

# PROJECT DETAILS: Weld County, CO NAD 83

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Colorado Northern Zone  
 System Datum: Mean Sea Level  
 Local North: True

Project: Weld County, CO NAD 83  
 Site: RSU Anschutz Fed 4-62-14\_13 CE15 Pad  
 Well: RSU Anschutz Fed 4-62-14-3225C  
 Wellbore: OH  
 Design: Plan 1



Azimuths to True North  
 Magnetic North: 8.22°



Magnetic Field  
 Strength: 52300.3nT  
 Dip Angle: 66.95°  
 Date: 1/4/2018  
 Model: HDGM

Plan: Plan 1 (RSU Anschutz Fed 4-62-14-3225C/OH)

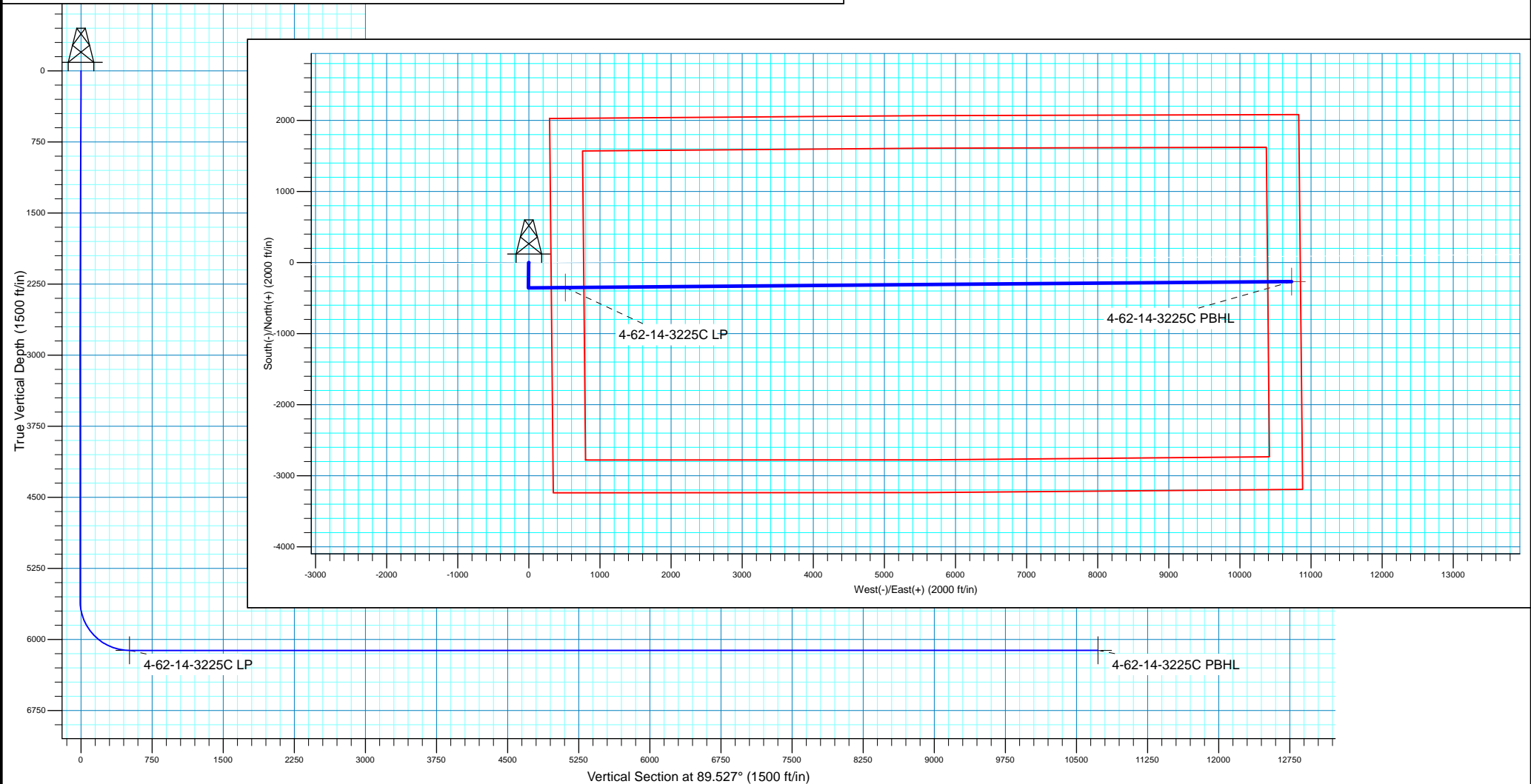
Created By: Seth Burstad

## SECTION DETAILS

| MD       | Inc   | Azi     | TVD     | +N/-S   | +E/-W    | Dleg  | TFace  | VSect    |
|----------|-------|---------|---------|---------|----------|-------|--------|----------|
| 0.00     | 0.00  | 0.000   | 0.00    | 0.00    | 0.00     | 0.00  | 0.00   | 0.00     |
| 200.00   | 0.00  | 0.000   | 200.00  | 0.00    | 0.00     | 0.00  | 0.00   | 0.00     |
| 1018.44  | 16.37 | 180.886 | 1007.36 | -116.10 | -1.80    | 2.00  | 180.89 | -2.75    |
| 1318.50  | 16.37 | 180.886 | 1295.25 | -200.65 | -3.10    | 0.00  | 0.00   | -4.76    |
| 2409.75  | 0.00  | 0.000   | 2371.72 | -355.46 | -5.50    | 1.50  | 180.00 | -8.43    |
| 5631.16  | 0.00  | 0.000   | 5593.13 | -355.46 | -5.50    | 0.00  | 0.00   | -8.43    |
| 6449.35  | 90.00 | 89.527  | 6114.00 | -351.16 | 515.35   | 11.00 | 89.53  | 512.44   |
| 16663.16 | 90.00 | 89.527  | 6114.00 | -266.87 | 10728.82 | 0.00  | 0.00   | 10726.25 |

## WELL DETAILS: RSU Anschutz Fed 4-62-14-3225C

| GL 4512' & KB 20' @ 4532.00ft |       |            |            | 4512.00          |                   |  |
|-------------------------------|-------|------------|------------|------------------|-------------------|--|
| +N/-S                         | +E/-W | Northing   | Easting    | Latitude         | Longitude         |  |
| 0.00                          | 0.00  | 1359568.95 | 3333791.31 | 40° 18' 51.239 N | 104° 18' 10.764 W |  |





**Bill Barrett Corporation**

## **Bill Barrett Corp.**

Weld County, CO NAD 83

RSU Anschutz Fed 4-62-14\_13 CE15 Pad

RSU Anschutz Fed 4-62-14-3225C

OH

Plan: Plan 1

## **Standard Planning Report**

05 January, 2018



**Scientific Drilling**

[www.scientificdrilling.com](http://www.scientificdrilling.com)



|                  |                                      |                                     |                                     |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------|
| <b>Database:</b> | Casper District                      | <b>Local Co-ordinate Reference:</b> | Well RSU Anschutz Fed 4-62-14-3225C |
| <b>Company:</b>  | Bill Barrett Corp.                   | <b>TVD Reference:</b>               | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Project:</b>  | Weld County, CO NAD 83               | <b>MD Reference:</b>                | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Site:</b>     | RSU Anschutz Fed 4-62-14_13 CE15 Pad | <b>North Reference:</b>             | True                                |
| <b>Well:</b>     | RSU Anschutz Fed 4-62-14-3225C       | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Wellbore:</b> | OH                                   |                                     |                                     |
| <b>Design:</b>   | Plan 1                               |                                     |                                     |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Weld County, CO NAD 83    |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | Colorado Northern Zone    |                      |                |

|                              |  |                     |                   |                                     |
|------------------------------|--|---------------------|-------------------|-------------------------------------|
| <b>Site</b>                  | RSU Anschutz Fed 4-62-14_13 CE15 Pad, Site Center : RSU Anschutz Fed 4-62-14-0108C |                     |                   |                                     |
| <b>Site Position:</b>        |  | <b>Northing:</b>    | 1,359,626.66 usft | <b>Latitude:</b> 40° 18' 51.811 N   |
| <b>From:</b>                 | Lat/Long   | <b>Easting:</b>     | 3,333,774.64 usft | <b>Longitude:</b> 104° 18' 10.969 W |
| <b>Position Uncertainty:</b> | 0.00 ft  | <b>Slot Radius:</b> | 13.200 in         | <b>Grid Convergence:</b> 0.77 °     |

|                             |  |           |                            |                   |
|-----------------------------|--|-----------|----------------------------|-------------------|
| <b>Well</b>                 | RSU Anschutz Fed 4-62-14-3225C, 2023' FNL 200' FEL Sec 15 T4N R62W |           |                            |                   |
| <b>Well Position</b>        | <b>+N/-S</b>   | -57.93 ft | <b>Northing:</b>           | 1,359,568.95 usft |
|                             | <b>+E/-W</b>   | 15.90 ft  | <b>Easting:</b>            | 3,333,791.31 usft |
| <b>Position Uncertainty</b> |  | 0.00 ft   | <b>Wellhead Elevation:</b> | 0.00 ft           |
|                             |  |           | <b>Ground Level:</b>       | 4,512.00 ft       |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | OH                |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | HDGM              | 1/4/2018           | 8.22                   | 66.95                | 52,300                     |

|                          |                              |                   |                      |                      |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| <b>Design</b>            | Plan 1                       |                   |                      |                      |
| <b>Audit Notes:</b>      |                              |                   |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                | PLAN              | <b>Tie On Depth:</b> | 0.00                 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b>    | <b>Direction (°)</b> |
|                          | 0.00                         | 0.00              | 0.00                 | 89.527               |

| <b>Plan Sections</b> |                 |             |                     |            |            |                       |                      |                     |         |                    |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|--------------------|
| Measured Depth (ft)  | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target             |
| 0.00                 | 0.00            | 0.000       | 0.00                | 0.00       | 0.00       | 0.00                  | 0.00                 | 0.00                | 0.00    |                    |
| 200.00               | 0.00            | 0.000       | 200.00              | 0.00       | 0.00       | 0.00                  | 0.00                 | 0.00                | 0.00    |                    |
| 1,018.44             | 16.37           | 180.886     | 1,007.36            | -116.10    | -1.80      | 2.00                  | 2.00                 | 0.00                | 180.89  |                    |
| 1,318.50             | 16.37           | 180.886     | 1,295.25            | -200.65    | -3.10      | 0.00                  | 0.00                 | 0.00                | 0.00    |                    |
| 2,409.75             | 0.00            | 0.000       | 2,371.72            | -355.46    | -5.50      | 1.50                  | -1.50                | 0.00                | 180.00  |                    |
| 5,631.16             | 0.00            | 0.000       | 5,593.13            | -355.46    | -5.50      | 0.00                  | 0.00                 | 0.00                | 0.00    |                    |
| 6,449.35             | 90.00           | 89.527      | 6,114.00            | -351.16    | 515.35     | 11.00                 | 11.00                | 10.94               | 89.53   |                    |
| 16,663.16            | 90.00           | 89.527      | 6,114.00            | -266.87    | 10,728.82  | 0.00                  | 0.00                 | 0.00                | 0.00    | 4-62-14-3225C PBHL |

|                  |                                      |                                     |                                     |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------|
| <b>Database:</b> | Casper District                      | <b>Local Co-ordinate Reference:</b> | Well RSU Anschutz Fed 4-62-14-3225C |
| <b>Company:</b>  | Bill Barrett Corp.                   | <b>TVD Reference:</b>               | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Project:</b>  | Weld County, CO NAD 83               | <b>MD Reference:</b>                | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Site:</b>     | RSU Anschutz Fed 4-62-14_13 CE15 Pad | <b>North Reference:</b>             | True                                |
| <b>Well:</b>     | RSU Anschutz Fed 4-62-14-3225C       | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Wellbore:</b> | OH                                   |                                     |                                     |
| <b>Design:</b>   | Plan 1                               |                                     |                                     |

| Planned Survey                          |                 |             |                     |            |            |                       |                       |                      |                     |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft)                     | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 0.00                                    | 0.00            | 0.000       | 0.00                | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 100.00                                  | 0.00            | 0.000       | 100.00              | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 200.00                                  | 0.00            | 0.000       | 200.00              | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| <b>Start Build 2.00</b>                 |                 |             |                     |            |            |                       |                       |                      |                     |
| 300.00                                  | 2.00            | 180.886     | 299.98              | -1.74      | -0.03      | -0.04                 | 2.00                  | 2.00                 | 0.00                |
| 400.00                                  | 4.00            | 180.886     | 399.84              | -6.98      | -0.11      | -0.17                 | 2.00                  | 2.00                 | 0.00                |
| 500.00                                  | 6.00            | 180.886     | 499.45              | -15.69     | -0.24      | -0.37                 | 2.00                  | 2.00                 | 0.00                |
| 600.00                                  | 8.00            | 180.886     | 598.70              | -27.88     | -0.43      | -0.66                 | 2.00                  | 2.00                 | 0.00                |
| 700.00                                  | 10.00           | 180.886     | 697.47              | -43.52     | -0.67      | -1.03                 | 2.00                  | 2.00                 | 0.00                |
| 800.00                                  | 12.00           | 180.886     | 795.62              | -62.60     | -0.97      | -1.49                 | 2.00                  | 2.00                 | 0.00                |
| 900.00                                  | 14.00           | 180.886     | 893.06              | -85.09     | -1.32      | -2.02                 | 2.00                  | 2.00                 | 0.00                |
| 1,000.00                                | 16.00           | 180.886     | 989.64              | -110.96    | -1.72      | -2.63                 | 2.00                  | 2.00                 | 0.00                |
| 1,018.44                                | 16.37           | 180.886     | 1,007.36            | -116.10    | -1.80      | -2.75                 | 2.00                  | 2.00                 | 0.00                |
| <b>Start 300.05 hold at 1018.44 MD</b>  |                 |             |                     |            |            |                       |                       |                      |                     |
| 1,100.00                                | 16.37           | 180.886     | 1,085.61            | -139.09    | -2.15      | -3.30                 | 0.00                  | 0.00                 | 0.00                |
| 1,200.00                                | 16.37           | 180.886     | 1,181.55            | -167.26    | -2.59      | -3.97                 | 0.00                  | 0.00                 | 0.00                |
| 1,300.00                                | 16.37           | 180.886     | 1,277.50            | -195.44    | -3.02      | -4.64                 | 0.00                  | 0.00                 | 0.00                |
| 1,318.50                                | 16.37           | 180.886     | 1,295.25            | -200.65    | -3.10      | -4.76                 | 0.00                  | 0.00                 | 0.00                |
| <b>Start Drop -1.50</b>                 |                 |             |                     |            |            |                       |                       |                      |                     |
| 1,400.00                                | 15.15           | 180.886     | 1,373.69            | -222.79    | -3.45      | -5.29                 | 1.50                  | -1.50                | 0.00                |
| 1,500.00                                | 13.65           | 180.886     | 1,470.54            | -247.64    | -3.83      | -5.88                 | 1.50                  | -1.50                | 0.00                |
| 1,600.00                                | 12.15           | 180.886     | 1,568.02            | -269.96    | -4.18      | -6.41                 | 1.50                  | -1.50                | 0.00                |
| 1,700.00                                | 10.65           | 180.886     | 1,666.04            | -289.72    | -4.48      | -6.87                 | 1.50                  | -1.50                | 0.00                |
| 1,800.00                                | 9.15            | 180.886     | 1,764.55            | -306.90    | -4.75      | -7.28                 | 1.50                  | -1.50                | 0.00                |
| 1,900.00                                | 7.65            | 180.886     | 1,863.48            | -321.50    | -4.97      | -7.63                 | 1.50                  | -1.50                | 0.00                |
| 2,000.00                                | 6.15            | 180.886     | 1,962.75            | -333.51    | -5.16      | -7.91                 | 1.50                  | -1.50                | 0.00                |
| 2,100.00                                | 4.65            | 180.886     | 2,062.31            | -342.91    | -5.31      | -8.14                 | 1.50                  | -1.50                | 0.00                |
| 2,200.00                                | 3.15            | 180.886     | 2,162.07            | -349.70    | -5.41      | -8.30                 | 1.50                  | -1.50                | 0.00                |
| 2,300.00                                | 1.65            | 180.886     | 2,261.98            | -353.88    | -5.48      | -8.40                 | 1.50                  | -1.50                | 0.00                |
| 2,400.00                                | 0.15            | 180.886     | 2,361.97            | -355.45    | -5.50      | -8.43                 | 1.50                  | -1.50                | 0.00                |
| 2,409.75                                | 0.00            | 0.000       | 2,371.72            | -355.46    | -5.50      | -8.43                 | 1.50                  | -1.50                | 0.00                |
| <b>Start 3221.41 hold at 2409.75 MD</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 2,500.00                                | 0.00            | 0.000       | 2,461.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 2,600.00                                | 0.00            | 0.000       | 2,561.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 2,700.00                                | 0.00            | 0.000       | 2,661.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 2,800.00                                | 0.00            | 0.000       | 2,761.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 2,900.00                                | 0.00            | 0.000       | 2,861.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,000.00                                | 0.00            | 0.000       | 2,961.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,100.00                                | 0.00            | 0.000       | 3,061.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,200.00                                | 0.00            | 0.000       | 3,161.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,300.00                                | 0.00            | 0.000       | 3,261.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,400.00                                | 0.00            | 0.000       | 3,361.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,500.00                                | 0.00            | 0.000       | 3,461.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,600.00                                | 0.00            | 0.000       | 3,561.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,700.00                                | 0.00            | 0.000       | 3,661.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,800.00                                | 0.00            | 0.000       | 3,761.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 3,900.00                                | 0.00            | 0.000       | 3,861.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 4,000.00                                | 0.00            | 0.000       | 3,961.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 4,100.00                                | 0.00            | 0.000       | 4,061.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 4,200.00                                | 0.00            | 0.000       | 4,161.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 4,300.00                                | 0.00            | 0.000       | 4,261.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 4,400.00                                | 0.00            | 0.000       | 4,361.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 4,500.00                                | 0.00            | 0.000       | 4,461.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 4,600.00                                | 0.00            | 0.000       | 4,561.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |

|                  |                                      |                                     |                                     |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------|
| <b>Database:</b> | Casper District                      | <b>Local Co-ordinate Reference:</b> | Well RSU Anschutz Fed 4-62-14-3225C |
| <b>Company:</b>  | Bill Barrett Corp.                   | <b>TVD Reference:</b>               | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Project:</b>  | Weld County, CO NAD 83               | <b>MD Reference:</b>                | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Site:</b>     | RSU Anschutz Fed 4-62-14_13 CE15 Pad | <b>North Reference:</b>             | True                                |
| <b>Well:</b>     | RSU Anschutz Fed 4-62-14-3225C       | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Wellbore:</b> | OH                                   |                                     |                                     |
| <b>Design:</b>   | Plan 1                               |                                     |                                     |

| Planned Survey                           |                 |             |                     |            |            |                       |                       |                      |                     |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft)                      | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 4,700.00                                 | 0.00            | 0.000       | 4,661.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 4,800.00                                 | 0.00            | 0.000       | 4,761.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 4,900.00                                 | 0.00            | 0.000       | 4,861.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 5,000.00                                 | 0.00            | 0.000       | 4,961.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 5,100.00                                 | 0.00            | 0.000       | 5,061.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 5,200.00                                 | 0.00            | 0.000       | 5,161.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 5,300.00                                 | 0.00            | 0.000       | 5,261.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 5,400.00                                 | 0.00            | 0.000       | 5,361.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 5,500.00                                 | 0.00            | 0.000       | 5,461.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 5,600.00                                 | 0.00            | 0.000       | 5,561.97            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| 5,631.16                                 | 0.00            | 0.000       | 5,593.13            | -355.46    | -5.50      | -8.43                 | 0.00                  | 0.00                 | 0.00                |
| <b>Start DLS 11.00 TFO 89.53</b>         |                 |             |                     |            |            |                       |                       |                      |                     |
| 5,700.00                                 | 7.57            | 89.527      | 5,661.77            | -355.42    | -0.96      | -3.89                 | 11.00                 | 11.00                | 0.00                |
| 5,800.00                                 | 18.57           | 89.527      | 5,759.02            | -355.24    | 21.62      | 18.69                 | 11.00                 | 11.00                | 0.00                |
| 5,900.00                                 | 29.57           | 89.527      | 5,850.19            | -354.90    | 62.35      | 59.42                 | 11.00                 | 11.00                | 0.00                |
| 6,000.00                                 | 40.57           | 89.527      | 5,931.91            | -354.43    | 119.72     | 116.79                | 11.00                 | 11.00                | 0.00                |
| 6,100.00                                 | 51.57           | 89.527      | 6,001.17            | -353.83    | 191.63     | 188.70                | 11.00                 | 11.00                | 0.00                |
| 6,200.00                                 | 62.57           | 89.527      | 6,055.45            | -353.14    | 275.43     | 272.51                | 11.00                 | 11.00                | 0.00                |
| 6,300.00                                 | 73.57           | 89.527      | 6,092.74            | -352.38    | 368.05     | 365.13                | 11.00                 | 11.00                | 0.00                |
| 6,400.00                                 | 84.57           | 89.527      | 6,111.67            | -351.57    | 466.08     | 463.16                | 11.00                 | 11.00                | 0.00                |
| 6,449.35                                 | 90.00           | 89.527      | 6,114.00            | -351.16    | 515.35     | 512.44                | 11.00                 | 11.00                | 0.00                |
| <b>Start 10213.82 hold at 6449.35 MD</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 6,500.00                                 | 90.00           | 89.527      | 6,114.00            | -350.74    | 566.01     | 563.09                | 0.00                  | 0.00                 | 0.00                |
| 6,600.00                                 | 90.00           | 89.527      | 6,114.00            | -349.92    | 666.00     | 663.09                | 0.00                  | 0.00                 | 0.00                |
| 6,700.00                                 | 90.00           | 89.527      | 6,114.00            | -349.09    | 766.00     | 763.09                | 0.00                  | 0.00                 | 0.00                |
| 6,800.00                                 | 90.00           | 89.527      | 6,114.00            | -348.27    | 865.99     | 863.09                | 0.00                  | 0.00                 | 0.00                |
| 6,900.00                                 | 90.00           | 89.527      | 6,114.00            | -347.44    | 965.99     | 963.09                | 0.00                  | 0.00                 | 0.00                |
| 7,000.00                                 | 90.00           | 89.527      | 6,114.00            | -346.62    | 1,065.99   | 1,063.09              | 0.00                  | 0.00                 | 0.00                |
| 7,100.00                                 | 90.00           | 89.527      | 6,114.00            | -345.79    | 1,165.98   | 1,163.09              | 0.00                  | 0.00                 | 0.00                |
| 7,200.00                                 | 90.00           | 89.527      | 6,114.00            | -344.97    | 1,265.98   | 1,263.09              | 0.00                  | 0.00                 | 0.00                |
| 7,300.00                                 | 90.00           | 89.527      | 6,114.00            | -344.14    | 1,365.98   | 1,363.09              | 0.00                  | 0.00                 | 0.00                |
| 7,400.00                                 | 90.00           | 89.527      | 6,114.00            | -343.32    | 1,465.97   | 1,463.09              | 0.00                  | 0.00                 | 0.00                |
| 7,500.00                                 | 90.00           | 89.527      | 6,114.00            | -342.49    | 1,565.97   | 1,563.09              | 0.00                  | 0.00                 | 0.00                |
| 7,600.00                                 | 90.00           | 89.527      | 6,114.00            | -341.67    | 1,665.97   | 1,663.09              | 0.00                  | 0.00                 | 0.00                |
| 7,700.00                                 | 90.00           | 89.527      | 6,114.00            | -340.84    | 1,765.96   | 1,763.09              | 0.00                  | 0.00                 | 0.00                |
| 7,800.00                                 | 90.00           | 89.527      | 6,114.00            | -340.02    | 1,865.96   | 1,863.09              | 0.00                  | 0.00                 | 0.00                |
| 7,900.00                                 | 90.00           | 89.527      | 6,114.00            | -339.19    | 1,965.96   | 1,963.09              | 0.00                  | 0.00                 | 0.00                |
| 8,000.00                                 | 90.00           | 89.527      | 6,114.00            | -338.36    | 2,065.95   | 2,063.09              | 0.00                  | 0.00                 | 0.00                |
| 8,100.00                                 | 90.00           | 89.527      | 6,114.00            | -337.54    | 2,165.95   | 2,163.09              | 0.00                  | 0.00                 | 0.00                |
| 8,200.00                                 | 90.00           | 89.527      | 6,114.00            | -336.71    | 2,265.95   | 2,263.09              | 0.00                  | 0.00                 | 0.00                |
| 8,300.00                                 | 90.00           | 89.527      | 6,114.00            | -335.89    | 2,365.94   | 2,363.09              | 0.00                  | 0.00                 | 0.00                |
| 8,400.00                                 | 90.00           | 89.527      | 6,114.00            | -335.06    | 2,465.94   | 2,463.09              | 0.00                  | 0.00                 | 0.00                |
| 8,500.00                                 | 90.00           | 89.527      | 6,114.00            | -334.24    | 2,565.94   | 2,563.09              | 0.00                  | 0.00                 | 0.00                |
| 8,600.00                                 | 90.00           | 89.527      | 6,114.00            | -333.41    | 2,665.93   | 2,663.09              | 0.00                  | 0.00                 | 0.00                |
| 8,700.00                                 | 90.00           | 89.527      | 6,114.00            | -332.59    | 2,765.93   | 2,763.09              | 0.00                  | 0.00                 | 0.00                |
| 8,800.00                                 | 90.00           | 89.527      | 6,114.00            | -331.76    | 2,865.93   | 2,863.09              | 0.00                  | 0.00                 | 0.00                |
| 8,900.00                                 | 90.00           | 89.527      | 6,114.00            | -330.94    | 2,965.92   | 2,963.09              | 0.00                  | 0.00                 | 0.00                |
| 9,000.00                                 | 90.00           | 89.527      | 6,114.00            | -330.11    | 3,065.92   | 3,063.09              | 0.00                  | 0.00                 | 0.00                |
| 9,100.00                                 | 90.00           | 89.527      | 6,114.00            | -329.29    | 3,165.92   | 3,163.09              | 0.00                  | 0.00                 | 0.00                |
| 9,200.00                                 | 90.00           | 89.527      | 6,114.00            | -328.46    | 3,265.91   | 3,263.09              | 0.00                  | 0.00                 | 0.00                |
| 9,300.00                                 | 90.00           | 89.527      | 6,114.00            | -327.64    | 3,365.91   | 3,363.09              | 0.00                  | 0.00                 | 0.00                |
| 9,400.00                                 | 90.00           | 89.527      | 6,114.00            | -326.81    | 3,465.91   | 3,463.09              | 0.00                  | 0.00                 | 0.00                |
| 9,500.00                                 | 90.00           | 89.527      | 6,114.00            | -325.99    | 3,565.90   | 3,563.09              | 0.00                  | 0.00                 | 0.00                |

|                  |                                      |                                     |                                     |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------|
| <b>Database:</b> | Casper District                      | <b>Local Co-ordinate Reference:</b> | Well RSU Anschutz Fed 4-62-14-3225C |
| <b>Company:</b>  | Bill Barrett Corp.                   | <b>TVD Reference:</b>               | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Project:</b>  | Weld County, CO NAD 83               | <b>MD Reference:</b>                | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Site:</b>     | RSU Anschutz Fed 4-62-14_13 CE15 Pad | <b>North Reference:</b>             | True                                |
| <b>Well:</b>     | RSU Anschutz Fed 4-62-14-3225C       | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Wellbore:</b> | OH                                   |                                     |                                     |
| <b>Design:</b>   | Plan 1                               |                                     |                                     |

| Planned Survey      |                 |             |                     |            |            |                       |                       |                      |                     |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 9,600.00            | 90.00           | 89.527      | 6,114.00            | -325.16    | 3,665.90   | 3,663.09              | 0.00                  | 0.00                 | 0.00                |
| 9,700.00            | 90.00           | 89.527      | 6,114.00            | -324.34    | 3,765.90   | 3,763.09              | 0.00                  | 0.00                 | 0.00                |
| 9,800.00            | 90.00           | 89.527      | 6,114.00            | -323.51    | 3,865.89   | 3,863.09              | 0.00                  | 0.00                 | 0.00                |
| 9,900.00            | 90.00           | 89.527      | 6,114.00            | -322.68    | 3,965.89   | 3,963.09              | 0.00                  | 0.00                 | 0.00                |
| 10,000.00           | 90.00           | 89.527      | 6,114.00            | -321.86    | 4,065.89   | 4,063.09              | 0.00                  | 0.00                 | 0.00                |
| 10,100.00           | 90.00           | 89.527      | 6,114.00            | -321.03    | 4,165.88   | 4,163.09              | 0.00                  | 0.00                 | 0.00                |
| 10,200.00           | 90.00           | 89.527      | 6,114.00            | -320.21    | 4,265.88   | 4,263.09              | 0.00                  | 0.00                 | 0.00                |
| 10,300.00           | 90.00           | 89.527      | 6,114.00            | -319.38    | 4,365.88   | 4,363.09              | 0.00                  | 0.00                 | 0.00                |
| 10,400.00           | 90.00           | 89.527      | 6,114.00            | -318.56    | 4,465.87   | 4,463.09              | 0.00                  | 0.00                 | 0.00                |
| 10,500.00           | 90.00           | 89.527      | 6,114.00            | -317.73    | 4,565.87   | 4,563.09              | 0.00                  | 0.00                 | 0.00                |
| 10,600.00           | 90.00           | 89.527      | 6,114.00            | -316.91    | 4,665.87   | 4,663.09              | 0.00                  | 0.00                 | 0.00                |
| 10,700.00           | 90.00           | 89.527      | 6,114.00            | -316.08    | 4,765.86   | 4,763.09              | 0.00                  | 0.00                 | 0.00                |
| 10,800.00           | 90.00           | 89.527      | 6,114.00            | -315.26    | 4,865.86   | 4,863.09              | 0.00                  | 0.00                 | 0.00                |
| 10,900.00           | 90.00           | 89.527      | 6,114.00            | -314.43    | 4,965.86   | 4,963.09              | 0.00                  | 0.00                 | 0.00                |
| 11,000.00           | 90.00           | 89.527      | 6,114.00            | -313.61    | 5,065.85   | 5,063.09              | 0.00                  | 0.00                 | 0.00                |
| 11,100.00           | 90.00           | 89.527      | 6,114.00            | -312.78    | 5,165.85   | 5,163.09              | 0.00                  | 0.00                 | 0.00                |
| 11,200.00           | 90.00           | 89.527      | 6,114.00            | -311.96    | 5,265.85   | 5,263.09              | 0.00                  | 0.00                 | 0.00                |
| 11,300.00           | 90.00           | 89.527      | 6,114.00            | -311.13    | 5,365.84   | 5,363.09              | 0.00                  | 0.00                 | 0.00                |
| 11,400.00           | 90.00           | 89.527      | 6,114.00            | -310.31    | 5,465.84   | 5,463.09              | 0.00                  | 0.00                 | 0.00                |
| 11,500.00           | 90.00           | 89.527      | 6,114.00            | -309.48    | 5,565.84   | 5,563.09              | 0.00                  | 0.00                 | 0.00                |
| 11,600.00           | 90.00           | 89.527      | 6,114.00            | -308.66    | 5,665.83   | 5,663.09              | 0.00                  | 0.00                 | 0.00                |
| 11,700.00           | 90.00           | 89.527      | 6,114.00            | -307.83    | 5,765.83   | 5,763.09              | 0.00                  | 0.00                 | 0.00                |
| 11,800.00           | 90.00           | 89.527      | 6,114.00            | -307.00    | 5,865.82   | 5,863.09              | 0.00                  | 0.00                 | 0.00                |
| 11,900.00           | 90.00           | 89.527      | 6,114.00            | -306.18    | 5,965.82   | 5,963.09              | 0.00                  | 0.00                 | 0.00                |
| 12,000.00           | 90.00           | 89.527      | 6,114.00            | -305.35    | 6,065.82   | 6,063.09              | 0.00                  | 0.00                 | 0.00                |
| 12,100.00           | 90.00           | 89.527      | 6,114.00            | -304.53    | 6,165.81   | 6,163.09              | 0.00                  | 0.00                 | 0.00                |
| 12,200.00           | 90.00           | 89.527      | 6,114.00            | -303.70    | 6,265.81   | 6,263.09              | 0.00                  | 0.00                 | 0.00                |
| 12,300.00           | 90.00           | 89.527      | 6,114.00            | -302.88    | 6,365.81   | 6,363.09              | 0.00                  | 0.00                 | 0.00                |
| 12,400.00           | 90.00           | 89.527      | 6,114.00            | -302.05    | 6,465.80   | 6,463.09              | 0.00                  | 0.00                 | 0.00                |
| 12,500.00           | 90.00           | 89.527      | 6,114.00            | -301.23    | 6,565.80   | 6,563.09              | 0.00                  | 0.00                 | 0.00                |
| 12,600.00           | 90.00           | 89.527      | 6,114.00            | -300.40    | 6,665.80   | 6,663.09              | 0.00                  | 0.00                 | 0.00                |
| 12,700.00           | 90.00           | 89.527      | 6,114.00            | -299.58    | 6,765.79   | 6,763.09              | 0.00                  | 0.00                 | 0.00                |
| 12,800.00           | 90.00           | 89.527      | 6,114.00            | -298.75    | 6,865.79   | 6,863.09              | 0.00                  | 0.00                 | 0.00                |
| 12,900.00           | 90.00           | 89.527      | 6,114.00            | -297.93    | 6,965.79   | 6,963.09              | 0.00                  | 0.00                 | 0.00                |
| 13,000.00           | 90.00           | 89.527      | 6,114.00            | -297.10    | 7,065.78   | 7,063.09              | 0.00                  | 0.00                 | 0.00                |
| 13,100.00           | 90.00           | 89.527      | 6,114.00            | -296.28    | 7,165.78   | 7,163.09              | 0.00                  | 0.00                 | 0.00                |
| 13,200.00           | 90.00           | 89.527      | 6,114.00            | -295.45    | 7,265.78   | 7,263.09              | 0.00                  | 0.00                 | 0.00                |
| 13,300.00           | 90.00           | 89.527      | 6,114.00            | -294.63    | 7,365.77   | 7,363.09              | 0.00                  | 0.00                 | 0.00                |
| 13,400.00           | 90.00           | 89.527      | 6,114.00            | -293.80    | 7,465.77   | 7,463.09              | 0.00                  | 0.00                 | 0.00                |
| 13,500.00           | 90.00           | 89.527      | 6,114.00            | -292.98    | 7,565.77   | 7,563.09              | 0.00                  | 0.00                 | 0.00                |
| 13,600.00           | 90.00           | 89.527      | 6,114.00            | -292.15    | 7,665.76   | 7,663.09              | 0.00                  | 0.00                 | 0.00                |
| 13,700.00           | 90.00           | 89.527      | 6,114.00            | -291.33    | 7,765.76   | 7,763.09              | 0.00                  | 0.00                 | 0.00                |
| 13,800.00           | 90.00           | 89.527      | 6,114.00            | -290.50    | 7,865.76   | 7,863.09              | 0.00                  | 0.00                 | 0.00                |
| 13,900.00           | 90.00           | 89.527      | 6,114.00            | -289.67    | 7,965.75   | 7,963.09              | 0.00                  | 0.00                 | 0.00                |
| 14,000.00           | 90.00           | 89.527      | 6,114.00            | -288.85    | 8,065.75   | 8,063.09              | 0.00                  | 0.00                 | 0.00                |
| 14,100.00           | 90.00           | 89.527      | 6,114.00            | -288.02    | 8,165.75   | 8,163.09              | 0.00                  | 0.00                 | 0.00                |
| 14,200.00           | 90.00           | 89.527      | 6,114.00            | -287.20    | 8,265.74   | 8,263.09              | 0.00                  | 0.00                 | 0.00                |
| 14,300.00           | 90.00           | 89.527      | 6,114.00            | -286.37    | 8,365.74   | 8,363.09              | 0.00                  | 0.00                 | 0.00                |
| 14,400.00           | 90.00           | 89.527      | 6,114.00            | -285.55    | 8,465.74   | 8,463.09              | 0.00                  | 0.00                 | 0.00                |
| 14,500.00           | 90.00           | 89.527      | 6,114.00            | -284.72    | 8,565.73   | 8,563.09              | 0.00                  | 0.00                 | 0.00                |
| 14,600.00           | 90.00           | 89.527      | 6,114.00            | -283.90    | 8,665.73   | 8,663.09              | 0.00                  | 0.00                 | 0.00                |
| 14,700.00           | 90.00           | 89.527      | 6,114.00            | -283.07    | 8,765.73   | 8,763.09              | 0.00                  | 0.00                 | 0.00                |
| 14,800.00           | 90.00           | 89.527      | 6,114.00            | -282.25    | 8,865.72   | 8,863.09              | 0.00                  | 0.00                 | 0.00                |
| 14,900.00           | 90.00           | 89.527      | 6,114.00            | -281.42    | 8,965.72   | 8,963.09              | 0.00                  | 0.00                 | 0.00                |

|                  |                                      |                                     |                                     |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------|
| <b>Database:</b> | Casper District                      | <b>Local Co-ordinate Reference:</b> | Well RSU Anschutz Fed 4-62-14-3225C |
| <b>Company:</b>  | Bill Barrett Corp.                   | <b>TVD Reference:</b>               | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Project:</b>  | Weld County, CO NAD 83               | <b>MD Reference:</b>                | GL 4512' & KB 20' @ 4532.00ft       |
| <b>Site:</b>     | RSU Anschutz Fed 4-62-14_13 CE15 Pad | <b>North Reference:</b>             | True                                |
| <b>Well:</b>     | RSU Anschutz Fed 4-62-14-3225C       | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Wellbore:</b> | OH                                   |                                     |                                     |
| <b>Design:</b>   | Plan 1                               |                                     |                                     |

| Planned Survey      |                 |             |                     |            |            |                       |                       |                      |                     |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 15,000.00           | 90.00           | 89.527      | 6,114.00            | -280.60    | 9,065.72   | 9,063.09              | 0.00                  | 0.00                 | 0.00                |
| 15,100.00           | 90.00           | 89.527      | 6,114.00            | -279.77    | 9,165.71   | 9,163.09              | 0.00                  | 0.00                 | 0.00                |
| 15,200.00           | 90.00           | 89.527      | 6,114.00            | -278.95    | 9,265.71   | 9,263.09              | 0.00                  | 0.00                 | 0.00                |
| 15,300.00           | 90.00           | 89.527      | 6,114.00            | -278.12    | 9,365.71   | 9,363.09              | 0.00                  | 0.00                 | 0.00                |
| 15,400.00           | 90.00           | 89.527      | 6,114.00            | -277.30    | 9,465.70   | 9,463.09              | 0.00                  | 0.00                 | 0.00                |
| 15,500.00           | 90.00           | 89.527      | 6,114.00            | -276.47    | 9,565.70   | 9,563.09              | 0.00                  | 0.00                 | 0.00                |
| 15,600.00           | 90.00           | 89.527      | 6,114.00            | -275.65    | 9,665.70   | 9,663.09              | 0.00                  | 0.00                 | 0.00                |
| 15,700.00           | 90.00           | 89.527      | 6,114.00            | -274.82    | 9,765.69   | 9,763.09              | 0.00                  | 0.00                 | 0.00                |
| 15,800.00           | 90.00           | 89.527      | 6,114.00            | -273.99    | 9,865.69   | 9,863.09              | 0.00                  | 0.00                 | 0.00                |
| 15,900.00           | 90.00           | 89.527      | 6,114.00            | -273.17    | 9,965.69   | 9,963.09              | 0.00                  | 0.00                 | 0.00                |
| 16,000.00           | 90.00           | 89.527      | 6,114.00            | -272.34    | 10,065.68  | 10,063.09             | 0.00                  | 0.00                 | 0.00                |
| 16,100.00           | 90.00           | 89.527      | 6,114.00            | -271.52    | 10,165.68  | 10,163.09             | 0.00                  | 0.00                 | 0.00                |
| 16,200.00           | 90.00           | 89.527      | 6,114.00            | -270.69    | 10,265.68  | 10,263.09             | 0.00                  | 0.00                 | 0.00                |
| 16,300.00           | 90.00           | 89.527      | 6,114.00            | -269.87    | 10,365.67  | 10,363.09             | 0.00                  | 0.00                 | 0.00                |
| 16,400.00           | 90.00           | 89.527      | 6,114.00            | -269.04    | 10,465.67  | 10,463.09             | 0.00                  | 0.00                 | 0.00                |
| 16,500.00           | 90.00           | 89.527      | 6,114.00            | -268.22    | 10,565.66  | 10,563.09             | 0.00                  | 0.00                 | 0.00                |
| 16,600.00           | 90.00           | 89.527      | 6,114.00            | -267.39    | 10,665.66  | 10,663.09             | 0.00                  | 0.00                 | 0.00                |
| 16,663.16           | 90.00           | 89.527      | 6,114.00            | -266.87    | 10,728.82  | 10,726.25             | 0.00                  | 0.00                 | 0.00                |
| TD at 16663.16      |                 |             |                     |            |            |                       |                       |                      |                     |

| Design Targets  |               |              |          |            |            |                 |                |                  |                   |
|---|---------------|--------------|----------|------------|------------|-----------------|----------------|------------------|-------------------|
| Target Name   | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |
| 4-62-14-3225C LP<br>- hit/miss target<br>- Shape<br>- Point | 0.00          | 0.000        | 6,114.00 | -351.16    | 515.35     | 1,359,224.78    | 3,334,311.35   | 40° 18' 47.768 N | 104° 18' 4.111 W  |
| 4-62-14-3225C PBHL<br>- plan hits target center<br>- Point  | 0.00          | 0.000        | 6,114.00 | -266.87    | 10,728.82  | 1,359,446.92    | 3,344,522.74   | 40° 18' 48.578 N | 104° 15' 52.261 W |

| Plan Annotations    |                     |                   |            |                                   |
|---------------------|---------------------|-------------------|------------|-----------------------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates |            | Comment                           |
|                     |                     | +N/-S (ft)        | +E/-W (ft) |                                   |
| 200.00              | 200.00              | 0.00              | 0.00       | Start Build 2.00                  |
| 1,018.44            | 1,007.36            | -116.10           | -1.80      | Start 300.05 hold at 1018.44 MD   |
| 1,318.50            | 1,295.25            | -200.65           | -3.10      | Start Drop -1.50                  |
| 2,409.75            | 2,371.72            | -355.46           | -5.50      | Start 3221.41 hold at 2409.75 MD  |
| 5,631.16            | 5,593.13            | -355.46           | -5.50      | Start DLS 11.00 TFO 89.53         |
| 6,449.35            | 6,114.00            | -351.16           | 515.35     | Start 10213.82 hold at 6449.35 MD |
| 16,663.16           | 6,114.00            | -266.87           | 10,728.82  | TD at 16663.16                    |