

# **ConocoPhillips MCBU - Permian-Panhandle Gold Data**

**Permian-BUCKEYE-NM East State Plane Zone**

**Vacuum - Field**

**VACUUM GLORIETA EAST UNIT 224H**

**3002542691**

**Original Hole**

**Design: Original Hole**

## **Survey Report - Geographic**

**04 May, 2016**

# ConocoPhillips

## Survey Report - Geographic

|                  |                                                   |                                     |                                     |
|------------------|---------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>Company:</b>  | ConocoPhillips MCBU - Permian-Panhandle Gold Data | <b>Local Co-ordinate Reference:</b> | Well VACUUM GLORIETA EAST UNIT 224H |
| <b>Project:</b>  | Permian-BUCKEYE-NM East State Plane Zone          | <b>TVD Reference:</b>               | RKB @ 3880.0usft (194)              |
| <b>Site:</b>     | Vacuum - Field                                    | <b>MD Reference:</b>                | RKB @ 3880.0usft (194)              |
| <b>Well:</b>     | VACUUM GLORIETA EAST UNIT 224H                    | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | Original Hole                                     | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | Original Hole                                     | <b>Database:</b>                    | EDM Central Planning                |

|                    |                                                                                                       |                      |                             |
|--------------------|-------------------------------------------------------------------------------------------------------|----------------------|-----------------------------|
| <b>Project</b>     | Permian-BUCKEYE-NM East State Plane Zone, Permian Basin; State of New Mexico, Actual Survey Gold Data |                      |                             |
| <b>Map System:</b> | US State Plane 1927 (Exact solution)                                                                  | <b>System Datum:</b> | Mean Sea Level              |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)                                                                               |                      |                             |
| <b>Map Zone:</b>   | New Mexico East 3001                                                                                  |                      | Using geodetic scale factor |

|                              |                |                          |                   |
|------------------------------|----------------|--------------------------|-------------------|
| <b>Site</b>                  | Vacuum - Field |                          |                   |
| <b>Site Position:</b>        |                | <b>Northing:</b>         | 0.00 usft         |
| <b>From:</b>                 | Map            | <b>Easting:</b>          | 0.00 usft         |
| <b>Position Uncertainty:</b> | 0.0 usft       | <b>Slot Radius:</b>      | 13-3/16 "         |
|                              |                | <b>Latitude:</b>         | 30° 59' 24.512 N  |
|                              |                | <b>Longitude:</b>        | 105° 55' 44.137 W |
|                              |                | <b>Grid Convergence:</b> | -0.82 °           |

|                             |                                                          |                            |                                  |
|-----------------------------|----------------------------------------------------------|----------------------------|----------------------------------|
| <b>Well</b>                 | VACUUM GLORIETA EAST UNIT 224H, Development - Horizontal |                            |                                  |
| <b>Well Position</b>        | <b>+N/-S</b>                                             | 0.0 usft                   | <b>Northing:</b> 655,716.37 usft |
|                             | <b>+E/-W</b>                                             | 0.0 usft                   | <b>Easting:</b> 771,437.74 usft  |
| <b>Position Uncertainty</b> | 0.0 usft                                                 | <b>Wellhead Elevation:</b> | 0.0 usft                         |
|                             |                                                          | <b>Latitude:</b>           | 32° 47' 58.336 N                 |
|                             |                                                          | <b>Longitude:</b>          | 103° 26' 59.914 W                |
|                             |                                                          | <b>Ground Level:</b>       | 3,865.5 usft                     |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Original Hole     |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | BGGM2015          | 10/29/2015         | 7.15                   | 60.70                | 48,535                     |

|                          |                                |                     |                     |                          |
|--------------------------|--------------------------------|---------------------|---------------------|--------------------------|
| <b>Design</b>            | Original Hole                  |                     |                     |                          |
| <b>Audit Notes:</b>      |                                |                     |                     |                          |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>       | ACTUAL              | <b>Tie On Depth:</b> 0.0 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Direction (°)</b>     |
|                          | 0.0                            | 0.0                 | 0.0                 | 240.34                   |

|                       |                  |                                      |                  |                     |
|-----------------------|------------------|--------------------------------------|------------------|---------------------|
| <b>Survey Program</b> | <b>Date</b>      | 3/17/2016                            |                  |                     |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b>             | <b>Tool Name</b> | <b>Description</b>  |
| 157.0                 | 1,585.0          | Surface MWD Survey 1 (Original Hole) | GOOD GYRO        | GOOD GYRO           |
| 1,730.0               | 6,595.0          | Final MWD Survey 2 (Original Hole)   | MWD - OWSG R1    | MWD - Standard OWSG |
| 6,699.0               | 9,114.0          | Final MWD Survey 3 (Original Hole)   | MWD - OWSG R1    | MWD - Standard OWSG |

|                              |                        |                    |                              |                     |                     |                            |                           |                  |                   |  |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|----------------------------|---------------------------|------------------|-------------------|--|
| <b>Survey</b>                |                        |                    |                              |                     |                     |                            |                           |                  |                   |  |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Map Northing (usft)</b> | <b>Map Easting (usft)</b> | <b>Latitude</b>  | <b>Longitude</b>  |  |
| 0.0                          | 0.00                   | 0.00               | 0.0                          | 0.0                 | 0.0                 | 655,716.37                 | 771,437.74                | 32° 47' 58.336 N | 103° 26' 59.914 W |  |
| 157.0                        | 0.63                   | 254.42             | 157.0                        | -0.2                | -0.8                | 655,716.14                 | 771,436.91                | 32° 47' 58.334 N | 103° 26' 59.924 W |  |
| 217.0                        | 0.45                   | 251.18             | 217.0                        | -0.4                | -1.4                | 655,715.98                 | 771,436.37                | 32° 47' 58.332 N | 103° 26' 59.930 W |  |
| 364.0                        | 0.44                   | 233.14             | 364.0                        | -0.9                | -2.4                | 655,715.45                 | 771,435.37                | 32° 47' 58.327 N | 103° 26' 59.942 W |  |
| 549.0                        | 0.41                   | 220.47             | 549.0                        | -1.9                | -3.4                | 655,714.52                 | 771,434.37                | 32° 47' 58.318 N | 103° 26' 59.954 W |  |
| 654.0                        | 0.46                   | 216.89             | 654.0                        | -2.5                | -3.9                | 655,713.90                 | 771,433.87                | 32° 47' 58.312 N | 103° 26' 59.960 W |  |
| 757.0                        | 0.40                   | 204.46             | 757.0                        | -3.1                | -4.3                | 655,713.24                 | 771,433.48                | 32° 47' 58.305 N | 103° 26' 59.965 W |  |
| 877.0                        | 0.40                   | 173.61             | 877.0                        | -3.9                | -4.4                | 655,712.45                 | 771,433.35                | 32° 47' 58.297 N | 103° 26' 59.966 W |  |
| 965.0                        | 0.35                   | 160.73             | 965.0                        | -4.5                | -4.3                | 655,711.89                 | 771,433.47                | 32° 47' 58.292 N | 103° 26' 59.965 W |  |

# ConocoPhillips

## Survey Report - Geographic

|                  |                                                   |                                     |                                     |
|------------------|---------------------------------------------------|-------------------------------------|-------------------------------------|
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| <b>Project:</b>  | Permian-BUCKEYE-NM East State Plane Zone          | <b>TVD Reference:</b>               | RKB @ 3880.0usft (194)              |
| <b>Site:</b>     | Vacuum - Field                                    | <b>MD Reference:</b>                | RKB @ 3880.0usft (194)              |
| <b>Well:</b>     | VACUUM GLORIETA EAST UNIT 224H                    | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | Original Hole                                     | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | Original Hole                                     | <b>Database:</b>                    | EDM Central Planning                |

| Survey                |                 |             |                       |              |              |                     |                    |                  |                   |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|-------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude         | Longitude         |
| 1,157.0               | 0.37            | 159.50      | 1,157.0               | -5.6         | -3.9         | 655,710.75          | 771,433.88         | 32° 47' 58.280 N | 103° 26' 59.960 W |
| 1,357.0               | 0.25            | 118.44      | 1,357.0               | -6.4         | -3.2         | 655,709.94          | 771,434.49         | 32° 47' 58.272 N | 103° 26' 59.953 W |
| 1,462.0               | 0.31            | 158.54      | 1,462.0               | -6.8         | -2.9         | 655,709.57          | 771,434.80         | 32° 47' 58.269 N | 103° 26' 59.949 W |
| 1,585.0               | 0.55            | 248.71      | 1,585.0               | -7.3         | -3.4         | 655,709.04          | 771,434.37         | 32° 47' 58.264 N | 103° 26' 59.954 W |
| 1,730.0               | 0.20            | 94.10       | 1,730.0               | -7.6         | -3.8         | 655,708.77          | 771,433.97         | 32° 47' 58.261 N | 103° 26' 59.959 W |
| 1,864.0               | 0.40            | 50.20       | 1,864.0               | -7.3         | -3.2         | 655,709.05          | 771,434.57         | 32° 47' 58.264 N | 103° 26' 59.952 W |
| 2,043.0               | 0.40            | 49.70       | 2,043.0               | -6.5         | -2.2         | 655,709.86          | 771,435.52         | 32° 47' 58.272 N | 103° 26' 59.941 W |
| 2,222.0               | 0.60            | 15.50       | 2,221.9               | -5.2         | -1.5         | 655,711.17          | 771,436.25         | 32° 47' 58.284 N | 103° 26' 59.932 W |
| 2,401.0               | 0.90            | 24.20       | 2,400.9               | -3.0         | -0.7         | 655,713.35          | 771,437.08         | 32° 47' 58.306 N | 103° 26' 59.922 W |
| 2,580.0               | 0.80            | 28.90       | 2,579.9               | -0.6         | 0.5          | 655,715.73          | 771,438.26         | 32° 47' 58.329 N | 103° 26' 59.908 W |
| 2,759.0               | 1.30            | 45.80       | 2,758.9               | 1.9          | 2.6          | 655,718.24          | 771,440.32         | 32° 47' 58.354 N | 103° 26' 59.884 W |
| 2,939.0               | 0.90            | 283.40      | 2,938.9               | 3.6          | 2.7          | 655,719.99          | 771,440.40         | 32° 47' 58.371 N | 103° 26' 59.883 W |
| 3,118.0               | 0.60            | 167.80      | 3,117.9               | 3.0          | 1.5          | 655,719.40          | 771,439.23         | 32° 47' 58.366 N | 103° 26' 59.896 W |
| 3,297.0               | 0.50            | 192.70      | 3,296.9               | 1.3          | 1.5          | 655,717.72          | 771,439.26         | 32° 47' 58.349 N | 103° 26' 59.896 W |
| 3,476.0               | 0.20            | 175.10      | 3,475.8               | 0.3          | 1.4          | 655,716.65          | 771,439.12         | 32° 47' 58.338 N | 103° 26' 59.898 W |
| 3,655.0               | 0.30            | 179.60      | 3,654.8               | -0.5         | 1.4          | 655,715.87          | 771,439.15         | 32° 47' 58.331 N | 103° 26' 59.898 W |
| 3,835.0               | 0.20            | 157.30      | 3,834.8               | -1.3         | 1.5          | 655,715.11          | 771,439.27         | 32° 47' 58.323 N | 103° 26' 59.896 W |
| 4,014.0               | 0.20            | 131.80      | 4,013.8               | -1.8         | 1.9          | 655,714.61          | 771,439.62         | 32° 47' 58.318 N | 103° 26' 59.892 W |
| 4,193.0               | 0.30            | 141.50      | 4,192.8               | -2.3         | 2.4          | 655,714.03          | 771,440.15         | 32° 47' 58.312 N | 103° 26' 59.886 W |
| 4,373.0               | 0.10            | 103.30      | 4,372.8               | -2.7         | 2.9          | 655,713.63          | 771,440.59         | 32° 47' 58.308 N | 103° 26' 59.881 W |
| 4,552.0               | 0.30            | 68.70       | 4,551.8               | -2.6         | 3.4          | 655,713.76          | 771,441.18         | 32° 47' 58.310 N | 103° 26' 59.874 W |
| 4,732.0               | 0.40            | 78.90       | 4,731.8               | -2.3         | 4.5          | 655,714.06          | 771,442.24         | 32° 47' 58.312 N | 103° 26' 59.862 W |
| 4,866.0               | 0.50            | 95.50       | 4,865.8               | -2.3         | 5.5          | 655,714.09          | 771,443.28         | 32° 47' 58.313 N | 103° 26' 59.850 W |
| 4,938.0               | 0.70            | 92.20       | 4,937.8               | -2.3         | 6.3          | 655,714.04          | 771,444.03         | 32° 47' 58.312 N | 103° 26' 59.841 W |
| 5,073.0               | 4.00            | 239.10      | 5,072.7               | -4.8         | 3.1          | 655,711.59          | 771,440.81         | 32° 47' 58.288 N | 103° 26' 59.879 W |
| 5,118.0               | 6.80            | 246.10      | 5,117.5               | -6.7         | -0.7         | 655,709.71          | 771,437.03         | 32° 47' 58.270 N | 103° 26' 59.923 W |
| 5,162.0               | 9.90            | 253.20      | 5,161.1               | -8.8         | -6.7         | 655,707.56          | 771,431.03         | 32° 47' 58.249 N | 103° 26' 59.994 W |
| 5,207.0               | 12.50           | 250.00      | 5,205.2               | -11.6        | -15.0        | 655,704.77          | 771,422.75         | 32° 47' 58.222 N | 103° 27' 0.091 W  |
| 5,252.0               | 14.80           | 250.10      | 5,248.9               | -15.2        | -25.0        | 655,701.15          | 771,412.76         | 32° 47' 58.187 N | 103° 27' 0.208 W  |
| 5,296.0               | 17.40           | 247.80      | 5,291.2               | -19.6        | -36.4        | 655,696.75          | 771,401.39         | 32° 47' 58.145 N | 103° 27' 0.342 W  |
| 5,341.0               | 19.60           | 247.50      | 5,333.9               | -25.1        | -49.6        | 655,691.32          | 771,388.18         | 32° 47' 58.092 N | 103° 27' 0.497 W  |
| 5,386.0               | 21.60           | 246.40      | 5,376.0               | -31.3        | -64.1        | 655,685.11          | 771,373.62         | 32° 47' 58.032 N | 103° 27' 0.668 W  |
| 5,431.0               | 23.70           | 245.10      | 5,417.5               | -38.4        | -79.9        | 655,677.99          | 771,357.82         | 32° 47' 57.963 N | 103° 27' 0.854 W  |
| 5,476.0               | 26.60           | 244.50      | 5,458.2               | -46.5        | -97.2        | 655,669.84          | 771,340.52         | 32° 47' 57.883 N | 103° 27' 1.058 W  |
| 5,520.0               | 28.90           | 244.00      | 5,497.2               | -55.4        | -115.7       | 655,660.94          | 771,322.07         | 32° 47' 57.797 N | 103° 27' 1.275 W  |
| 5,565.0               | 30.90           | 243.60      | 5,536.2               | -65.3        | -135.8       | 655,651.03          | 771,301.95         | 32° 47' 57.701 N | 103° 27' 1.511 W  |
| 5,610.0               | 33.20           | 241.50      | 5,574.3               | -76.4        | -157.0       | 655,640.02          | 771,280.77         | 32° 47' 57.593 N | 103° 27' 1.761 W  |
| 5,654.0               | 36.10           | 239.80      | 5,610.5               | -88.6        | -178.8       | 655,627.75          | 771,258.97         | 32° 47' 57.474 N | 103° 27' 2.017 W  |
| 5,699.0               | 38.50           | 240.10      | 5,646.3               | -102.3       | -202.4       | 655,614.09          | 771,235.37         | 32° 47' 57.341 N | 103° 27' 2.295 W  |
| 5,744.0               | 39.90           | 242.20      | 5,681.2               | -116.0       | -227.3       | 655,600.38          | 771,210.46         | 32° 47' 57.207 N | 103° 27' 2.588 W  |
| 5,789.0               | 41.90           | 242.70      | 5,715.2               | -129.6       | -253.4       | 655,586.75          | 771,184.34         | 32° 47' 57.074 N | 103° 27' 2.895 W  |
| 5,834.0               | 45.00           | 244.20      | 5,747.9               | -143.4       | -281.1       | 655,572.93          | 771,156.65         | 32° 47' 56.940 N | 103° 27' 3.221 W  |
| 5,879.0               | 47.60           | 244.20      | 5,779.0               | -157.6       | -310.4       | 655,558.78          | 771,127.37         | 32° 47' 56.802 N | 103° 27' 3.566 W  |
| 5,923.0               | 49.70           | 242.80      | 5,808.0               | -172.3       | -339.9       | 655,544.03          | 771,097.81         | 32° 47' 56.659 N | 103° 27' 3.913 W  |
| 5,968.0               | 52.20           | 240.10      | 5,836.4               | -189.1       | -370.6       | 655,527.32          | 771,067.13         | 32° 47' 56.496 N | 103° 27' 4.274 W  |
| 6,013.0               | 54.70           | 240.10      | 5,863.2               | -207.1       | -401.9       | 655,509.30          | 771,035.79         | 32° 47' 56.320 N | 103° 27' 4.643 W  |
| 6,058.0               | 57.60           | 239.50      | 5,888.2               | -225.9       | -434.2       | 655,490.50          | 771,003.50         | 32° 47' 56.137 N | 103° 27' 5.023 W  |
| 6,103.0               | 60.40           | 239.10      | 5,911.4               | -245.6       | -467.4       | 655,470.81          | 770,970.34         | 32° 47' 55.945 N | 103° 27' 5.414 W  |
| 6,147.0               | 63.20           | 239.10      | 5,932.2               | -265.5       | -500.7       | 655,450.90          | 770,937.07         | 32° 47' 55.750 N | 103° 27' 5.805 W  |
| 6,192.0               | 66.00           | 240.00      | 5,951.5               | -286.1       | -535.7       | 655,430.31          | 770,902.03         | 32° 47' 55.550 N | 103° 27' 6.218 W  |
| 6,237.0               | 68.50           | 242.00      | 5,968.9               | -306.2       | -572.0       | 655,410.20          | 770,865.73         | 32° 47' 55.354 N | 103° 27' 6.645 W  |
| 6,282.0               | 68.90           | 242.00      | 5,985.2               | -325.9       | -609.0       | 655,390.51          | 770,828.71         | 32° 47' 55.162 N | 103° 27' 7.081 W  |
| 6,327.0               | 69.10           | 242.00      | 6,001.4               | -345.6       | -646.1       | 655,370.79          | 770,791.62         | 32° 47' 54.970 N | 103° 27' 7.517 W  |
| 6,371.0               | 69.40           | 241.60      | 6,017.0               | -365.0       | -682.4       | 655,351.35          | 770,755.36         | 32° 47' 54.780 N | 103° 27' 7.944 W  |

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## Survey Report - Geographic

|                  |                                                   |                                     |                                     |
|------------------|---------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>Company:</b>  | ConocoPhillips MCBU - Permian-Panhandle Gold Data | <b>Local Co-ordinate Reference:</b> | Well VACUUM GLORIETA EAST UNIT 224H |
| <b>Project:</b>  | Permian-BUCKEYE-NM East State Plane Zone          | <b>TVD Reference:</b>               | RKB @ 3880.0usft (194)              |
| <b>Site:</b>     | Vacuum - Field                                    | <b>MD Reference:</b>                | RKB @ 3880.0usft (194)              |
| <b>Well:</b>     | VACUUM GLORIETA EAST UNIT 224H                    | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | Original Hole                                     | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | Original Hole                                     | <b>Database:</b>                    | EDM Central Planning                |

| Survey                |                 |             |                       |              |              |                     |                    |                  |                   |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|-------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude         | Longitude         |
| 6,416.0               | 69.60           | 241.50      | 6,032.7               | -385.1       | -719.4       | 655,331.27          | 770,718.30         | 32° 47' 54.585 N | 103° 27' 8.380 W  |
| 6,461.0               | 70.90           | 241.30      | 6,047.9               | -405.4       | -756.6       | 655,310.99          | 770,681.12         | 32° 47' 54.387 N | 103° 27' 8.817 W  |
| 6,506.0               | 73.80           | 240.30      | 6,061.6               | -426.3       | -794.1       | 655,290.07          | 770,643.69         | 32° 47' 54.183 N | 103° 27' 9.258 W  |
| 6,550.0               | 75.80           | 239.10      | 6,073.1               | -447.7       | -830.7       | 655,268.65          | 770,607.03         | 32° 47' 53.974 N | 103° 27' 9.689 W  |
| 6,595.0               | 78.20           | 238.10      | 6,083.2               | -470.6       | -868.1       | 655,245.81          | 770,569.61         | 32° 47' 53.751 N | 103° 27' 10.130 W |
| 6,699.0               | 81.50           | 239.60      | 6,101.6               | -523.5       | -955.7       | 655,192.87          | 770,482.01         | 32° 47' 53.235 N | 103° 27' 11.161 W |
| 6,728.0               | 81.70           | 239.40      | 6,105.8               | -538.1       | -980.5       | 655,178.30          | 770,457.29         | 32° 47' 53.093 N | 103° 27' 11.452 W |
| 6,773.0               | 81.80           | 238.90      | 6,112.2               | -560.9       | -1,018.7     | 655,155.47          | 770,419.06         | 32° 47' 52.870 N | 103° 27' 11.902 W |
| 6,819.0               | 84.40           | 237.90      | 6,117.8               | -584.8       | -1,057.6     | 655,131.54          | 770,380.17         | 32° 47' 52.637 N | 103° 27' 12.360 W |
| 6,864.0               | 87.80           | 235.90      | 6,120.8               | -609.4       | -1,095.2     | 655,107.03          | 770,342.57         | 32° 47' 52.397 N | 103° 27' 12.803 W |
| 6,955.0               | 90.60           | 234.60      | 6,122.1               | -661.2       | -1,169.9     | 655,055.17          | 770,267.81         | 32° 47' 51.890 N | 103° 27' 13.684 W |
| 7,045.0               | 91.90           | 236.00      | 6,120.1               | -712.4       | -1,243.9     | 655,003.95          | 770,193.84         | 32° 47' 51.389 N | 103° 27' 14.555 W |
| 7,136.0               | 92.00           | 235.90      | 6,117.0               | -763.4       | -1,319.3     | 654,953.03          | 770,118.49         | 32° 47' 50.892 N | 103° 27' 15.443 W |
| 7,227.0               | 91.60           | 236.00      | 6,114.2               | -814.3       | -1,394.6     | 654,902.10          | 770,043.13         | 32° 47' 50.394 N | 103° 27' 16.331 W |
| 7,317.0               | 91.90           | 236.70      | 6,111.4               | -864.1       | -1,469.5     | 654,852.25          | 769,968.25         | 32° 47' 49.907 N | 103° 27' 17.213 W |
| 7,408.0               | 91.90           | 238.90      | 6,108.4               | -912.6       | -1,546.5     | 654,803.79          | 769,891.29         | 32° 47' 49.434 N | 103° 27' 18.119 W |
| 7,499.0               | 92.60           | 240.60      | 6,104.8               | -958.4       | -1,625.0     | 654,757.98          | 769,812.75         | 32° 47' 48.987 N | 103° 27' 19.043 W |
| 7,589.0               | 92.70           | 240.60      | 6,100.7               | -1,002.5     | -1,703.3     | 654,713.85          | 769,734.42         | 32° 47' 48.557 N | 103° 27' 19.965 W |
| 7,680.0               | 92.70           | 240.30      | 6,096.4               | -1,047.4     | -1,782.4     | 654,669.02          | 769,655.35         | 32° 47' 48.120 N | 103° 27' 20.896 W |
| 7,771.0               | 92.50           | 239.30      | 6,092.3               | -1,093.1     | -1,861.0     | 654,623.29          | 769,576.78         | 32° 47' 47.674 N | 103° 27' 21.821 W |
| 7,861.0               | 91.10           | 240.50      | 6,089.4               | -1,138.2     | -1,938.8     | 654,578.18          | 769,498.96         | 32° 47' 47.234 N | 103° 27' 22.737 W |
| 7,952.0               | 89.60           | 239.80      | 6,088.9               | -1,183.5     | -2,017.7     | 654,532.89          | 769,420.04         | 32° 47' 46.792 N | 103° 27' 23.666 W |
| 8,043.0               | 88.30           | 240.90      | 6,090.6               | -1,228.5     | -2,096.8     | 654,487.88          | 769,340.97         | 32° 47' 46.353 N | 103° 27' 24.596 W |
| 8,133.0               | 88.10           | 240.60      | 6,093.4               | -1,272.5     | -2,175.3     | 654,443.93          | 769,262.48         | 32° 47' 45.925 N | 103° 27' 25.520 W |
| 8,224.0               | 88.10           | 239.70      | 6,096.4               | -1,317.7     | -2,254.2     | 654,398.66          | 769,183.60         | 32° 47' 45.483 N | 103° 27' 26.448 W |
| 8,315.0               | 90.00           | 241.60      | 6,097.9               | -1,362.3     | -2,333.5     | 654,354.07          | 769,104.30         | 32° 47' 45.049 N | 103° 27' 27.382 W |
| 8,406.0               | 89.90           | 240.60      | 6,098.0               | -1,406.3     | -2,413.1     | 654,310.09          | 769,024.63         | 32° 47' 44.620 N | 103° 27' 28.319 W |
| 8,496.0               | 91.10           | 241.10      | 6,097.2               | -1,450.1     | -2,491.7     | 654,266.26          | 768,946.04         | 32° 47' 44.193 N | 103° 27' 29.244 W |
| 8,587.0               | 91.20           | 240.70      | 6,095.4               | -1,494.4     | -2,571.2     | 654,222.01          | 768,866.54         | 32° 47' 43.762 N | 103° 27' 30.179 W |
| 8,678.0               | 91.50           | 240.50      | 6,093.2               | -1,539.0     | -2,650.5     | 654,177.35          | 768,787.28         | 32° 47' 43.326 N | 103° 27' 31.112 W |
| 8,768.0               | 91.50           | 240.60      | 6,090.9               | -1,583.3     | -2,728.8     | 654,133.12          | 768,708.94         | 32° 47' 42.895 N | 103° 27' 32.034 W |
| 8,859.0               | 92.20           | 240.50      | 6,087.9               | -1,628.0     | -2,808.0     | 654,088.40          | 768,629.74         | 32° 47' 42.459 N | 103° 27' 32.966 W |
| 8,950.0               | 92.80           | 240.60      | 6,084.0               | -1,672.7     | -2,887.2     | 654,043.70          | 768,550.58         | 32° 47' 42.023 N | 103° 27' 33.898 W |
| 9,040.0               | 93.10           | 240.30      | 6,079.3               | -1,717.0     | -2,965.4     | 653,999.37          | 768,472.39         | 32° 47' 41.591 N | 103° 27' 34.818 W |
| 9,114.0               | 93.00           | 239.90      | 6,075.4               | -1,753.8     | -3,029.4     | 653,962.54          | 768,408.33         | 32° 47' 41.232 N | 103° 27' 35.572 W |
| 9,185.0               | 93.00           | 239.90      | 6,071.7               | -1,789.4     | -3,090.8     | 653,926.98          | 768,346.99         | 32° 47' 40.885 N | 103° 27' 36.294 W |

| Casing Points         |                       |        |                     |                   |  |
|-----------------------|-----------------------|--------|---------------------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name   | Casing Diameter (") | Hole Diameter (") |  |
| 1,613.5               | 1,613.5               | 9 5/8" | 9-5/8               | 12-1/4            |  |
| 6,665.8               | 6,096.3               | 7"     | 7                   | 8-3/4             |  |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|