H AWP

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| REFERENCE WELLPATH IDENTIFICATION |                               |          |            |
|-----------------------------------|-------------------------------|----------|------------|
| Operator                          | Mewbourne Oil Company         | Slot     | No. 1H SHL |
| Area                              | Eddy County, NM               | Well     | No. 1H     |
| Field                             | (Lakewood) Sec 34, T19S, R25E | Wellbore | No. 1H AWB |
| Facility                          | Lakewood 34 IP Fed No. 1H     |          |            |

| REPORT SETUP INFORMATION |                                                                  |                      |                           |
|--------------------------|------------------------------------------------------------------|----------------------|---------------------------|
| Projection System        | NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet | Software System      | WellArchitect® 2.0        |
| North Reference          | Grid                                                             | User                 | Victor Hernandez          |
| Scale                    | 0.999911                                                         | Report Generated     | 5/25/2010 at 11:35:32 AM  |
| Convergence at slot      | 0.07° West                                                       | Database/Source file | WA_Midland/No._1H_AWB.xml |

| WELLPATH LOCATION     |                   |          |                  |                |                        |                 |
|-----------------------|-------------------|----------|------------------|----------------|------------------------|-----------------|
|                       | Local coordinates |          | Grid coordinates |                | Geographic coordinates |                 |
|                       | North[ft]         | East[ft] | Easting[USft]    | Northing[USft] | Latitude               | Longitude       |
| Slot Location         | 0.00              | 0.00     | 459535.44        | 588466.34      | 32°37'03.825"N         | 104°27'53.118"W |
| Facility Reference Pt |                   |          | 459535.44        | 588466.34      | 32°37'03.825"N         | 104°27'53.118"W |
| Field Reference Pt    |                   |          | 459535.44        | 588466.35      | 32°37'03.825"N         | 104°27'53.118"W |

| WELLPATH DATUM           |                        |                                          |                   |
|--------------------------|------------------------|------------------------------------------|-------------------|
| Calculation method       | Minimum curvature      | Rig on No. 1H SHL (KB) to GL             | 14.00ft           |
| Horizontal Reference Pt  | Slot                   | Rig on No. 1H SHL (KB) to Mean Sea Level | 3533.00ft         |
| Vertical Reference Pt    | Rig on No. 1H SHL (KB) | GL to Mud Line (Facility)                | 0.00ft            |
| MD Reference Pt          | Rig on No. 1H SHL (KB) | Section Origin                           | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level         | Section Azimuth                          | 180.03°           |

## Actual Wellpath Report

No. 1H AWP

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| REFERENCE WELLPATH IDENTIFICATION |                               |          |            |
|-----------------------------------|-------------------------------|----------|------------|
| Operator                          | Mewbourne Oil Company         | Slot     | No. 1H SHL |
| Area                              | Eddy County, NM               | Well     | No. 1H     |
| Field                             | (Lakewood) Sec 34, T19S, R25E | Wellbore | No. 1H AWP |
| Facility                          | Lakewood 34 IP Fed No. 1H     |          |            |

| WELLPATH DATA (115 stations) |                    |                |             |                   |               |              |                       |                        |                |                 |                  |
|------------------------------|--------------------|----------------|-------------|-------------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|------------------|
| MD<br>[ft]                   | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | DLS<br>[°/100ft] |
| 0.00                         | 0.000              | 70.500         | 0.00        | 0.00              | 0.00          | 0.00         | 459535.44             | 588466.34              | 32°37'03.825"N | 104°27'53.118"W | 0.00             |
| 100.00                       | 0.550              | 70.500         | 100.00      | -0.16             | 0.16          | 0.45         | 459535.89             | 588466.50              | 32°37'03.827"N | 104°27'53.113"W | 0.55             |
| 200.00                       | 0.540              | 62.810         | 199.99      | -0.54             | 0.54          | 1.32         | 459536.76             | 588466.88              | 32°37'03.830"N | 104°27'53.103"W | 0.07             |
| 300.00                       | 0.540              | 58.050         | 299.99      | -1.00             | 1.00          | 2.14         | 459537.58             | 588467.34              | 32°37'03.835"N | 104°27'53.093"W | 0.04             |
| 400.00                       | 0.520              | 52.200         | 399.99      | -1.53             | 1.53          | 2.90         | 459538.34             | 588467.87              | 32°37'03.840"N | 104°27'53.084"W | 0.06             |
| 500.00                       | 0.560              | 351.580        | 499.98      | -2.29             | 2.29          | 3.19         | 459538.63             | 588468.63              | 32°37'03.848"N | 104°27'53.081"W | 0.55             |
| 600.00                       | 0.640              | 334.380        | 599.98      | -3.28             | 3.28          | 2.88         | 459538.32             | 588469.62              | 32°37'03.858"N | 104°27'53.085"W | 0.20             |
| 700.00                       | 0.450              | 311.750        | 699.97      | -4.04             | 4.04          | 2.34         | 459537.78             | 588470.38              | 32°37'03.865"N | 104°27'53.091"W | 0.28             |
| 800.00                       | 0.450              | 304.190        | 799.97      | -4.52             | 4.52          | 1.72         | 459537.16             | 588470.86              | 32°37'03.870"N | 104°27'53.098"W | 0.06             |
| 900.00                       | 0.330              | 307.250        | 899.97      | -4.92             | 4.92          | 1.17         | 459536.61             | 588471.26              | 32°37'03.874"N | 104°27'53.105"W | 0.12             |
| 1000.00                      | 0.270              | 297.610        | 999.96      | -5.20             | 5.20          | 0.73         | 459536.17             | 588471.54              | 32°37'03.877"N | 104°27'53.110"W | 0.08             |
| 1100.00                      | 0.290              | 311.010        | 1099.96     | -5.48             | 5.48          | 0.33         | 459535.77             | 588471.82              | 32°37'03.879"N | 104°27'53.114"W | 0.07             |
| 1200.00                      | 0.320              | 326.710        | 1199.96     | -5.88             | 5.88          | -0.01        | 459535.43             | 588472.22              | 32°37'03.883"N | 104°27'53.118"W | 0.09             |
| 1300.00                      | 0.400              | 345.650        | 1299.96     | -6.45             | 6.45          | -0.25        | 459535.19             | 588472.79              | 32°37'03.889"N | 104°27'53.121"W | 0.14             |
| 1400.00                      | 0.370              | 339.920        | 1399.96     | -7.11             | 7.11          | -0.32        | 459535.12             | 588473.45              | 32°37'03.895"N | 104°27'53.122"W | 0.13             |
| 1500.00                      | 0.530              | 9.530          | 1499.96     | -7.89             | 7.89          | -0.22        | 459535.22             | 588474.23              | 32°37'03.903"N | 104°27'53.121"W | 0.17             |
| 1600.00                      | 0.560              | 30.230         | 1599.95     | -8.77             | 8.77          | 0.10         | 459535.54             | 588475.10              | 32°37'03.912"N | 104°27'53.117"W | 0.20             |
| 1700.00                      | 0.800              | 31.310         | 1699.94     | -9.78             | 9.78          | 0.71         | 459536.15             | 588476.12              | 32°37'03.922"N | 104°27'53.110"W | 0.24             |
| 1800.00                      | 0.900              | 27.500         | 1799.93     | -11.08            | 11.08         | 1.44         | 459536.88             | 588477.42              | 32°37'03.935"N | 104°27'53.102"W | 0.11             |
| 1900.00                      | 0.590              | 14.760         | 1899.92     | -12.27            | 12.27         | 1.93         | 459537.37             | 588478.61              | 32°37'03.947"N | 104°27'53.096"W | 0.35             |
| 1980.00                      | 0.560              | 4.970          | 1979.92     | -13.06            | 13.06         | 2.07         | 459537.51             | 588479.40              | 32°37'03.954"N | 104°27'53.094"W | 0.13             |
| 2015.00                      | 0.700              | 9.400          | 2014.92     | -13.44            | 13.44         | 2.12         | 459537.56             | 588479.78              | 32°37'03.958"N | 104°27'53.094"W | 0.42             |
| 2045.00                      | 0.500              | 6.500          | 2044.92     | -13.75            | 13.75         | 2.17         | 459537.61             | 588480.09              | 32°37'03.961"N | 104°27'53.093"W | 0.67             |
| 2075.00                      | 0.300              | 67.900         | 2074.92     | -13.91            | 13.91         | 2.25         | 459537.69             | 588480.25              | 32°37'03.963"N | 104°27'53.092"W | 1.48             |
| 2107.00                      | 1.700              | 174.300        | 2106.91     | -13.47            | 13.47         | 2.38         | 459537.82             | 588479.81              | 32°37'03.958"N | 104°27'53.091"W | 5.65             |
| 2140.00                      | 4.900              | 177.000        | 2139.85     | -11.58            | 11.58         | 2.50         | 459537.94             | 588477.91              | 32°37'03.940"N | 104°27'53.089"W | 9.71             |
| 2172.00                      | 8.400              | 173.700        | 2171.63     | -7.89             | 7.89          | 2.83         | 459538.27             | 588474.23              | 32°37'03.903"N | 104°27'53.085"W | 11.00            |
| 2203.00                      | 11.300             | 169.600        | 2202.17     | -2.65             | 2.65          | 3.63         | 459539.06             | 588468.99              | 32°37'03.851"N | 104°27'53.076"W | 9.62             |
| 2235.00                      | 14.200             | 172.000        | 2233.38     | 4.32              | -4.32         | 4.74         | 459540.18             | 588462.02              | 32°37'03.782"N | 104°27'53.063"W | 9.21             |
| 2267.00                      | 17.400             | 172.000        | 2264.17     | 12.95             | -12.95        | 5.95         | 459541.39             | 588453.39              | 32°37'03.697"N | 104°27'53.048"W | 10.00            |

## Actual Wellpath Report

No. 1H AWP

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| REFERENCE WELLPATH IDENTIFICATION |                               |          |            |
|-----------------------------------|-------------------------------|----------|------------|
| Operator                          | Mewbourne Oil Company         | Slot     | No. 1H SHL |
| Area                              | Eddy County, NM               | Well     | No. 1H     |
| Field                             | (Lakewood) Sec 34, T19S, R25E | Wellbore | No. 1H AWB |
| Facility                          | Lakewood 34 IP Fed No. 1H     |          |            |

| WELLPATH DATA (115 stations) |                    |                |             |                   |               |              |                       |                        |                |                 |                  |
|------------------------------|--------------------|----------------|-------------|-------------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|------------------|
| MD<br>[ft]                   | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | DLS<br>[°/100ft] |
| 2299.00                      | 20.500             | 173.000        | 2294.43     | 23.25             | -23.25        | 7.30         | 459542.74             | 588443.09              | 32°37'03.595"N | 104°27'53.033"W | 9.74             |
| 2331.00                      | 24.000             | 173.400        | 2324.04     | 35.28             | -35.28        | 8.73         | 459544.17             | 588431.06              | 32°37'03.476"N | 104°27'53.016"W | 10.95            |
| 2362.00                      | 27.300             | 175.100        | 2351.98     | 48.63             | -48.63        | 10.06        | 459545.50             | 588417.71              | 32°37'03.344"N | 104°27'53.000"W | 10.91            |
| 2394.00                      | 30.200             | 177.100        | 2380.04     | 63.98             | -63.99        | 11.10        | 459546.54             | 588402.36              | 32°37'03.192"N | 104°27'52.988"W | 9.55             |
| 2426.00                      | 32.600             | 179.700        | 2407.35     | 80.64             | -80.65        | 11.55        | 459546.99             | 588385.70              | 32°37'03.027"N | 104°27'52.982"W | 8.61             |
| 2458.00                      | 36.000             | 179.600        | 2433.78     | 98.67             | -98.68        | 11.66        | 459547.10             | 588367.67              | 32°37'02.849"N | 104°27'52.980"W | 10.63            |
| 2490.00                      | 39.100             | 179.700        | 2459.15     | 118.17            | -118.18       | 11.78        | 459547.22             | 588348.17              | 32°37'02.656"N | 104°27'52.979"W | 9.69             |
| 2522.00                      | 42.600             | 179.800        | 2483.35     | 139.10            | -139.10       | 11.87        | 459547.31             | 588327.25              | 32°37'02.449"N | 104°27'52.977"W | 10.94            |
| 2554.00                      | 46.100             | 180.200        | 2506.23     | 161.46            | -161.47       | 11.87        | 459547.31             | 588304.88              | 32°37'02.227"N | 104°27'52.977"W | 10.97            |
| 2585.00                      | 49.500             | 180.600        | 2527.05     | 184.42            | -184.43       | 11.70        | 459547.14             | 588281.93              | 32°37'02.000"N | 104°27'52.979"W | 11.01            |
| 2616.00                      | 52.600             | 180.500        | 2546.53     | 208.53            | -208.54       | 11.47        | 459546.91             | 588257.82              | 32°37'01.762"N | 104°27'52.981"W | 10.00            |
| 2648.00                      | 56.000             | 180.400        | 2565.20     | 234.51            | -234.52       | 11.27        | 459546.71             | 588231.84              | 32°37'01.505"N | 104°27'52.983"W | 10.63            |
| 2680.00                      | 59.000             | 180.200        | 2582.40     | 261.50            | -261.50       | 11.13        | 459546.57             | 588204.86              | 32°37'01.238"N | 104°27'52.984"W | 9.39             |
| 2712.00                      | 62.300             | 180.600        | 2598.08     | 289.38            | -289.39       | 10.93        | 459546.37             | 588176.98              | 32°37'00.962"N | 104°27'52.986"W | 10.37            |
| 2744.00                      | 65.700             | 181.200        | 2612.10     | 318.14            | -318.14       | 10.48        | 459545.92             | 588148.22              | 32°37'00.677"N | 104°27'52.991"W | 10.76            |
| 2776.00                      | 69.300             | 181.400        | 2624.35     | 347.69            | -347.70       | 9.81         | 459545.25             | 588118.68              | 32°37'00.385"N | 104°27'52.999"W | 11.26            |
| 2807.00                      | 72.400             | 181.500        | 2634.52     | 376.96            | -376.97       | 9.07         | 459544.51             | 588089.41              | 32°37'00.095"N | 104°27'53.007"W | 10.00            |
| 2839.00                      | 75.900             | 181.100        | 2643.26     | 407.73            | -407.74       | 8.37         | 459543.81             | 588058.64              | 32°36'59.791"N | 104°27'53.014"W | 11.00            |
| 2871.00                      | 79.100             | 181.000        | 2650.18     | 438.97            | -438.97       | 7.80         | 459543.24             | 588027.41              | 32°36'59.482"N | 104°27'53.021"W | 10.00            |
| 2903.00                      | 82.100             | 181.900        | 2655.41     | 470.52            | -470.53       | 7.00         | 459542.44             | 587995.86              | 32°36'59.169"N | 104°27'53.030"W | 9.78             |
| 2935.00                      | 84.500             | 182.000        | 2659.14     | 502.28            | -502.29       | 5.92         | 459541.36             | 587964.10              | 32°36'58.855"N | 104°27'53.042"W | 7.51             |
| 2966.00                      | 87.800             | 181.700        | 2661.22     | 533.19            | -533.20       | 4.92         | 459540.36             | 587933.19              | 32°36'58.549"N | 104°27'53.053"W | 10.69            |
| 2998.00                      | 89.300             | 181.900        | 2662.03     | 565.17            | -565.17       | 3.91         | 459539.35             | 587901.22              | 32°36'58.233"N | 104°27'53.064"W | 4.73             |
| 3030.00                      | 90.400             | 182.600        | 2662.11     | 597.14            | -597.14       | 2.66         | 459538.10             | 587869.25              | 32°36'57.916"N | 104°27'53.079"W | 4.07             |
| 3062.00                      | 91.200             | 182.400        | 2661.67     | 629.11            | -629.11       | 1.26         | 459536.70             | 587837.29              | 32°36'57.600"N | 104°27'53.094"W | 2.58             |
| 3094.00                      | 90.700             | 182.400        | 2661.14     | 661.08            | -661.08       | -0.08        | 459535.36             | 587805.32              | 32°36'57.284"N | 104°27'53.110"W | 1.56             |
| 3125.00                      | 89.700             | 182.800        | 2661.03     | 692.05            | -692.05       | -1.49        | 459533.96             | 587774.36              | 32°36'56.977"N | 104°27'53.126"W | 3.47             |
| 3157.00                      | 89.200             | 182.700        | 2661.34     | 724.01            | -724.01       | -3.02        | 459532.42             | 587742.40              | 32°36'56.661"N | 104°27'53.143"W | 1.59             |
| 3188.00                      | 89.300             | 182.800        | 2661.74     | 754.97            | -754.97       | -4.51        | 459530.93             | 587711.44              | 32°36'56.355"N | 104°27'53.160"W | 0.46             |
| 3219.00                      | 89.800             | 182.800        | 2661.99     | 785.93            | -785.93       | -6.02        | 459529.42             | 587680.48              | 32°36'56.048"N | 104°27'53.177"W | 1.61             |

## Actual Wellpath Report

No. 1H AWP

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| REFERENCE WELLPATH IDENTIFICATION |                               |          |            |
|-----------------------------------|-------------------------------|----------|------------|
| Operator                          | Mewbourne Oil Company         | Slot     | No. 1H SHL |
| Area                              | Eddy County, NM               | Well     | No. 1H     |
| Field                             | (Lakewood) Sec 34, T19S, R25E | Wellbore | No. 1H AWB |
| Facility                          | Lakewood 34 IP Fed No. 1H     |          |            |

| WELLPATH DATA (115 stations) |                    |                |             |                   |               |              |                       |                        |                |                 |                  |
|------------------------------|--------------------|----------------|-------------|-------------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|------------------|
| MD<br>[ft]                   | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | DLS<br>[°/100ft] |
| 3251.00                      | 89.300             | 182.600        | 2662.24     | 817.90            | -817.89       | -7.53        | 459527.91             | 587648.52              | 32°36'55.732"N | 104°27'53.194"W | 1.68             |
| 3282.00                      | 89.300             | 182.400        | 2662.62     | 848.87            | -848.86       | -8.88        | 459526.56             | 587617.55              | 32°36'55.426"N | 104°27'53.210"W | 0.65             |
| 3314.00                      | 89.400             | 182.000        | 2662.98     | 880.84            | -880.84       | -10.11       | 459525.33             | 587585.58              | 32°36'55.109"N | 104°27'53.224"W | 1.29             |
| 3346.00                      | 89.700             | 181.900        | 2663.23     | 912.82            | -912.82       | -11.20       | 459524.24             | 587553.61              | 32°36'54.793"N | 104°27'53.236"W | 0.99             |
| 3378.00                      | 89.300             | 181.500        | 2663.51     | 944.81            | -944.80       | -12.15       | 459523.29             | 587521.62              | 32°36'54.476"N | 104°27'53.247"W | 1.77             |
| 3410.00                      | 89.400             | 181.300        | 2663.87     | 976.80            | -976.79       | -12.93       | 459522.51             | 587489.64              | 32°36'54.160"N | 104°27'53.255"W | 0.70             |
| 3441.00                      | 89.100             | 180.400        | 2664.28     | 1007.79           | -1007.78      | -13.39       | 459522.05             | 587458.65              | 32°36'53.853"N | 104°27'53.260"W | 3.06             |
| 3473.00                      | 89.600             | 180.500        | 2664.64     | 1039.79           | -1039.78      | -13.64       | 459521.80             | 587426.65              | 32°36'53.536"N | 104°27'53.263"W | 1.59             |
| 3505.00                      | 88.700             | 180.400        | 2665.12     | 1071.78           | -1071.78      | -13.89       | 459521.55             | 587394.66              | 32°36'53.220"N | 104°27'53.265"W | 2.83             |
| 3537.00                      | 88.900             | 180.300        | 2665.79     | 1103.78           | -1103.77      | -14.09       | 459521.35             | 587362.67              | 32°36'52.903"N | 104°27'53.267"W | 0.70             |
| 3568.00                      | 89.600             | 181.100        | 2666.19     | 1134.77           | -1134.76      | -14.47       | 459520.98             | 587331.68              | 32°36'52.597"N | 104°27'53.271"W | 3.43             |
| 3599.00                      | 90.200             | 180.300        | 2666.25     | 1165.77           | -1165.76      | -14.84       | 459520.60             | 587300.69              | 32°36'52.290"N | 104°27'53.275"W | 3.23             |
| 3631.00                      | 89.800             | 180.400        | 2666.25     | 1197.77           | -1197.76      | -15.04       | 459520.40             | 587268.69              | 32°36'51.973"N | 104°27'53.277"W | 1.29             |
| 3663.00                      | 90.300             | 180.500        | 2666.22     | 1229.77           | -1229.76      | -15.29       | 459520.15             | 587236.69              | 32°36'51.657"N | 104°27'53.279"W | 1.59             |
| 3695.00                      | 89.200             | 181.000        | 2666.36     | 1261.76           | -1261.75      | -15.71       | 459519.73             | 587204.70              | 32°36'51.340"N | 104°27'53.284"W | 3.78             |
| 3727.00                      | 89.200             | 180.400        | 2666.80     | 1293.76           | -1293.75      | -16.10       | 459519.34             | 587172.71              | 32°36'51.023"N | 104°27'53.288"W | 1.87             |
| 3759.00                      | 88.100             | 180.700        | 2667.56     | 1325.75           | -1325.74      | -16.41       | 459519.03             | 587140.72              | 32°36'50.707"N | 104°27'53.291"W | 3.56             |
| 3790.00                      | 88.400             | 181.800        | 2668.50     | 1356.73           | -1356.72      | -17.08       | 459518.36             | 587109.75              | 32°36'50.400"N | 104°27'53.298"W | 3.68             |
| 3822.00                      | 88.900             | 180.000        | 2669.26     | 1388.71           | -1388.70      | -17.59       | 459517.85             | 587077.77              | 32°36'50.084"N | 104°27'53.304"W | 5.84             |
| 3854.00                      | 89.400             | 180.200        | 2669.73     | 1420.71           | -1420.70      | -17.64       | 459517.80             | 587045.77              | 32°36'49.767"N | 104°27'53.304"W | 1.68             |
| 3886.00                      | 89.200             | 180.200        | 2670.12     | 1452.71           | -1452.69      | -17.75       | 459517.69             | 587013.78              | 32°36'49.451"N | 104°27'53.305"W | 0.62             |
| 3918.00                      | 88.200             | 179.500        | 2670.85     | 1484.70           | -1484.69      | -17.67       | 459517.77             | 586981.79              | 32°36'49.134"N | 104°27'53.303"W | 3.81             |
| 3950.00                      | 87.900             | 179.200        | 2671.94     | 1516.68           | -1516.67      | -17.31       | 459518.13             | 586949.81              | 32°36'48.818"N | 104°27'53.299"W | 1.33             |
| 3982.00                      | 88.200             | 178.600        | 2673.03     | 1548.65           | -1548.64      | -16.69       | 459518.75             | 586917.84              | 32°36'48.501"N | 104°27'53.291"W | 2.10             |
| 4014.00                      | 88.900             | 178.400        | 2673.84     | 1580.63           | -1580.62      | -15.86       | 459519.59             | 586885.86              | 32°36'48.185"N | 104°27'53.281"W | 2.27             |
| 4046.00                      | 89.200             | 179.000        | 2674.37     | 1612.62           | -1612.61      | -15.13       | 459520.31             | 586853.88              | 32°36'47.868"N | 104°27'53.272"W | 2.10             |
| 4077.00                      | 88.000             | 178.300        | 2675.13     | 1643.60           | -1643.59      | -14.40       | 459521.04             | 586822.90              | 32°36'47.562"N | 104°27'53.263"W | 4.48             |
| 4109.00                      | 88.100             | 178.400        | 2676.21     | 1675.56           | -1675.56      | -13.48       | 459521.96             | 586790.94              | 32°36'47.246"N | 104°27'53.252"W | 0.44             |
| 4141.00                      | 88.600             | 178.300        | 2677.14     | 1707.54           | -1707.53      | -12.56       | 459522.88             | 586758.97              | 32°36'46.929"N | 104°27'53.240"W | 1.59             |
| 4173.00                      | 89.000             | 178.300        | 2677.81     | 1739.51           | -1739.51      | -11.61       | 459523.83             | 586726.99              | 32°36'46.613"N | 104°27'53.229"W | 1.25             |

## Actual Wellpath Report

No. 1H AWP

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| REFERENCE WELLPATH IDENTIFICATION |                               |          |            |
|-----------------------------------|-------------------------------|----------|------------|
| Operator                          | Mewbourne Oil Company         | Slot     | No. 1H SHL |
| Area                              | Eddy County, NM               | Well     | No. 1H     |
| Field                             | (Lakewood) Sec 34, T19S, R25E | Wellbore | No. 1H AWB |
| Facility                          | Lakewood 34 IP Fed No. 1H     |          |            |

| WELLPATH DATA (115 stations) |                    |                |             |                   |               |              |                       |                        |                |                 |                  |
|------------------------------|--------------------|----------------|-------------|-------------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|------------------|
| MD<br>[ft]                   | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | DLS<br>[°/100ft] |
| 4205.00                      | 89.400             | 177.800        | 2678.25     | 1771.49           | -1771.49      | -10.52       | 459524.92             | 586695.01              | 32°36'46.296"N | 104°27'53.216"W | 2.00             |
| 4236.00                      | 89.700             | 177.700        | 2678.50     | 1802.47           | -1802.46      | -9.30        | 459526.14             | 586664.04              | 32°36'45.990"N | 104°27'53.201"W | 1.02             |
| 4268.00                      | 90.000             | 177.800        | 2678.58     | 1834.44           | -1834.44      | -8.05        | 459527.39             | 586632.07              | 32°36'45.674"N | 104°27'53.186"W | 0.99             |
| 4300.00                      | 89.400             | 178.100        | 2678.75     | 1866.42           | -1866.42      | -6.90        | 459528.54             | 586600.09              | 32°36'45.357"N | 104°27'53.172"W | 2.10             |
| 4332.00                      | 89.400             | 177.900        | 2679.08     | 1898.40           | -1898.39      | -5.79        | 459529.65             | 586568.12              | 32°36'45.041"N | 104°27'53.158"W | 0.62             |
| 4364.00                      | 89.800             | 177.500        | 2679.31     | 1930.37           | -1930.37      | -4.50        | 459530.94             | 586536.15              | 32°36'44.724"N | 104°27'53.143"W | 1.77             |
| 4395.00                      | 90.200             | 177.600        | 2679.31     | 1961.34           | -1961.34      | -3.18        | 459532.26             | 586505.18              | 32°36'44.418"N | 104°27'53.127"W | 1.33             |
| 4427.00                      | 89.600             | 177.800        | 2679.36     | 1993.31           | -1993.31      | -1.89        | 459533.55             | 586473.21              | 32°36'44.102"N | 104°27'53.112"W | 1.98             |
| 4459.00                      | 89.800             | 177.800        | 2679.53     | 2025.29           | -2025.29      | -0.66        | 459534.78             | 586441.24              | 32°36'43.785"N | 104°27'53.097"W | 0.62             |
| 4491.00                      | 90.100             | 178.100        | 2679.56     | 2057.27           | -2057.27      | 0.48         | 459535.92             | 586409.26              | 32°36'43.469"N | 104°27'53.083"W | 1.33             |
| 4523.00                      | 88.900             | 178.700        | 2679.84     | 2089.25           | -2089.25      | 1.37         | 459536.81             | 586377.28              | 32°36'43.152"N | 104°27'53.072"W | 4.19             |
| 4554.00                      | 89.000             | 178.600        | 2680.40     | 2120.24           | -2120.24      | 2.10         | 459537.54             | 586346.29              | 32°36'42.846"N | 104°27'53.063"W | 0.46             |
| 4586.00                      | 89.300             | 178.900        | 2680.88     | 2152.23           | -2152.23      | 2.80         | 459538.24             | 586314.31              | 32°36'42.529"N | 104°27'53.054"W | 1.33             |
| 4618.00                      | 89.600             | 178.300        | 2681.19     | 2184.22           | -2184.22      | 3.58         | 459539.02             | 586282.32              | 32°36'42.213"N | 104°27'53.045"W | 2.10             |
| 4650.00                      | 90.000             | 178.800        | 2681.30     | 2216.20           | -2216.21      | 4.39         | 459539.83             | 586250.33              | 32°36'41.896"N | 104°27'53.035"W | 2.00             |
| 4682.00                      | 88.600             | 179.400        | 2681.69     | 2248.20           | -2248.20      | 4.90         | 459540.34             | 586218.34              | 32°36'41.580"N | 104°27'53.028"W | 4.76             |
| 4714.00                      | 88.600             | 179.300        | 2682.47     | 2280.19           | -2280.19      | 5.26         | 459540.70             | 586186.36              | 32°36'41.263"N | 104°27'53.024"W | 0.31             |
| 4746.00                      | 88.800             | 179.200        | 2683.20     | 2312.17           | -2312.18      | 5.68         | 459541.12             | 586154.37              | 32°36'40.947"N | 104°27'53.018"W | 0.70             |
| 4778.00                      | 89.000             | 179.500        | 2683.81     | 2344.17           | -2344.17      | 6.04         | 459541.48             | 586122.38              | 32°36'40.630"N | 104°27'53.014"W | 1.13             |
| 4809.00                      | 89.400             | 179.300        | 2684.24     | 2375.16           | -2375.16      | 6.37         | 459541.81             | 586091.39              | 32°36'40.323"N | 104°27'53.009"W | 1.44             |
| 4841.00                      | 89.700             | 179.700        | 2684.50     | 2407.16           | -2407.16      | 6.64         | 459542.08             | 586059.40              | 32°36'40.007"N | 104°27'53.006"W | 1.56             |
| 4873.00                      | 88.800             | 180.400        | 2684.91     | 2439.15           | -2439.16      | 6.62         | 459542.06             | 586027.40              | 32°36'39.690"N | 104°27'53.006"W | 3.56             |
| 4904.00                      | 88.800             | 180.400        | 2685.56     | 2470.15           | -2470.15      | 6.40         | 459541.84             | 585996.41              | 32°36'39.383"N | 104°27'53.008"W | 0.00             |
| 4936.00                      | 89.100             | 180.200        | 2686.15     | 2502.14           | -2502.15      | 6.23         | 459541.67             | 585964.42              | 32°36'39.067"N | 104°27'53.009"W | 1.13             |
| 4976.00                      | 89.100             | 180.200        | 2686.78     | 2542.14           | -2542.14      | 6.09         | 459541.53             | 585924.43              | 32°36'38.671"N | 104°27'53.010"W | 0.00             |

## Actual Wellpath Report

No. 1H AWP

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| REFERENCE WELLPATH IDENTIFICATION |                               |          |            |
|-----------------------------------|-------------------------------|----------|------------|
| Operator                          | Mewbourne Oil Company         | Slot     | No. 1H SHL |
| Area                              | Eddy County, NM               | Well     | No. 1H     |
| Field                             | (Lakewood) Sec 34, T19S, R25E | Wellbore | No. 1H AWB |
| Facility                          | Lakewood 34 IP Fed No. 1H     |          |            |

| TARGETS                   |            |             |               |              |                       |                        |                |                 |        |
|---------------------------|------------|-------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|--------|
| Name                      | MD<br>[ft] | TVD<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | Shape  |
| No. 1H PBHL               |            | 2689.00     | -2631.58      | -1.54        | 459533.90             | 585835.00              | 32°36'37.786"N | 104°27'53.098"W | point  |
| Offset 1980' FSL 660' FEL |            | 2700.00     | -980.73       | -301.77      | 459233.70             | 587485.70              | 32°36'54.117"N | 104°27'56.632"W | circle |
| Offset 2190' FSL 588' FEL |            | 2700.00     | -770.91       | -231.06      | 459304.40             | 587695.50              | 32°36'56.194"N | 104°27'55.808"W | circle |
| Offset 660' FSL 660' FEL  |            | 2700.00     | -2300.85      | -293.57      | 459241.90             | 586165.70              | 32°36'41.055"N | 104°27'56.517"W | circle |

| WELLPATH COMPOSITION |                |                                             |  |  | Ref Wellbore: No. 1H AWB | Ref Wellpath: No. 1H AWP |
|----------------------|----------------|---------------------------------------------|--|--|--------------------------|--------------------------|
| Start MD<br>[ft]     | End MD<br>[ft] | Positional Uncertainty Model                |  |  | Log Name/Comment         | Wellbore                 |
| 0.00                 | 1980.00        | Gyrodata standard - Drop gyro or Multi-shot |  |  | GYRO <100 - 1980>        | No. 1H AWB               |
| 1980.00              | 4936.00        | NaviTrak (Standard)                         |  |  | MWD <2015 - 4936>        | No. 1H AWB               |
| 4936.00              | 4976.00        | Blind Drilling (std)                        |  |  | Projection to bit        | No. 1H AWB               |



# **A Gyrodata Directional Survey**

**for**

**MEWBOURNE OIL CO.**

**Lease: LAKEWOOD 34 FED IP Well: #1H, 4-1/2" DRILLPIPE**  
**Location: PATTERSON #63, EDDY COUNTY, NEW MEXICO**

Job Number: MD0510GBM226

Run Date: 5/19/2010 3:19:28 AM

Surveyor: Steve Winther

Calculation Method: MINIMUM CURVATURE

Survey surface coordinates obtained from: Well Plan/Plot

Survey Latitude: 32.617731 deg. N Longitude: 104.464756 deg. W

Azimuth Correction:

Gyro: 0.07000 deg to Grid North

Depth Reference: Rotary Table

Rotary Table Elevation: 15.00

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location



# A Gyrodata Directional Survey

MEWBOURNE OIL CO.

Lease: LAKEWOOD 34 FED IP Well: #1H, 4-1/2" DRILLPIPE

Location: PATTERSON #63, EDDY COUNTY, NEW MEXICO

Job Number: MD0510GBM226

| MEASURED<br>DEPTH<br>feet | I N C L<br>deg. | AZIMUTH<br>deg. | DOGLEG<br>SEVERITY<br>deg./<br>100 ft. | VERTICAL<br>DEPTH<br>feet | CLOSURE<br>DIST. AZIMUTH<br>feet deg. | HORIZONTAL<br>COORDINATES<br>feet |
|---------------------------|-----------------|-----------------|----------------------------------------|---------------------------|---------------------------------------|-----------------------------------|
| 0.00                      | 0.00            | 0.00            | 0.00                                   | 0.00                      | 0.0 0.0                               | 0.00 N 0.00 E                     |

0 TO 1980 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4-1/2" DRILLPIPE

ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO PATTERSON DRILLING RIG #63 AND R.K.B. HEIGHT OF 15 FT.

|         |      |        |      |         |           |                |
|---------|------|--------|------|---------|-----------|----------------|
| 100.00  | 0.55 | 70.50  | 0.55 | 100.00  | 0.5 70.5  | 0.16 N 0.46 E  |
| 200.00  | 0.54 | 62.81  | 0.07 | 199.99  | 1.4 68.0  | 0.54 N 1.33 E  |
| 300.00  | 0.54 | 58.05  | 0.04 | 299.99  | 2.4 65.0  | 1.00 N 2.15 E  |
| 400.00  | 0.52 | 52.20  | 0.06 | 399.99  | 3.3 62.2  | 1.53 N 2.91 E  |
| 500.00  | 0.56 | 351.58 | 0.55 | 499.98  | 3.9 54.4  | 2.29 N 3.20 E  |
| 600.00  | 0.64 | 334.38 | 0.19 | 599.98  | 4.4 41.4  | 3.27 N 2.89 E  |
| 700.00  | 0.45 | 311.75 | 0.28 | 699.97  | 4.7 30.3  | 4.03 N 2.36 E  |
| 800.00  | 0.45 | 304.19 | 0.06 | 799.97  | 4.8 21.0  | 4.52 N 1.74 E  |
| 900.00  | 0.33 | 307.25 | 0.12 | 899.97  | 5.1 13.5  | 4.91 N 1.18 E  |
| 1000.00 | 0.27 | 297.61 | 0.08 | 999.96  | 5.3 8.1   | 5.20 N 0.74 E  |
| 1100.00 | 0.29 | 311.01 | 0.07 | 1099.96 | 5.5 3.5   | 5.47 N 0.34 E  |
| 1200.00 | 0.32 | 326.71 | 0.09 | 1199.96 | 5.9 359.9 | 5.87 N 0.01 W  |
| 1300.00 | 0.40 | 345.65 | 0.14 | 1299.96 | 6.4 357.8 | 6.44 N 0.25 W  |
| 1400.00 | 0.37 | 3.92   | 0.12 | 1399.96 | 7.1 357.5 | 7.09 N 0.31 W  |
| 1500.00 | 0.53 | 9.53   | 0.17 | 1499.96 | 7.9 358.5 | 7.87 N 0.21 W  |
| 1600.00 | 0.56 | 30.23  | 0.20 | 1599.95 | 8.7 0.7   | 8.75 N 0.11 E  |
| 1700.00 | 0.80 | 31.31  | 0.24 | 1699.94 | 9.8 4.2   | 9.77 N 0.72 E  |
| 1800.00 | 0.90 | 27.50  | 0.11 | 1799.93 | 11.2 7.5  | 11.07 N 1.45 E |
| 1900.00 | 0.59 | 14.76  | 0.35 | 1899.92 | 12.4 9.0  | 12.27 N 1.95 E |
| 1980.00 | 0.56 | 4.97   | 0.13 | 1979.92 | 13.2 9.1  | 13.06 N 2.09 E |

Final Station Closure: Distance: 13.22 ft Az: 9.09 deg.

# ADVANTAGE Final Survey Listing



INTEQ

**Operator** Mewbourne Oil Company **Fields** (Lakewood) Sec 34, T19S, R25E **API No** 30-015-37710 **Location** S34 T19S R25E  
**Well** Lakewood 34 IP Fed No. 1H **Wellbore** Original Path Hole **Rig** Patterson UTI 63 **Job** 3169447

## Well Origin

|                                 |                |                               |                   |
|---------------------------------|----------------|-------------------------------|-------------------|
| <b>Latitude</b>                 | 32.62 deg      | <b>Longitude</b>              | -104.46 deg       |
| <b>North Reference</b>          | Grid           | <b>Drill Depth Zero</b>       |                   |
| <b>Vertical Datum is</b>        | Mean Sea Level | <b>Vertical Datum to DDZ</b>  | 14.00 ft          |
| <b>Vertical Section North</b>   | 0.00 ft        | <b>Vertical Section East</b>  | 0.00 ft           |
| <b>Vertical Section Azimuth</b> | 180.03 deg     | <b>Vertical Section Depth</b> | 0.00 ft           |
| <b>Grid Convergence</b>         | 0.07 deg       | <b>Magnetic Declination</b>   | 8.20 deg          |
| <b>Total Correction</b>         | 8.27 deg       | <b>TVD Calculation Method</b> | Minimum Curvature |
| <b>D-Raw Calculation</b>        | Magcorr1       | <b>Local Magnetic Field</b>   | 48942 nT          |
| <b>Local Magnetic Dip Angle</b> | 60.43 deg      | <b>Local Gravity Field</b>    | 9.79534 m/s^2     |

| Tie In | MD ft   | Incl deg | Azim deg | North ft | East ft | TVD ft  | VS ft   | Incr VS ft | CRS LEN ft | DLS deg/100ft | Buidl deg/100ft | Turn deg/100ft |
|--------|---------|----------|----------|----------|---------|---------|---------|------------|------------|---------------|-----------------|----------------|
| U      | 1980.00 | 0.56     | 4.97     | 13.06    | 2.09    | 1979.92 | 13.20   |            | 1,980.00   |               |                 |                |
|        | 2015.00 | 0.70     | 9.40     | 13.44    | 2.14    | 2014.92 | -13.44  | 0.38       | 35.00      | 0.42          | 0.40            | 12.66          |
|        | 2045.00 | 0.50     | 6.50     | 13.75    | 2.18    | 2044.92 | -13.75  | 0.70       | 30.00      | 0.67          | -0.67           | -9.67          |
|        | 2076.00 | 0.30     | 67.90    | 13.92    | 2.27    | 2075.92 | -13.92  | 0.89       | 31.00      | 1.43          | -0.65           | 198.06         |
|        | 2108.00 | 1.70     | 174.30   | 13.48    | 2.40    | 2107.91 | -13.48  | 1.34       | 32.00      | 5.64          | 4.37            | 332.50         |
|        | 2140.00 | 4.90     | 177.00   | 11.64    | 2.52    | 2139.85 | -11.64  | 3.18       | 32.00      | 10.02         | 10.01           | 8.44           |
|        | 2172.00 | 8.40     | 173.70   | 7.95     | 2.85    | 2171.63 | -7.95   | 6.89       | 32.00      | 11.00         | 10.94           | -10.31         |
|        | 2204.00 | 11.30    | 169.60   | 2.54     | 3.67    | 2203.16 | -2.54   | 12.36      | 32.00      | 9.32          | 9.06            | -12.81         |
|        | 2235.00 | 14.50    | 172.00   | -4.29    | 4.76    | 2233.37 | 4.29    | 19.28      | 31.00      | 10.46         | 10.32           | 7.74           |
|        | 2265.00 | 17.40    | 172.00   | -12.45   | 5.90    | 2262.21 | 12.45   | 27.52      | 30.00      | 9.67          | 9.67            | 0.00           |
|        | 2297.00 | 20.50    | 173.00   | -22.75   | 7.25    | 2292.48 | 22.75   | 37.91      | 32.00      | 9.74          | 9.69            | 3.13           |
|        | 2331.00 | 24.00    | 173.40   | -35.54   | 8.77    | 2323.94 | 35.53   | 50.78      | 34.00      | 10.30         | 10.29           | 1.18           |
|        | 2362.00 | 27.30    | 175.10   | -48.89   | 10.11   | 2351.88 | 48.88   | 64.20      | 31.00      | 10.91         | 10.65           | 5.48           |
|        | 2394.00 | 30.20    | 177.10   | -64.24   | 11.14   | 2379.93 | 64.23   | 79.59      | 32.00      | 9.55          | 9.06            | 6.25           |
|        | 2426.00 | 32.60    | 179.70   | -80.90   | 11.59   | 2407.25 | 80.89   | 96.25      | 32.00      | 8.61          | 7.50            | 8.13           |
|        | 2458.00 | 36.00    | 179.60   | -98.93   | 11.70   | 2433.68 | 98.92   | 114.28     | 32.00      | 10.63         | 10.63           | -0.31          |
|        | 2490.00 | 39.10    | 179.70   | -118.43  | 11.82   | 2459.05 | 118.42  | 133.78     | 32.00      | 9.69          | 9.69            | 0.32           |
|        | 2522.00 | 42.60    | 179.80   | -139.36  | 11.91   | 2483.25 | 139.35  | 154.71     | 32.00      | 10.94         | 10.94           | 0.31           |
|        | 2554.00 | 46.10    | 180.20   | -161.72  | 11.91   | 2506.13 | 161.72  | 177.08     | 32.00      | 10.97         | 10.94           | 1.25           |
|        | 2585.00 | 49.50    | 180.60   | -184.68  | 11.75   | 2526.95 | 184.68  | 200.04     | 31.00      | 11.01         | 10.97           | 1.29           |
|        | 2616.00 | 52.60    | 180.50   | -208.79  | 11.52   | 2546.43 | 208.78  | 224.14     | 31.00      | 10.00         | 10.00           | -0.32          |
|        | 2648.00 | 56.00    | 180.40   | -234.77  | 11.31   | 2565.10 | 234.76  | 250.13     | 32.00      | 10.63         | 10.62           | -0.31          |
|        | 2680.00 | 59.00    | 180.20   | -261.76  | 11.17   | 2582.30 | 261.75  | 277.11     | 32.00      | 9.39          | 9.38            | -0.63          |
|        | 2712.00 | 62.30    | 180.60   | -289.64  | 10.98   | 2597.98 | 289.64  | 305.00     | 32.00      | 10.37         | 10.31           | 1.25           |
|        | 2744.00 | 65.70    | 181.20   | -318.40  | 10.52   | 2612.00 | 318.39  | 333.76     | 32.00      | 10.76         | 10.63           | 1.88           |
|        | 2776.00 | 69.30    | 181.40   | -347.95  | 9.85    | 2624.25 | 347.94  | 363.32     | 32.00      | 11.26         | 11.25           | 0.63           |
|        | 2807.00 | 72.40    | 181.50   | -377.22  | 9.11    | 2634.42 | 377.22  | 392.60     | 31.00      | 10.00         | 10.00           | 0.32           |
|        | 2839.00 | 75.90    | 181.10   | -407.99  | 8.41    | 2643.15 | 407.99  | 423.38     | 32.00      | 11.00         | 10.94           | -1.25          |
|        | 2871.00 | 79.10    | 181.00   | -439.22  | 7.84    | 2650.08 | 439.22  | 454.61     | 32.00      | 10.00         | 10.00           | -0.31          |
|        | 2903.00 | 82.10    | 181.90   | -470.78  | 7.04    | 2655.31 | 470.78  | 486.18     | 32.00      | 9.78          | 9.38            | 2.81           |
|        | 2935.00 | 84.50    | 182.00   | -502.54  | 5.96    | 2659.04 | 502.54  | 517.96     | 32.00      | 7.51          | 7.50            | 0.31           |
|        | 2966.00 | 87.80    | 181.70   | -533.45  | 4.96    | 2661.12 | 533.45  | 548.89     | 31.00      | 10.69         | 10.65           | -0.97          |
|        | 2998.00 | 89.30    | 181.90   | -565.42  | 3.96    | 2661.93 | 565.42  | 580.87     | 32.00      | 4.73          | 4.69            | 0.63           |
|        | 3030.00 | 90.40    | 182.60   | -597.40  | 2.70    | 2662.01 | 597.40  | 612.87     | 32.00      | 4.07          | 3.44            | 2.19           |
|        | 3062.00 | 91.20    | 182.40   | -629.36  | 1.31    | 2661.57 | 629.36  | 644.87     | 32.00      | 2.58          | 2.50            | -0.64          |
|        | 3094.00 | 90.70    | 182.40   | -661.33  | -0.03   | 2661.04 | 661.33  | 676.87     | 32.00      | 1.56          | -1.56           | 0.01           |
|        | 3125.00 | 89.70    | 182.80   | -692.30  | 1.44    | 2660.93 | 692.30  | 707.86     | 31.00      | 3.47          | -3.23           | 1.29           |
|        | 3157.00 | 89.20    | 182.70   | -724.26  | -2.97   | 2661.23 | 724.26  | 739.86     | 32.00      | 1.59          | -1.56           | -0.31          |
|        | 3188.00 | 89.30    | 182.80   | -755.22  | -4.46   | 2661.64 | 755.22  | 770.86     | 31.00      | 0.46          | 0.32            | 0.32           |
|        | 3219.00 | 89.80    | 182.80   | -786.18  | -5.98   | 2661.88 | 786.19  | 801.86     | 31.00      | 1.61          | 1.61            | 0.00           |
|        | 3251.00 | 89.30    | 182.60   | -818.15  | -7.48   | 2662.14 | 818.15  | 833.86     | 32.00      | 1.68          | -1.56           | -0.63          |
|        | 3282.00 | 89.30    | 182.40   | -849.11  | -8.84   | 2662.51 | 849.12  | 864.86     | 31.00      | 0.65          | 0.00            | -0.65          |
|        | 3314.00 | 89.40    | 182.00   | -881.09  | -10.06  | 2662.88 | 881.09  | 896.85     | 32.00      | 1.29          | 0.31            | -1.25          |
|        | 3346.00 | 89.70    | 181.90   | -913.07  | -11.15  | 2663.13 | 913.07  | 928.85     | 32.00      | 0.99          | 0.94            | -0.31          |
|        | 3378.00 | 89.30    | 181.50   | -945.05  | -12.10  | 2663.41 | 945.06  | 960.85     | 32.00      | 1.77          | -1.25           | -1.25          |
|        | 3410.00 | 89.40    | 181.30   | -977.04  | -12.88  | 2663.77 | 977.05  | 992.85     | 32.00      | 0.70          | 0.31            | -0.63          |
|        | 3441.00 | 89.10    | 180.40   | -1008.04 | -13.34  | 2664.18 | 1008.04 | 1023.85    | 31.00      | 3.06          | -0.97           | -2.90          |
|        | 3473.00 | 89.60    | 180.40   | -1040.03 | -13.57  | 2664.54 | 1040.04 | 1055.84    | 32.00      | 1.56          | 1.56            | 0.00           |
|        | 3505.00 | 88.70    | 180.40   | -1072.03 | -15.79  | 2665.01 | 1072.04 | 1087.84    | 32.00      | 2.81          | -2.81           | 0.00           |
|        | 3537.00 | 88.90    | 180.30   | -1104.02 | -13.99  | 2665.69 | 1104.03 | 1119.83    | 32.00      | 0.70          | 0.63            | -0.31          |

# ADVANTAGE Final Survey Listing



INTEQ

**Operator** Mewbourne Oil Company **Fields** (Lakewood) Sec 34, T19S, R25E **API No** 30-015-37710 **Location** S34 T19S R25E  
**Well** Lakewood 34 IP Fed No. 1H **Wellbore** Original Path Hole **Rig** Patterson UTI 63 **Job** 3169447

| Tie In | MD<br>ft | Incl<br>deg | Azlm<br>deg | North<br>ft | East<br>ft | TVD<br>ft | VS<br>ft | Incr VS<br>ft | CRS LEN<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft |
|--------|----------|-------------|-------------|-------------|------------|-----------|----------|---------------|---------------|------------------|--------------------|-------------------|
|        | 3568.00  | 89.60       | 181.10      | -1135.02    | -14.36     | 2666.09   | 1135.02  | 1150.83       | 31.00         | 3.43             | 2.26               | 2.58              |
|        | 3599.00  | 90.20       | 180.30      | -1166.01    | -14.74     | 2666.14   | 1166.02  | 1181.83       | 31.00         | 3.23             | 1.94               | -2.58             |
|        | 3631.00  | 89.80       | 180.40      | -1198.01    | -14.94     | 2666.14   | 1198.02  | 1213.83       | 32.00         | 1.29             | -1.25              | 0.31              |
|        | 3663.00  | 90.30       | 180.50      | -1230.01    | -15.19     | 2666.12   | 1230.02  | 1245.83       | 32.00         | 1.59             | 1.56               | 0.31              |
|        | 3695.00  | 89.20       | 181.00      | -1262.01    | -15.61     | 2666.26   | 1262.02  | 1277.83       | 32.00         | 3.79             | -3.45              | 1.56              |
|        | 3727.00  | 89.20       | 180.40      | -1294.00    | -16.00     | 2666.71   | 1294.01  | 1309.83       | 32.00         | 1.87             | 0.01               | -1.88             |
|        | 3759.00  | 88.10       | 180.70      | -1325.99    | -16.31     | 2667.46   | 1326.00  | 1341.82       | 32.00         | 3.56             | -3.44              | 0.94              |
|        | 3790.00  | 88.40       | 181.80      | -1356.97    | -16.98     | 2668.41   | 1356.98  | 1372.80       | 31.00         | 3.68             | 0.97               | 3.55              |
|        | 3822.00  | 88.90       | 180.00      | -1388.95    | -17.49     | 2669.16   | 1388.96  | 1404.79       | 32.00         | 5.82             | 1.56               | -5.61             |
|        | 3854.00  | 89.40       | 180.20      | -1420.95    | -17.54     | 2669.63   | 1420.96  | 1436.79       | 32.00         | 1.68             | 1.56               | 0.61              |
|        | 3886.00  | 89.20       | 180.20      | -1452.95    | -17.66     | 2670.03   | 1452.96  | 1468.78       | 32.00         | 0.63             | -0.63              | 0.00              |
|        | 3918.00  | 88.20       | 179.50      | -1484.94    | -17.57     | 2670.75   | 1484.95  | 1500.78       | 32.00         | 3.81             | -3.13              | -2.19             |
|        | 3950.00  | 87.90       | 179.20      | -1516.92    | -17.21     | 2671.84   | 1516.93  | 1532.76       | 32.00         | 1.33             | -0.94              | -0.94             |
|        | 3982.00  | 88.20       | 178.60      | -1548.89    | -16.59     | 2672.93   | 1548.90  | 1564.74       | 32.00         | 2.10             | 0.94               | -1.88             |
|        | 4014.00  | 88.90       | 178.40      | -1580.87    | -15.76     | 2673.74   | 1580.88  | 1596.73       | 32.00         | 2.27             | 2.19               | -0.63             |
|        | 4046.00  | 89.20       | 179.00      | -1612.86    | -15.03     | 2674.27   | 1612.87  | 1628.72       | 32.00         | 2.10             | 0.94               | 1.88              |
|        | 4077.00  | 88.00       | 178.30      | -1643.84    | -14.30     | 2675.03   | 1643.85  | 1659.71       | 31.00         | 4.48             | 3.87               | -2.26             |
|        | 4109.00  | 88.10       | 178.40      | -1675.81    | -13.38     | 2676.12   | 1675.82  | 1691.70       | 32.00         | 0.44             | 0.31               | 0.31              |
|        | 4141.00  | 88.60       | 178.30      | -1707.78    | -12.46     | 2677.04   | 1707.79  | 1723.68       | 32.00         | 1.59             | 1.56               | -0.31             |
|        | 4173.00  | 89.00       | 178.30      | -1739.76    | -11.51     | 2677.71   | 1739.77  | 1755.67       | 32.00         | 1.25             | 1.25               | 0.00              |
|        | 4205.00  | 89.40       | 177.80      | -1771.74    | -10.42     | 2678.15   | 1771.74  | 1787.67       | 32.00         | 2.00             | 1.25               | -1.56             |
|        | 4236.00  | 89.70       | 177.70      | -1802.71    | -9.20      | 2678.40   | 1802.72  | 1818.67       | 31.00         | 1.02             | 0.97               | -0.32             |
|        | 4268.00  | 90.00       | 177.80      | -1834.69    | -7.95      | 2678.48   | 1834.69  | 1850.67       | 32.00         | 0.99             | 0.94               | 0.31              |
|        | 4300.00  | 89.40       | 178.10      | -1866.67    | -6.80      | 2678.65   | 1866.67  | 1882.67       | 32.00         | 2.10             | -1.88              | 0.94              |
|        | 4332.00  | 89.40       | 177.90      | -1898.65    | -5.69      | 2678.98   | 1898.65  | 1914.67       | 32.00         | 0.62             | 0.00               | -0.63             |
|        | 4364.00  | 89.80       | 177.50      | -1930.62    | -4.40      | 2679.21   | 1930.62  | 1946.67       | 32.00         | 1.77             | 1.25               | -1.25             |
|        | 4395.00  | 90.20       | 177.60      | -1961.59    | -3.08      | 2679.21   | 1961.59  | 1977.67       | 31.00         | 1.33             | 1.29               | -0.32             |
|        | 4427.00  | 89.60       | 177.80      | -1993.57    | -1.79      | 2679.26   | 1993.57  | 2009.67       | 32.00         | 1.98             | -1.88              | 0.63              |
|        | 4459.00  | 89.90       | 177.80      | -2025.54    | -0.56      | 2679.40   | 2025.54  | 2041.67       | 32.00         | 0.94             | 0.94               | 0.00              |
|        | 4491.00  | 90.10       | 178.10      | -2057.52    | 0.58       | 2679.40   | 2057.52  | 2073.67       | 32.00         | 1.13             | 0.63               | 0.94              |
|        | 4523.00  | 88.90       | 178.70      | -2089.51    | 1.47       | 2679.68   | 2089.51  | 2105.66       | 32.00         | 4.19             | -3.75              | -1.88             |
|        | 4554.00  | 89.00       | 178.60      | -2120.49    | 2.20       | 2680.25   | 2120.49  | 2136.66       | 31.00         | 0.46             | 0.32               | -0.32             |
|        | 4586.00  | 89.30       | 178.90      | -2152.48    | 2.90       | 2680.73   | 2152.48  | 2168.66       | 32.00         | 1.33             | 0.94               | 0.94              |
|        | 4618.00  | 89.60       | 178.30      | -2184.47    | 3.68       | 2681.03   | 2184.47  | 2200.65       | 32.00         | 2.10             | 0.94               | -1.88             |
|        | 4650.00  | 90.00       | 178.80      | -2216.46    | 4.49       | 2681.14   | 2216.46  | 2232.65       | 32.00         | 2.00             | 1.25               | 1.56              |
|        | 4682.00  | 88.60       | 179.40      | -2248.45    | 5.00       | 2681.54   | 2248.45  | 2264.65       | 32.00         | 4.76             | -4.38              | 1.88              |
|        | 4714.00  | 88.60       | 179.30      | -2280.44    | 5.36       | 2682.32   | 2280.44  | 2296.64       | 32.00         | 0.31             | 0.00               | -0.31             |
|        | 4746.00  | 88.80       | 179.20      | -2312.43    | 5.78       | 2683.04   | 2312.43  | 2328.63       | 32.00         | 0.69             | 0.62               | -0.31             |
|        | 4778.00  | 89.00       | 179.50      | -2344.42    | 6.14       | 2683.66   | 2344.42  | 2360.63       | 32.00         | 1.12             | 0.63               | 0.93              |
|        | 4809.00  | 89.40       | 179.30      | -2375.42    | 6.47       | 2684.09   | 2375.41  | 2391.62       | 31.00         | 1.44             | 1.29               | -0.64             |
|        | 4841.00  | 89.70       | 179.70      | -2407.42    | 6.75       | 2684.34   | 2407.41  | 2423.62       | 32.00         | 1.56             | 0.94               | 1.25              |
|        | 4873.00  | 88.80       | 180.40      | -2439.41    | 6.72       | 2684.76   | 2439.41  | 2455.62       | 32.00         | 3.56             | -2.81              | 2.19              |
|        | 4904.00  | 88.80       | 180.40      | -2470.40    | 6.50       | 2685.41   | 2470.40  | 2486.63       | 31.00         | 0.00             | 0.00               | 0.00              |
|        | 4936.00  | 89.10       | 180.20      | -2502.40    | 6.33       | 2686.00   | 2502.39  | 2518.61       | 32.00         | 1.13             | 0.94               | -0.63             |

Projection to TD

|         |       |        |          |      |         |         |         |       |      |      |      |
|---------|-------|--------|----------|------|---------|---------|---------|-------|------|------|------|
| 4976.00 | 89.10 | 180.20 | -2542.39 | 6.19 | 2686.63 | 2542.39 | 2558.60 | 40.00 | 0.00 | 0.00 | 0.00 |
|---------|-------|--------|----------|------|---------|---------|---------|-------|------|------|------|

Tie Column Legend: I - interpolated tie-point, S - survey station, U - user-defined, T - Surface