



Bill Barrett Corp.  
Project: Weld Co., CO  
Site: Sec.1-T4N-R61W  
Well: East Platte #1-1H  
Wellbore: Wellbore #1  
Design: Design #3  
Lat: 40° 20' 57.573 N  
Long: 104° 10' 7.544 W  
Pad GL: 4459.00  
KB: WELL @ 4475.00usft

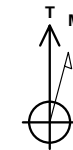
# Archer

## SECTION DETAILS

| MD       | Inc   | Azi   | TVD     | +N/-S   | +E/-W   | Dleg | TFace  | Vsect   | Annotation                          |
|----------|-------|-------|---------|---------|---------|------|--------|---------|-------------------------------------|
| 6287.00  | 92.61 | 95.07 | 5897.15 | -269.12 | 526.23  | 0.00 | 0.00   | 541.67  | Tie-In / Start DLS 5.00° TFO -29.72 |
| 6388.51  | 93.00 | 90.01 | 5892.19 | -273.62 | 627.49  | 5.00 | -85.43 | 643.01  |                                     |
| 6706.31  | 93.00 | 90.01 | 5875.55 | -273.66 | 944.85  | 0.00 | 0.00   | 959.79  |                                     |
| 6760.71  | 90.28 | 90.01 | 5874.00 | -273.67 | 999.23  | 5.00 | 180.00 | 1014.06 |                                     |
| 10247.70 | 90.28 | 90.01 | 5856.96 | -274.15 | 4486.17 | 0.00 | 0.00   | 4494.54 | TD at 10247.43                      |

## PROJECT DETAILS: Weld Co., CO

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



Azimuths to True North  
Magnetic North: 8.27°

Magnetic Field  
Strength: 52957.8snT  
Dip Angle: 67.04°  
Date: 06/19/2013  
Model: IGRF2010

## WELL DETAILS: East Platte #1-1H

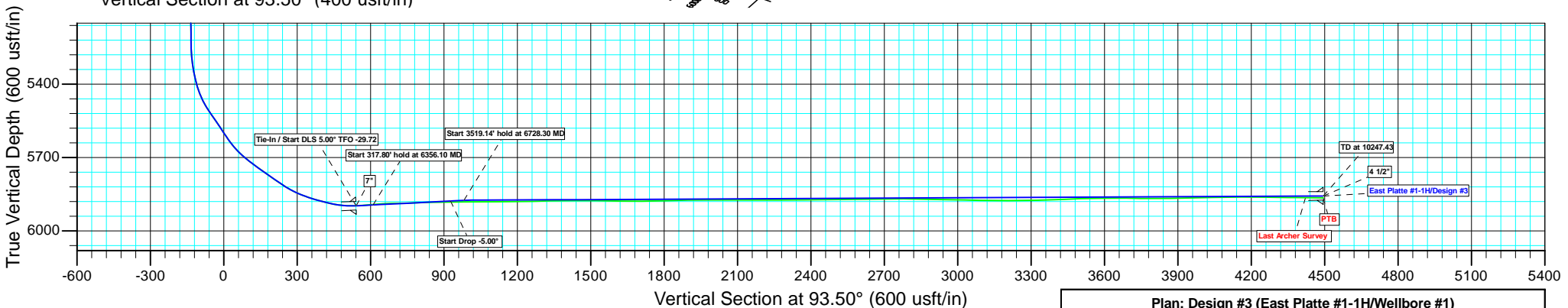
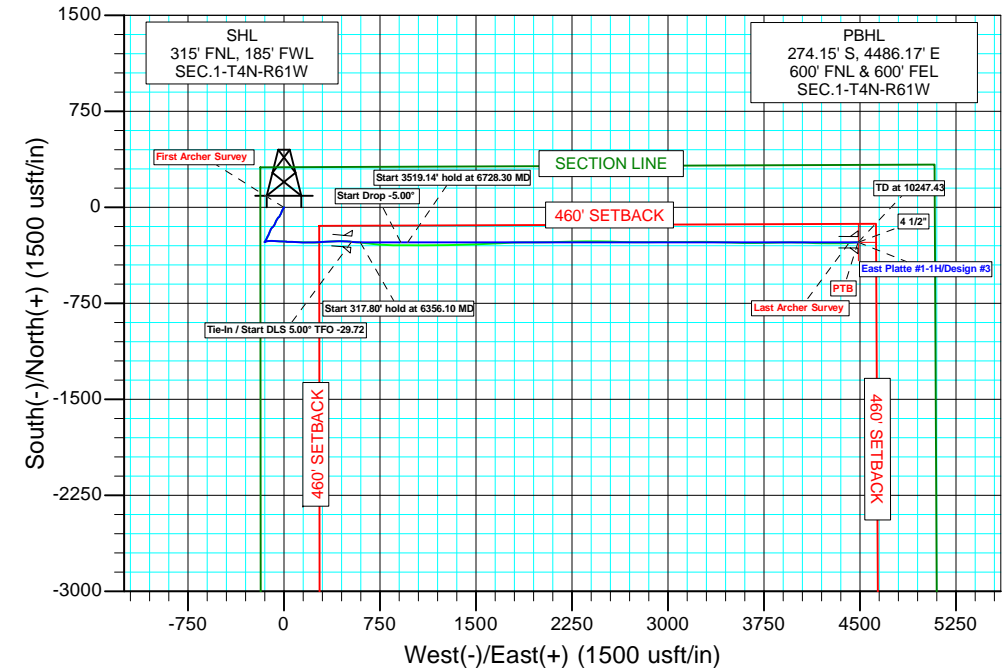
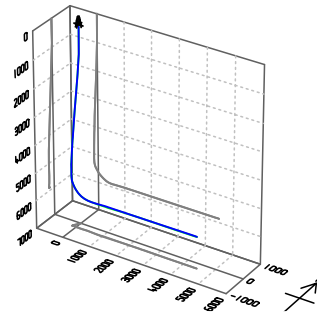
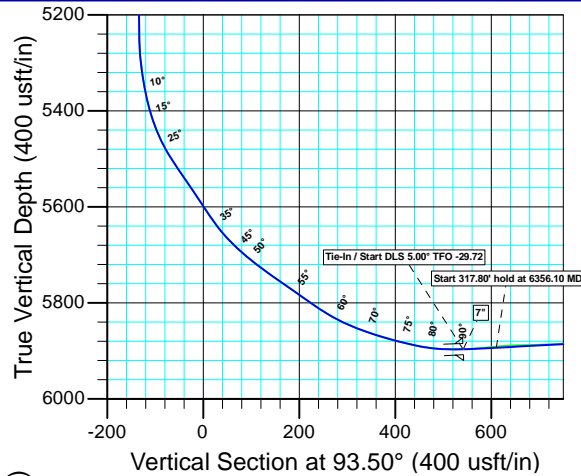
| +N/-S | +E/-W | Northing    | Ground Level:<br>Easting | 4459.00<br>Latitude | Longitude        | Slot |
|-------|-------|-------------|--------------------------|---------------------|------------------|------|
| 0.00  | 0.00  | 1372885.150 | 3371026.720              | 40° 20' 57.573 N    | 104° 10' 7.544 W |      |

## WELLBORE TARGET DETAILS (LAT/LONG)

| Name                  | TVD     | +N/-S   | +E/-W   | Latitude         | Longitude       | Shape Point |
|-----------------------|---------|---------|---------|------------------|-----------------|-------------|
| East Platte 1-1H PBHL | 5862.54 | -274.15 | 4486.17 | 40° 20' 54.860 N | 104° 9' 9.600 W |             |

## CASING DETAILS

| TVD     | MD       | Name   |
|---------|----------|--------|
| 5897.15 | 6287.00  | 7"     |
| 5856.96 | 10247.43 | 4 1/2" |



Plan: Design #3 (East Platte #1-1H/Wellbore #1)

Created By: Bret Wolford

Date: 9:13, July 18 2013



**Bill Barrett Corporation**

## **Bill Barrett Corp.**

**Weld Co., CO**

**Sec.1-T4N-R61W**

**East Platte #1-1H**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**18 July, 2013**

# **Archer**

|                  |                    |                                     |                           |
|------------------|--------------------|-------------------------------------|---------------------------|
| <b>Company:</b>  | Bill Barrett Corp. | <b>Local Co-ordinate Reference:</b> | Well East Platte #1-1H    |
| <b>Project:</b>  | Weld Co., CO       | <b>TVD Reference:</b>               | WELL @ 4475.00usft        |
| <b>Site:</b>     | Sec.1-T4N-R61W     | <b>MD Reference:</b>                | WELL @ 4475.00usft        |
| <b>Well:</b>     | East Platte #1-1H  | <b>North Reference:</b>             | True                      |
| <b>Wellbore:</b> | Wellbore #1        | <b>Survey Calculation Method:</b>   | Minimum Curvature         |
| <b>Design:</b>   | Wellbore #1        | <b>Database:</b>                    | EDM 5000.1 Single User Db |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Weld Co., CO              |                      |                |
| <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    |                      |                |

|                       |           |                |                    |                   |                  |
|-----------------------|-----------|----------------|--------------------|-------------------|------------------|
| Site                  |           | Sec.1-T4N-R61W |                    |                   |                  |
| Site Position:        |           | Northing:      | 1,372,885.150 usft | Latitude:         | 40° 20' 57.573 N |
| From:                 | Map       | Easting:       | 3,371,026.720 usft | Longitude:        | 104° 10' 7.544 W |
| Position Uncertainty: | 0.00 usft | Slot Radius:   | 13-3/16 "          | Grid Convergence: | 0.86 °           |

| Well                 | East Platte #1-1H |           |                     |                    |               |                  |
|----------------------|-------------------|-----------|---------------------|--------------------|---------------|------------------|
| Well Position        | +N/-S             | 0.00 usft | Northing:           | 1,372,885.150 usft | Latitude:     | 40° 20' 57.573 N |
|                      | +E/-W             | 0.00 usft | Easting:            | 3,371,026.720 usft | Longitude:    | 104° 10' 7.544 W |
| Position Uncertainty |                   | 0.00 usft | Wellhead Elevation: | usft               | Ground Level: | 4,459.00 usft    |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2010          | 2013/06/19         | 8.27                   | 67.04                | 52,958                     |

|                   |                            |                 |                 |                    |
|-------------------|----------------------------|-----------------|-----------------|--------------------|
| Design            | Wellbore #1                |                 |                 |                    |
| Audit Notes:      |                            |                 |                 |                    |
| Version:          | 1.0                        | Phase:          | ACTUAL          | Tie On Depth: 0.00 |
| Vertical Section: | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°)   |
|                   | 0.00                       | 0.00            | 0.00            | 93.50              |

|                       |                  |                          |                  |                    |  |
|-----------------------|------------------|--------------------------|------------------|--------------------|--|
| <b>Survey Program</b> | <b>Date</b>      | 2013/07/18               |                  |                    |  |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |  |
| 846.00                | 10,250.00        | Survey #1 (Wellbore #1)  | MWD              | MWD - Standard     |  |

|                                  |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
|----------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|--|
| <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>Vertical Section (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> |  |
| 0.00                             | 0.00                   | 0.00               | 0.00                         | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |  |
| <b>Tie-In / Assumed Vertical</b> |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
| 846.00                           | 0.00                   | 0.00               | 846.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |  |
| <b>First Archer Survey</b>       |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
| 860.00                           | 0.60                   | 253.00             | 860.00                       | -0.02               | -0.07               | -0.07                          | 4.29                           | 4.29                          | 0.00                         |  |
| 955.00                           | 3.30                   | 209.70             | 954.94                       | -2.54               | -1.90               | -1.74                          | 3.04                           | 2.84                          | -45.58                       |  |
| 1,049.00                         | 3.90                   | 206.80             | 1,048.75                     | -7.75               | -4.68               | -4.20                          | 0.67                           | 0.64                          | -3.09                        |  |
| 1,144.00                         | 3.30                   | 206.20             | 1,143.56                     | -13.08              | -7.35               | -6.53                          | 0.63                           | -0.63                         | -0.63                        |  |
| 1,211.00                         | 5.30                   | 205.10             | 1,210.37                     | -17.62              | -9.51               | -8.42                          | 2.99                           | 2.99                          | -1.64                        |  |
| 1,306.00                         | 5.50                   | 215.80             | 1,304.95                     | -25.28              | -14.04              | -12.47                         | 1.08                           | 0.21                          | 11.26                        |  |
| 1,401.00                         | 4.30                   | 205.20             | 1,399.61                     | -32.20              | -18.22              | -16.22                         | 1.58                           | -1.26                         | -11.16                       |  |
| 1,495.00                         | 4.60                   | 190.30             | 1,493.33                     | -39.09              | -20.39              | -17.97                         | 1.27                           | 0.32                          | -15.85                       |  |
| 1,586.00                         | 4.30                   | 201.40             | 1,584.05                     | -45.86              | -22.29              | -19.45                         | 1.00                           | -0.33                         | 12.20                        |  |

|                  |                    |                                     |                           |
|------------------|--------------------|-------------------------------------|---------------------------|
| <b>Company:</b>  | Bill Barrett Corp. | <b>Local Co-ordinate Reference:</b> | Well East Platte #1-1H    |
| <b>Project:</b>  | Weld Co., CO       | <b>TVD Reference:</b>               | WELL @ 4475.00usft        |
| <b>Site:</b>     | Sec. 1-T4N-R61W    | <b>MD Reference:</b>                | WELL @ 4475.00usft        |
| <b>Well:</b>     | East Platte #1-1H  | <b>North Reference:</b>             | True                      |
| <b>Wellbore:</b> | Wellbore #1        | <b>Survey Calculation Method:</b>   | Minimum Curvature         |
| <b>Design:</b>   | Wellbore #1        | <b>Database:</b>                    | EDM 5000.1 Single User Db |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 1,679.00              | 4.80            | 214.70      | 1,676.76              | -52.31       | -25.77       | -22.54                  | 1.25                    | 0.54                   | 14.30                 |
| 1,772.00              | 4.50            | 211.60      | 1,769.46              | -58.61       | -29.90       | -26.27                  | 0.42                    | -0.32                  | -3.33                 |
| 1,864.00              | 4.30            | 202.70      | 1,861.19              | -64.87       | -33.12       | -29.10                  | 0.77                    | -0.22                  | -9.67                 |
| 1,956.00              | 4.80            | 207.70      | 1,952.90              | -71.46       | -36.24       | -31.82                  | 0.69                    | 0.54                   | 5.43                  |
| 2,048.00              | 5.90            | 231.90      | 2,044.51              | -77.79       | -41.75       | -36.93                  | 2.70                    | 1.20                   | 26.30                 |
| 2,140.00              | 5.70            | 221.90      | 2,136.04              | -84.10       | -48.53       | -43.31                  | 1.12                    | -0.22                  | -10.87                |
| 2,232.00              | 6.00            | 211.40      | 2,227.56              | -91.61       | -54.08       | -48.39                  | 1.21                    | 0.33                   | -11.41                |
| 2,324.00              | 5.60            | 209.40      | 2,319.09              | -99.62       | -58.79       | -52.61                  | 0.49                    | -0.43                  | -2.17                 |
| 2,417.00              | 5.50            | 204.10      | 2,411.65              | -107.65      | -62.84       | -56.16                  | 0.56                    | -0.11                  | -5.70                 |
| 2,509.00              | 5.20            | 201.90      | 2,503.25              | -115.54      | -66.19       | -59.02                  | 0.39                    | -0.33                  | -2.39                 |
| 2,601.00              | 4.80            | 197.00      | 2,594.90              | -123.09      | -68.88       | -61.24                  | 0.64                    | -0.43                  | -5.33                 |
| 2,693.00              | 4.80            | 208.70      | 2,686.58              | -130.15      | -71.85       | -63.78                  | 1.06                    | 0.00                   | 12.72                 |
| 2,785.00              | 4.80            | 205.40      | 2,778.26              | -137.00      | -75.35       | -66.85                  | 0.30                    | 0.00                   | -3.59                 |
| 2,877.00              | 4.70            | 217.30      | 2,869.95              | -143.47      | -79.28       | -70.39                  | 1.07                    | -0.11                  | 12.93                 |
| 2,972.00              | 4.60            | 216.80      | 2,964.63              | -149.62      | -83.92       | -74.64                  | 0.11                    | -0.11                  | -0.53                 |
| 3,066.00              | 5.70            | 233.50      | 3,058.26              | -155.42      | -89.94       | -80.29                  | 1.97                    | 1.17                   | 17.77                 |
| 3,161.00              | 6.20            | 217.00      | 3,152.75              | -162.32      | -96.82       | -86.73                  | 1.87                    | 0.53                   | -17.37                |
| 3,256.00              | 5.40            | 211.90      | 3,247.27              | -170.21      | -102.27      | -91.69                  | 1.00                    | -0.84                  | -5.37                 |
| 3,350.00              | 4.70            | 207.30      | 3,340.90              | -177.39      | -106.37      | -95.35                  | 0.86                    | -0.74                  | -4.89                 |
| 3,445.00              | 5.00            | 195.60      | 3,435.56              | -184.84      | -109.27      | -97.79                  | 1.09                    | 0.32                   | -12.32                |
| 3,539.00              | 4.80            | 197.70      | 3,529.22              | -192.53      | -111.56      | -99.61                  | 0.29                    | -0.21                  | 2.23                  |
| 3,633.00              | 3.90            | 205.80      | 3,622.95              | -199.15      | -114.15      | -101.79                 | 1.16                    | -0.96                  | 8.62                  |
| 3,729.00              | 3.90            | 198.50      | 3,718.73              | -205.19      | -116.61      | -103.88                 | 0.52                    | 0.00                   | -7.60                 |
| 3,823.00              | 4.90            | 200.20      | 3,812.45              | -211.99      | -119.01      | -105.86                 | 1.07                    | 1.06                   | 1.81                  |
| 3,917.00              | 4.90            | 208.50      | 3,906.11              | -219.28      | -122.31      | -108.71                 | 0.75                    | 0.00                   | 8.83                  |
| 4,012.00              | 5.10            | 214.30      | 4,000.75              | -226.34      | -126.63      | -112.59                 | 0.57                    | 0.21                   | 6.11                  |
| 4,107.00              | 4.60            | 209.20      | 4,095.41              | -233.15      | -130.86      | -116.40                 | 0.69                    | -0.53                  | -5.37                 |
| 4,134.00              | 4.70            | 204.80      | 4,122.32              | -235.10      | -131.86      | -117.27                 | 1.37                    | 0.37                   | -16.30                |
| 4,228.00              | 4.00            | 204.20      | 4,216.05              | -241.59      | -134.82      | -119.83                 | 0.75                    | -0.74                  | -0.64                 |
| 4,323.00              | 4.10            | 209.20      | 4,310.81              | -247.57      | -137.83      | -122.47                 | 0.39                    | 0.11                   | 5.26                  |
| 4,417.00              | 3.80            | 206.70      | 4,404.59              | -253.29      | -140.87      | -125.16                 | 0.37                    | -0.32                  | -2.66                 |
| 4,512.00              | 3.40            | 196.40      | 4,499.40              | -258.80      | -143.08      | -127.03                 | 0.80                    | -0.42                  | -10.84                |
| 4,544.00              | 3.20            | 194.90      | 4,531.35              | -260.58      | -143.58      | -127.42                 | 0.68                    | -0.62                  | -4.69                 |
| 4,575.00              | 3.30            | 199.40      | 4,562.30              | -262.26      | -144.10      | -127.83                 | 0.88                    | 0.32                   | 14.52                 |
| 4,607.00              | 3.20            | 199.00      | 4,594.25              | -263.97      | -144.69      | -128.32                 | 0.32                    | -0.31                  | -1.25                 |
| 4,637.00              | 3.00            | 197.40      | 4,624.20              | -265.51      | -145.20      | -128.74                 | 0.73                    | -0.67                  | -5.33                 |
| 4,669.00              | 2.90            | 212.30      | 4,656.16              | -266.99      | -145.88      | -129.33                 | 2.41                    | -0.31                  | 46.56                 |
| 4,700.00              | 3.60            | 230.30      | 4,687.11              | -268.28      | -147.05      | -130.41                 | 3.97                    | 2.26                   | 58.06                 |
| 4,732.00              | 3.80            | 233.70      | 4,719.04              | -269.55      | -148.68      | -131.96                 | 0.93                    | 0.62                   | 10.62                 |
| 4,763.00              | 2.90            | 239.10      | 4,749.99              | -270.56      | -150.18      | -133.40                 | 3.07                    | -2.90                  | 17.42                 |
| 4,794.00              | 1.80            | 253.80      | 4,780.96              | -271.10      | -151.32      | -134.50                 | 4.02                    | -3.55                  | 47.42                 |
| 4,889.00              | 0.90            | 22.00       | 4,875.95              | -270.82      | -152.47      | -135.67                 | 2.59                    | -0.95                  | 134.95                |
| 4,984.00              | 0.50            | 40.60       | 4,970.94              | -269.81      | -151.92      | -135.18                 | 0.48                    | -0.42                  | 19.58                 |
| 5,078.00              | 0.30            | 84.20       | 5,064.94              | -269.48      | -151.41      | -134.69                 | 0.37                    | -0.21                  | 46.38                 |
| 5,173.00              | 0.50            | 85.90       | 5,159.94              | -269.42      | -150.75      | -134.04                 | 0.21                    | 0.21                   | 1.79                  |
| 5,204.00              | 0.60            | 56.10       | 5,190.94              | -269.32      | -150.48      | -133.77                 | 0.96                    | 0.32                   | -96.13                |
| 5,236.00              | 0.40            | 89.40       | 5,222.94              | -269.23      | -150.23      | -133.53                 | 1.08                    | -0.62                  | 104.06                |
| 5,267.00              | 1.20            | 80.70       | 5,253.93              | -269.17      | -149.80      | -133.11                 | 2.60                    | 2.58                   | -28.06                |
| 5,299.00              | 5.40            | 77.20       | 5,285.87              | -268.79      | -148.00      | -131.33                 | 13.13                   | 13.12                  | -10.94                |
| 5,330.00              | 8.80            | 75.80       | 5,316.63              | -267.88      | -144.28      | -127.67                 | 10.98                   | 10.97                  | -4.52                 |
| 5,362.00              | 10.90           | 73.60       | 5,348.16              | -266.43      | -139.00      | -122.50                 | 6.67                    | 6.56                   | -6.87                 |
| 5,393.00              | 13.70           | 76.50       | 5,378.44              | -264.74      | -132.62      | -116.23                 | 9.25                    | 9.03                   | 9.35                  |
| 5,425.00              | 17.20           | 79.30       | 5,409.28              | -262.98      | -124.29      | -108.01                 | 11.18                   | 10.94                  | 8.75                  |
| 5,456.00              | 21.80           | 85.60       | 5,438.50              | -261.68      | -114.04      | -97.86                  | 16.30                   | 14.84                  | 20.32                 |

|                  |                    |                                     |                           |
|------------------|--------------------|-------------------------------------|---------------------------|
| <b>Company:</b>  | Bill Barrett Corp. | <b>Local Co-ordinate Reference:</b> | Well East Platte #1-1H    |
| <b>Project:</b>  | Weld Co., CO       | <b>TVD Reference:</b>               | WELL @ 4475.00usft        |
| <b>Site:</b>     | Sec. 1-T4N-R61W    | <b>MD Reference:</b>                | WELL @ 4475.00usft        |
| <b>Well:</b>     | East Platte #1-1H  | <b>North Reference:</b>             | True                      |
| <b>Wellbore:</b> | Wellbore #1        | <b>Survey Calculation Method:</b>   | Minimum Curvature         |
| <b>Design:</b>   | Wellbore #1        | <b>Database:</b>                    | EDM 5000.1 Single User Db |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 5,488.00              | 26.80           | 89.90       | 5,467.66              | -261.22      | -100.89      | -84.77                  | 16.57                   | 15.62                  | 13.44                 |  |
| 5,519.00              | 31.70           | 93.00       | 5,494.70              | -261.63      | -85.76       | -69.64                  | 16.54                   | 15.81                  | 10.00                 |  |
| 5,551.00              | 34.50           | 94.40       | 5,521.50              | -262.77      | -68.32       | -52.17                  | 9.07                    | 8.75                   | 4.37                  |  |
| 5,582.00              | 34.60           | 94.80       | 5,547.03              | -264.18      | -50.80       | -34.59                  | 0.80                    | 0.32                   | 1.29                  |  |
| 5,614.00              | 33.70           | 94.20       | 5,573.52              | -265.59      | -32.89       | -16.63                  | 3.00                    | -2.81                  | -1.87                 |  |
| 5,646.00              | 33.70           | 94.10       | 5,600.14              | -266.87      | -15.18       | 1.13                    | 0.17                    | 0.00                   | -0.31                 |  |
| 5,677.00              | 34.90           | 92.70       | 5,625.75              | -267.90      | 2.26         | 18.59                   | 4.63                    | 3.87                   | -4.52                 |  |
| 5,709.00              | 39.50           | 91.30       | 5,651.23              | -268.57      | 21.59        | 37.93                   | 14.62                   | 14.37                  | -4.37                 |  |
| 5,740.00              | 44.30           | 90.70       | 5,674.30              | -268.92      | 42.28        | 58.60                   | 15.54                   | 15.48                  | -1.94                 |  |
| 5,771.00              | 48.90           | 91.70       | 5,695.59              | -269.40      | 64.79        | 81.10                   | 15.02                   | 14.84                  | 3.23                  |  |
| 5,803.00              | 52.30           | 92.60       | 5,715.90              | -270.33      | 89.50        | 105.82                  | 10.84                   | 10.62                  | 2.81                  |  |
| 5,834.00              | 53.90           | 92.70       | 5,734.51              | -271.48      | 114.26       | 130.61                  | 5.17                    | 5.16                   | 0.32                  |  |
| 5,866.00              | 54.80           | 92.20       | 5,753.16              | -272.59      | 140.24       | 156.61                  | 3.09                    | 2.81                   | -1.56                 |  |
| 5,897.00              | 55.00           | 92.10       | 5,770.99              | -273.54      | 165.58       | 181.96                  | 0.70                    | 0.65                   | -0.32                 |  |
| 5,929.00              | 55.00           | 91.90       | 5,789.34              | -274.46      | 191.78       | 208.17                  | 0.51                    | 0.00                   | -0.62                 |  |
| 5,960.00              | 55.40           | 91.00       | 5,807.04              | -275.10      | 217.23       | 233.60                  | 2.71                    | 1.29                   | -2.90                 |  |
| 5,992.00              | 59.50           | 87.90       | 5,824.25              | -274.83      | 244.19       | 260.50                  | 15.19                   | 12.81                  | -9.69                 |  |
| 6,023.00              | 64.00           | 86.10       | 5,838.92              | -273.39      | 271.45       | 287.62                  | 15.39                   | 14.52                  | -5.81                 |  |
| 6,055.00              | 68.80           | 85.20       | 5,851.73              | -271.16      | 300.68       | 316.66                  | 15.22                   | 15.00                  | -2.81                 |  |
| 6,086.00              | 71.30           | 85.70       | 5,862.31              | -268.85      | 329.73       | 345.51                  | 8.21                    | 8.06                   | 1.61                  |  |
| 6,118.00              | 74.00           | 86.90       | 5,871.85              | -266.88      | 360.20       | 375.81                  | 9.17                    | 8.44                   | 3.75                  |  |
| 6,149.00              | 75.10           | 87.50       | 5,880.11              | -265.42      | 390.05       | 405.51                  | 4.01                    | 3.55                   | 1.94                  |  |
| 6,181.00              | 77.30           | 89.50       | 5,887.74              | -264.61      | 421.11       | 436.47                  | 9.17                    | 6.87                   | 6.25                  |  |
| 6,212.00              | 81.60           | 91.40       | 5,893.41              | -264.85      | 451.58       | 466.89                  | 15.12                   | 13.87                  | 6.13                  |  |
| 6,219.00              | 82.70           | 91.80       | 5,894.37              | -265.05      | 458.51       | 473.82                  | 16.70                   | 15.71                  | 5.71                  |  |
| 6,300.00              | 94.50           | 95.70       | 5,896.35              | -270.34      | 539.15       | 554.64                  | 15.34                   | 14.57                  | 4.81                  |  |
| 6,331.00              | 94.90           | 95.10       | 5,893.81              | -273.25      | 569.91       | 585.51                  | 2.32                    | 1.29                   | -1.94                 |  |
| 6,362.00              | 95.10           | 95.10       | 5,891.10              | -275.99      | 600.67       | 616.38                  | 0.65                    | 0.65                   | 0.00                  |  |
| 6,393.00              | 92.10           | 96.20       | 5,889.16              | -279.04      | 631.45       | 647.30                  | 10.30                   | -9.68                  | 3.55                  |  |
| 6,424.00              | 91.70           | 96.50       | 5,888.13              | -282.47      | 662.25       | 678.24                  | 1.61                    | -1.29                  | 0.97                  |  |
| 6,454.00              | 91.60           | 96.00       | 5,887.27              | -285.73      | 692.06       | 708.20                  | 1.70                    | -0.33                  | -1.67                 |  |
| 6,485.00              | 92.00           | 94.70       | 5,886.29              | -288.62      | 722.90       | 739.16                  | 4.39                    | 1.29                   | -4.19                 |  |
| 6,517.00              | 92.00           | 94.40       | 5,885.18              | -291.16      | 754.78       | 771.14                  | 0.94                    | 0.00                   | -0.94                 |  |
| 6,547.00              | 92.20           | 94.10       | 5,884.08              | -293.38      | 784.68       | 801.12                  | 1.20                    | 0.67                   | -1.00                 |  |
| 6,577.00              | 91.30           | 91.90       | 5,883.16              | -294.95      | 814.62       | 831.10                  | 7.92                    | -3.00                  | -7.33                 |  |
| 6,607.00              | 91.00           | 91.00       | 5,882.56              | -295.71      | 844.61       | 861.07                  | 3.16                    | -1.00                  | -3.00                 |  |
| 6,640.00              | 91.60           | 91.10       | 5,881.81              | -296.31      | 877.59       | 894.03                  | 1.84                    | 1.82                   | 0.30                  |  |
| 6,671.00              | 89.80           | 90.00       | 5,881.43              | -296.61      | 908.59       | 924.99                  | 6.80                    | -5.81                  | -3.55                 |  |
| 6,702.00              | 90.20           | 90.10       | 5,881.43              | -296.64      | 939.59       | 955.93                  | 1.33                    | 1.29                   | 0.32                  |  |
| 6,734.00              | 90.20           | 89.90       | 5,881.32              | -296.64      | 971.59       | 987.87                  | 0.62                    | 0.00                   | -0.62                 |  |
| 6,766.00              | 90.40           | 90.00       | 5,881.15              | -296.61      | 1,003.59     | 1,019.81                | 0.70                    | 0.62                   | 0.31                  |  |
| 6,797.00              | 90.40           | 90.00       | 5,880.94              | -296.61      | 1,034.59     | 1,050.75                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,829.00              | 90.40           | 89.90       | 5,880.71              | -296.58      | 1,066.59     | 1,082.69                | 0.31                    | 0.00                   | -0.31                 |  |
| 6,860.00              | 90.60           | 89.70       | 5,880.44              | -296.47      | 1,097.58     | 1,113.62                | 0.91                    | 0.65                   | -0.65                 |  |
| 6,892.00              | 90.90           | 90.10       | 5,880.02              | -296.42      | 1,129.58     | 1,145.56                | 1.56                    | 0.94                   | 1.25                  |  |
| 6,986.00              | 91.00           | 89.50       | 5,878.46              | -296.09      | 1,223.57     | 1,239.35                | 0.65                    | 0.11                   | -0.64                 |  |
| 7,081.00              | 90.70           | 88.90       | 5,877.05              | -294.76      | 1,318.55     | 1,334.07                | 0.71                    | -0.32                  | -0.63                 |  |
| 7,175.00              | 90.90           | 88.00       | 5,875.74              | -292.22      | 1,412.50     | 1,427.70                | 0.98                    | 0.21                   | -0.96                 |  |
| 7,270.00              | 89.10           | 87.50       | 5,875.74              | -288.49      | 1,507.43     | 1,522.22                | 1.97                    | -1.89                  | -0.53                 |  |
| 7,365.00              | 89.00           | 86.90       | 5,877.32              | -283.85      | 1,602.30     | 1,616.63                | 0.64                    | -0.11                  | -0.63                 |  |
| 7,459.00              | 90.40           | 87.10       | 5,877.81              | -278.93      | 1,696.17     | 1,710.02                | 1.50                    | 1.49                   | 0.21                  |  |
| 7,554.00              | 91.70           | 89.10       | 5,876.07              | -275.78      | 1,791.09     | 1,804.58                | 2.51                    | 1.37                   | 2.11                  |  |
| 7,648.00              | 90.60           | 89.30       | 5,874.18              | -274.47      | 1,885.06     | 1,898.29                | 1.19                    | -1.17                  | 0.21                  |  |
| 7,743.00              | 90.20           | 89.40       | 5,873.52              | -273.39      | 1,980.05     | 1,993.04                | 0.43                    | -0.42                  | 0.11                  |  |

|                  |                    |                                     |                           |
|------------------|--------------------|-------------------------------------|---------------------------|
| <b>Company:</b>  | Bill Barrett Corp. | <b>Local Co-ordinate Reference:</b> | Well East Platte #1-1H    |
| <b>Project:</b>  | Weld Co., CO       | <b>TVD Reference:</b>               | WELL @ 4475.00usft        |
| <b>Site:</b>     | Sec. 1-T4N-R61W    | <b>MD Reference:</b>                | WELL @ 4475.00usft        |
| <b>Well:</b>     | East Platte #1-1H  | <b>North Reference:</b>             | True                      |
| <b>Wellbore:</b> | Wellbore #1        | <b>Survey Calculation Method:</b>   | Minimum Curvature         |
| <b>Design:</b>   | Wellbore #1        | <b>Database:</b>                    | EDM 5000.1 Single User Db |

| Survey                    |                 |             |                       |              |              |                         |                         |                        |                       |  |
|---------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)     | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 7,837.00                  | 89.90           | 88.90       | 5,873.44              | -272.00      | 2,074.04     | 2,086.77                | 0.62                    | -0.32                  | -0.53                 |  |
| 7,932.00                  | 90.10           | 87.90       | 5,873.44              | -269.34      | 2,169.00     | 2,181.39                | 1.07                    | 0.21                   | -1.05                 |  |
| 8,027.00                  | 90.20           | 89.50       | 5,873.19              | -267.19      | 2,263.98     | 2,276.06                | 1.69                    | 0.11                   | 1.68                  |  |
| 8,121.00                  | 90.10           | 89.80       | 5,872.94              | -266.61      | 2,357.97     | 2,369.85                | 0.34                    | -0.11                  | 0.32                  |  |
| 8,216.00                  | 90.60           | 90.60       | 5,872.36              | -266.95      | 2,452.97     | 2,464.69                | 0.99                    | 0.53                   | 0.84                  |  |
| 8,310.00                  | 91.30           | 91.10       | 5,870.80              | -268.34      | 2,546.95     | 2,558.57                | 0.92                    | 0.74                   | 0.53                  |  |
| 8,405.00                  | 90.10           | 91.20       | 5,869.64              | -270.25      | 2,641.92     | 2,653.48                | 1.27                    | -1.26                  | 0.11                  |  |
| 8,499.00                  | 90.80           | 90.90       | 5,868.90              | -271.97      | 2,735.90     | 2,747.39                | 0.81                    | 0.74                   | -0.32                 |  |
| 8,593.00                  | 88.50           | 89.10       | 5,869.48              | -271.97      | 2,829.89     | 2,841.21                | 3.11                    | -2.45                  | -1.91                 |  |
| 8,688.00                  | 88.80           | 89.70       | 5,871.72              | -270.97      | 2,924.85     | 2,935.94                | 0.71                    | 0.32                   | 0.63                  |  |
| 8,783.00                  | 89.00           | 90.10       | 5,873.54              | -270.81      | 3,019.84     | 3,030.73                | 0.47                    | 0.21                   | 0.42                  |  |
| 8,877.00                  | 88.80           | 89.60       | 5,875.35              | -270.56      | 3,113.82     | 3,124.52                | 0.57                    | -0.21                  | -0.53                 |  |
| 8,972.00                  | 90.50           | 89.00       | 5,875.93              | -269.40      | 3,208.81     | 3,219.26                | 1.90                    | 1.79                   | -0.63                 |  |
| 9,066.00                  | 91.50           | 90.90       | 5,874.28              | -269.32      | 3,302.79     | 3,313.06                | 2.28                    | 1.06                   | 2.02                  |  |
| 9,160.00                  | 91.90           | 92.60       | 5,871.50              | -272.19      | 3,396.70     | 3,406.98                | 1.86                    | 0.43                   | 1.81                  |  |
| 9,255.00                  | 92.10           | 91.40       | 5,868.18              | -275.50      | 3,491.58     | 3,501.88                | 1.28                    | 0.21                   | -1.26                 |  |
| 9,349.00                  | 90.80           | 91.20       | 5,865.80              | -277.63      | 3,585.52     | 3,595.78                | 1.40                    | -1.38                  | -0.21                 |  |
| 9,443.00                  | 89.30           | 89.50       | 5,865.72              | -278.21      | 3,679.52     | 3,689.63                | 2.41                    | -1.60                  | -1.81                 |  |
| 9,538.00                  | 89.00           | 88.90       | 5,867.13              | -276.88      | 3,774.50     | 3,784.36                | 0.71                    | -0.32                  | -0.63                 |  |
| 9,632.00                  | 91.60           | 88.80       | 5,866.64              | -275.00      | 3,868.47     | 3,878.04                | 2.77                    | 2.77                   | -0.11                 |  |
| 9,726.00                  | 91.10           | 90.20       | 5,864.42              | -274.18      | 3,962.43     | 3,971.78                | 1.58                    | -0.53                  | 1.49                  |  |
| 9,821.00                  | 91.40           | 91.90       | 5,862.35              | -275.92      | 4,057.39     | 4,066.67                | 1.82                    | 0.32                   | 1.79                  |  |
| 9,915.00                  | 89.90           | 91.90       | 5,861.28              | -279.03      | 4,151.33     | 4,160.62                | 1.60                    | -1.60                  | 0.00                  |  |
| 10,010.00                 | 89.40           | 91.40       | 5,861.86              | -281.77      | 4,246.29     | 4,255.57                | 0.74                    | -0.53                  | -0.53                 |  |
| 10,104.00                 | 89.40           | 88.40       | 5,862.85              | -281.60      | 4,340.27     | 4,349.37                | 3.19                    | 0.00                   | -3.19                 |  |
| 10,135.00                 | 89.20           | 87.20       | 5,863.23              | -280.41      | 4,371.25     | 4,380.21                | 3.92                    | -0.65                  | -3.87                 |  |
| <b>Last Archer Survey</b> |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 10,177.00                 | 89.00           | 86.00       | 5,863.89              | -277.92      | 4,413.17     | 4,421.90                | 2.90                    | -0.48                  | -2.86                 |  |
| <b>PTB</b>                |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 10,250.00                 | 89.00           | 86.00       | 5,865.16              | -272.83      | 4,485.98     | 4,494.27                | 0.00                    | 0.00                   | 0.00                  |  |

| Survey Annotations    |                       |                   |              |                           |  |
|-----------------------|-----------------------|-------------------|--------------|---------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              |                           |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) | Comment                   |  |
| 846.00                | 846.00                | 0.00              | 0.00         | Tie-In / Assumed Vertical |  |
| 860.00                | 860.00                | -0.02             | -0.07        | First Archer Survey       |  |
| 10,177.00             | 5,863.89              | -277.92           | 4,413.17     | Last Archer Survey        |  |
| 10,250.00             | 5,865.16              | -272.83           | 4,485.98     | PTB                       |  |

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