



Bill Barrett Corp.
Project: Weld Co., CO (NAD 83)
Site: Sec. 21-T5N-R61W
Well: Hawkins 5-61-21-4956BH
Wellbore: OH
Design: plan3 23sept13 rbw
Lat: 40° 22' 58.44 N
Long: 104° 13' 21.22 W
Pad GL: 4665.00
KB @ 4683.00ft



SECTION DETAILS

| MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect | Annotation |
|----------|--------|--------|---------|---------|---------|-------|--------|---------|----------------------------------|
| 0.00 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 925.00 | 0.000 | 0.00 | 925.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Start Build 2.00 |
| 1201.06 | 5.521 | 229.45 | 1200.63 | -8.64 | -10.10 | 2.00 | 229.45 | -9.41 | Start 3540.17 hold at 1201.06 MD |
| 4741.22 | 5.521 | 229.45 | 4724.37 | -230.08 | -268.90 | 0.00 | 0.00 | -250.62 | Start Drop -2.00 |
| 5017.28 | 0.000 | 0.00 | 5000.00 | -238.72 | -279.00 | 2.00 | 180.00 | -260.04 | Start 635.52 hold at 5017.28 MD |
| 5652.79 | 0.000 | 0.00 | 5635.52 | -238.72 | -279.00 | 0.00 | 0.00 | -260.04 | Start Build 12.00 |
| 6405.00 | 90.265 | 91.26 | 6112.98 | -249.31 | 200.56 | 12.00 | 91.26 | 218.94 | Start 4319.04 hold at 6405.00 MD |
| 10724.04 | 90.265 | 91.26 | 6093.00 | -344.64 | 4518.49 | 0.00 | 0.00 | 4531.62 | TD at 10724.04 |

WELL DETAILS: Hawkins 5-61-21-4956BH

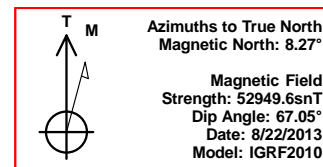
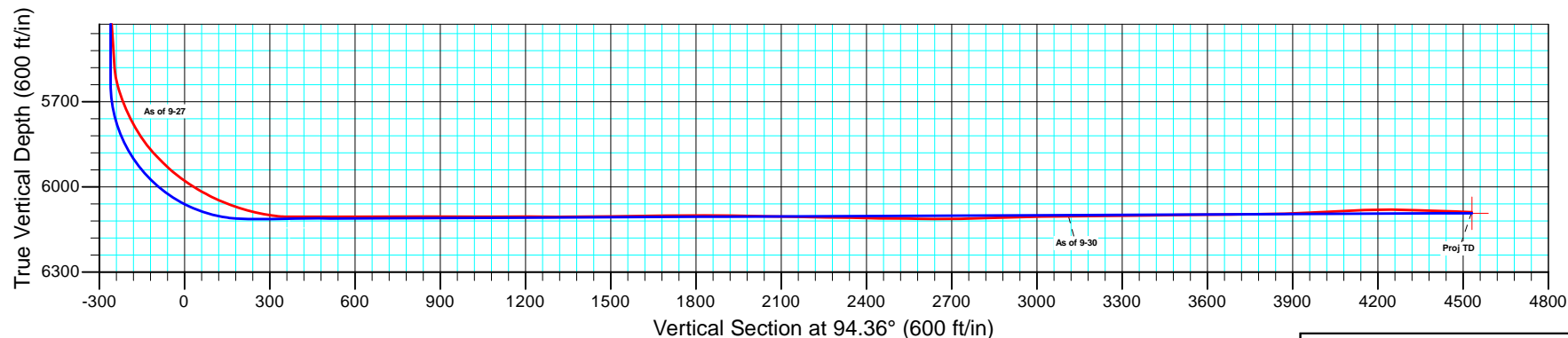
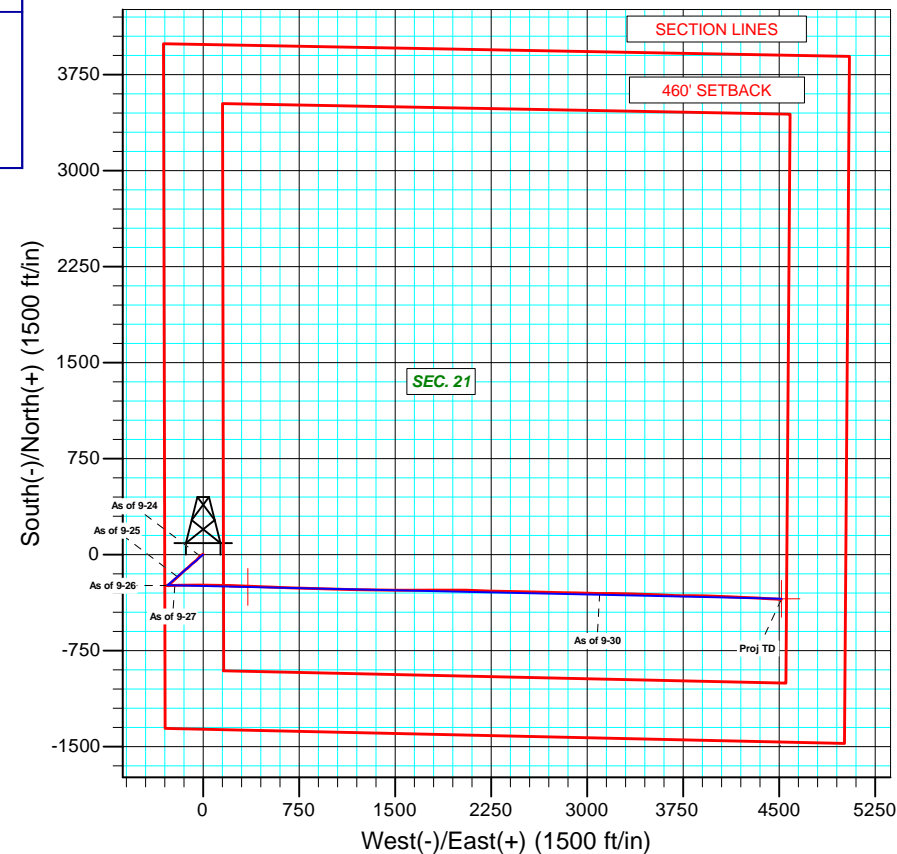
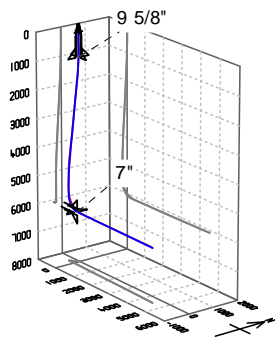
| +N/-S | +E/-W | Northing | Ground Level: Easting | 4665.00 Latitude | Longitude | Slot |
|-------|-------|------------|--------------------------|---------------------|------------------|------|
| 0.00 | 0.00 | 1384894.18 | 3355857.39 | 40° 22' 58.44 N | 104° 13' 21.22 W | |

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|--------------------|---------|---------|---------|-----------------|------------------|-------|
| 4956BH PBHL 2 | 6093.00 | -344.64 | 4518.49 | 40° 22' 55.03 N | 104° 12' 22.83 W | Point |
| 4956BH Entry Point | 6145.00 | -251.96 | 350.55 | 40° 22' 55.95 N | 104° 13' 16.69 W | Point |

PROJECT DETAILS: Weld Co., 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



Plan: plan3 23sept13 rbw (Hawkins 5-61-21-4956BH/OH)

Created By: Brandon West

Date: 10:34, October 01 2013

| | | | |
|------------------|------------------------|-------------------------------------|-----------------------------|
| Company: | Bill Barrett Corp. | Local Co-ordinate Reference: | Well Hawkins 5-61-21-4956BH |
| Project: | Weld Co., CO (NAD 83) | TVD Reference: | KB @ 4683.00ft |
| Site: | Sec. 21-T5N-R61W | MD Reference: | KB @ 4683.00ft |
| Well: | Hawkins 5-61-21-4956BH | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | CompassVM |

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|--------------------|---------------------------|----------------------|----------------|
| Project | Weld Co., CO (NAD 83) | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

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|-----------------------|------------------|--------------|-------------------|-------------------|------------------|
| Site | Sec. 21-T5N-R61W | | | | |
| Site Position: | | Northing: | 1,384,933.66 usft | Latitude: | 40° 22' 58.83 N |
| From: | Lat/Long | Easting: | 3,355,857.59 usft | Longitude: | 104° 13' 21.21 W |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 1.10 ft | Grid Convergence: | 0.83 ° |

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|----------------------|------------------------|---------|---------------------|-------------------|---------------|------------------|
| Well | Hawkins 5-61-21-4956BH | | | | | |
| Well Position | +N/-S | 0.00 ft | Northing: | 1,384,894.18 usft | Latitude: | 40° 22' 58.44 N |
| | +E/-W | 0.00 ft | Easting: | 3,355,857.39 usft | Longitude: | 104° 13' 21.22 W |
| Position Uncertainty | | 0.00 ft | Wellhead Elevation: | ft | Ground Level: | 4,665.00 ft |

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|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 8/22/2013 | 8.27 | 67.05 | 52,950 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|------|
| Design | OH | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 94.36 | |

| | | | | | |
|-----------------------|----------------|--------------------------|------------------|--------------------|--|
| Survey Program | Date | 10/1/2013 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 100.00 | 10,645.00 | Surveys (OH) | MWD | MWD - Standard | |

| | | | | | | | | | | |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|------------------------------|-----------------------------|----------------------------|--|
| 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 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 100.00 | 0.020 | 166.11 | 100.00 | -0.02 | 0.00 | 0.01 | 0.02 | 0.02 | 0.00 | |
| 200.00 | 0.090 | 344.96 | 200.00 | 0.04 | -0.01 | -0.02 | 0.11 | 0.07 | 178.85 | |
| 300.00 | 0.350 | 16.91 | 300.00 | 0.41 | 0.06 | 0.03 | 0.28 | 0.26 | 31.95 | |
| 400.00 | 0.500 | 358.56 | 400.00 | 1.14 | 0.13 | 0.05 | 0.20 | 0.15 | -18.35 | |
| 500.00 | 0.420 | 345.86 | 499.99 | 1.93 | 0.03 | -0.11 | 0.13 | -0.08 | -12.70 | |
| 600.00 | 0.420 | 307.45 | 599.99 | 2.51 | -0.35 | -0.54 | 0.28 | 0.00 | -38.41 | |
| 700.00 | 0.250 | 209.60 | 699.99 | 2.54 | -0.75 | -0.94 | 0.52 | -0.17 | -97.85 | |
| 736.00 | 0.360 | 301.99 | 735.99 | 2.53 | -0.88 | -1.07 | 1.24 | 0.31 | 256.64 | |
| 869.00 | 1.000 | 159.40 | 868.98 | 1.67 | -0.83 | -0.95 | 0.98 | 0.48 | -107.21 | |

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|------------------|------------------------|-------------------------------------|-----------------------------|
| Company: | Bill Barrett Corp. | Local Co-ordinate Reference: | Well Hawkins 5-61-21-4956BH |
| Project: | Weld Co., CO (NAD 83) | TVD Reference: | KB @ 4683.00ft |
| Site: | Sec. 21-T5N-R61W | MD Reference: | KB @ 4683.00ft |
| Well: | Hawkins 5-61-21-4956BH | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | CompassVM |

| 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) |
| 961.00 | 4.000 | 246.00 | 960.90 | -0.39 | -3.48 | -3.44 | 4.42 | 3.26 | 94.13 |
| 1,052.00 | 4.200 | 244.80 | 1,051.67 | -3.10 | -9.39 | -9.13 | 0.24 | 0.22 | -1.32 |
| 1,144.00 | 5.200 | 231.60 | 1,143.36 | -7.12 | -15.71 | -15.12 | 1.59 | 1.09 | -14.35 |
| 1,236.00 | 5.400 | 231.00 | 1,234.97 | -12.44 | -22.34 | -21.33 | 0.23 | 0.22 | -0.65 |
| As of 9-24 | | | | | | | | | |
| 1,327.00 | 5.300 | 221.10 | 1,325.57 | -18.30 | -28.43 | -26.96 | 1.02 | -0.11 | -10.88 |
| 1,419.00 | 5.100 | 223.10 | 1,417.20 | -24.49 | -34.02 | -32.06 | 0.29 | -0.22 | 2.17 |
| 1,514.00 | 4.400 | 224.70 | 1,511.87 | -30.16 | -39.46 | -37.06 | 0.75 | -0.74 | 1.68 |
| 1,609.00 | 5.100 | 223.00 | 1,606.54 | -35.84 | -44.91 | -42.05 | 0.75 | 0.74 | -1.79 |
| 1,704.00 | 5.600 | 222.10 | 1,701.13 | -42.37 | -50.90 | -47.53 | 0.53 | 0.53 | -0.95 |
| 1,799.00 | 5.400 | 227.70 | 1,795.69 | -48.81 | -57.31 | -53.43 | 0.60 | -0.21 | 5.89 |
| 1,894.00 | 5.100 | 232.00 | 1,890.29 | -54.42 | -63.94 | -59.62 | 0.52 | -0.32 | 4.53 |
| 1,990.00 | 5.100 | 231.80 | 1,985.91 | -59.69 | -70.66 | -65.91 | 0.02 | 0.00 | -0.21 |
| 2,086.00 | 4.900 | 232.10 | 2,081.55 | -64.85 | -77.25 | -72.09 | 0.21 | -0.21 | 0.31 |
| 2,181.00 | 5.700 | 229.40 | 2,176.14 | -70.41 | -84.03 | -78.43 | 0.88 | 0.84 | -2.84 |
| 2,276.00 | 5.700 | 226.90 | 2,270.67 | -76.70 | -91.06 | -84.96 | 0.26 | 0.00 | -2.63 |
| 2,372.00 | 5.600 | 225.40 | 2,366.21 | -83.25 | -97.87 | -91.26 | 0.19 | -0.10 | -1.56 |
| 2,467.00 | 5.700 | 230.20 | 2,460.74 | -89.52 | -104.80 | -97.69 | 0.51 | 0.11 | 5.05 |
| 2,562.00 | 5.500 | 229.20 | 2,555.29 | -95.52 | -111.87 | -104.28 | 0.23 | -0.21 | -1.05 |
| 2,657.00 | 5.500 | 228.30 | 2,649.85 | -101.52 | -118.71 | -110.65 | 0.09 | 0.00 | -0.95 |
| 2,751.00 | 5.800 | 233.50 | 2,743.40 | -107.34 | -125.90 | -117.37 | 0.63 | 0.32 | 5.53 |
| 2,846.00 | 5.500 | 233.90 | 2,837.94 | -112.88 | -133.43 | -124.46 | 0.32 | -0.32 | 0.42 |
| 2,942.00 | 5.700 | 225.00 | 2,933.48 | -118.96 | -140.52 | -131.07 | 0.93 | 0.21 | -9.27 |
| 3,038.00 | 5.400 | 225.30 | 3,029.03 | -125.51 | -147.10 | -137.13 | 0.31 | -0.31 | 0.31 |
| 3,132.00 | 6.300 | 225.50 | 3,122.54 | -132.24 | -153.93 | -143.42 | 0.96 | 0.96 | 0.21 |
| 3,228.00 | 6.200 | 228.10 | 3,217.97 | -139.39 | -161.54 | -150.47 | 0.31 | -0.10 | 2.71 |
| 3,322.00 | 6.100 | 226.50 | 3,311.43 | -146.22 | -168.94 | -157.33 | 0.21 | -0.11 | -1.70 |
| 3,418.00 | 6.300 | 226.30 | 3,406.87 | -153.37 | -176.45 | -164.28 | 0.21 | 0.21 | -0.21 |
| 3,511.00 | 6.500 | 226.80 | 3,499.29 | -160.50 | -183.98 | -171.24 | 0.22 | 0.22 | 0.54 |
| 3,606.00 | 6.000 | 227.00 | 3,593.72 | -167.56 | -191.53 | -178.23 | 0.53 | -0.53 | 0.21 |
| 3,701.00 | 5.800 | 226.70 | 3,688.22 | -174.24 | -198.65 | -184.83 | 0.21 | -0.21 | -0.32 |
| As of 9-25 | | | | | | | | | |
| 3,797.00 | 6.500 | 229.30 | 3,783.66 | -181.11 | -206.30 | -191.93 | 0.78 | 0.73 | 2.71 |
| 3,891.00 | 6.500 | 229.40 | 3,877.06 | -188.04 | -214.38 | -199.45 | 0.01 | 0.00 | 0.11 |
| 3,985.00 | 6.400 | 228.90 | 3,970.47 | -194.95 | -222.36 | -206.89 | 0.12 | -0.11 | -0.53 |
| 4,081.00 | 6.500 | 226.40 | 4,065.86 | -202.22 | -230.33 | -214.28 | 0.31 | 0.10 | -2.60 |
| 4,176.00 | 5.900 | 230.70 | 4,160.30 | -209.02 | -238.00 | -221.42 | 0.80 | -0.63 | 4.53 |
| 4,271.00 | 4.500 | 224.70 | 4,254.91 | -214.76 | -244.40 | -227.36 | 1.58 | -1.47 | -6.32 |
| 4,367.00 | 4.200 | 228.30 | 4,350.63 | -219.77 | -249.68 | -232.24 | 0.42 | -0.31 | 3.75 |
| 4,462.00 | 4.400 | 230.50 | 4,445.37 | -224.41 | -255.09 | -237.28 | 0.27 | 0.21 | 2.32 |
| 4,556.00 | 4.400 | 230.60 | 4,539.09 | -228.99 | -260.65 | -242.48 | 0.01 | 0.00 | 0.11 |
| 4,650.00 | 4.100 | 232.00 | 4,632.83 | -233.35 | -266.09 | -247.57 | 0.34 | -0.32 | 1.49 |
| 4,745.00 | 1.800 | 220.40 | 4,727.70 | -236.57 | -269.73 | -250.96 | 2.49 | -2.42 | -12.21 |
| 4,840.00 | 1.500 | 219.90 | 4,822.66 | -238.66 | -271.50 | -252.56 | 0.32 | -0.32 | -0.53 |

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|------------------|------------------------|-------------------------------------|-----------------------------|
| Company: | Bill Barrett Corp. | Local Co-ordinate Reference: | Well Hawkins 5-61-21-4956BH |
| Project: | Weld Co., CO (NAD 83) | TVD Reference: | KB @ 4683.00ft |
| Site: | Sec. 21-T5N-R61W | MD Reference: | KB @ 4683.00ft |
| Well: | Hawkins 5-61-21-4956BH | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | CompassVM |

| 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) |
| 4,935.00 | 1.500 | 220.90 | 4,917.63 | -240.56 | -273.11 | -254.02 | 0.03 | 0.00 | 1.05 |
| 5,030.00 | 0.700 | 280.60 | 5,012.61 | -241.39 | -274.49 | -255.34 | 1.36 | -0.84 | 62.84 |
| 5,126.00 | 0.700 | 265.10 | 5,108.60 | -241.33 | -275.65 | -256.50 | 0.20 | 0.00 | -16.15 |
| As of 9-26 | | | | | | | | | |
| 5,221.00 | 0.700 | 270.80 | 5,203.60 | -241.37 | -276.81 | -257.65 | 0.07 | 0.00 | 6.00 |
| 5,315.00 | 0.700 | 275.50 | 5,297.59 | -241.31 | -277.96 | -258.80 | 0.06 | 0.00 | 5.00 |
| 5,409.00 | 3.000 | 105.70 | 5,391.55 | -241.92 | -276.16 | -256.96 | 3.93 | 2.45 | -180.64 |
| 5,505.00 | 2.700 | 97.00 | 5,487.44 | -242.88 | -271.50 | -252.24 | 0.55 | -0.31 | -9.06 |
| 5,600.00 | 5.100 | 72.50 | 5,582.22 | -241.88 | -265.25 | -246.09 | 3.02 | 2.53 | -25.79 |
| 5,632.00 | 10.800 | 78.70 | 5,613.90 | -240.86 | -260.95 | -241.88 | 17.99 | 17.81 | 19.38 |
| 5,663.00 | 15.600 | 83.10 | 5,644.07 | -239.79 | -253.96 | -234.99 | 15.81 | 15.48 | 14.19 |
| 5,695.00 | 18.500 | 89.30 | 5,674.66 | -239.21 | -244.61 | -225.71 | 10.68 | 9.06 | 19.38 |
| 5,727.00 | 22.000 | 88.90 | 5,704.68 | -239.04 | -233.54 | -214.68 | 10.95 | 10.94 | -1.25 |
| 5,759.00 | 25.300 | 89.90 | 5,733.99 | -238.91 | -220.70 | -201.89 | 10.39 | 10.31 | 3.13 |
| As of 9-27 | | | | | | | | | |
| 5,790.00 | 26.400 | 90.10 | 5,761.88 | -238.91 | -207.19 | -188.42 | 3.56 | 3.55 | 0.65 |
| 5,822.00 | 29.000 | 88.10 | 5,790.22 | -238.67 | -192.32 | -173.61 | 8.63 | 8.13 | -6.25 |
| 5,854.00 | 32.700 | 87.50 | 5,817.68 | -238.03 | -175.92 | -157.31 | 11.60 | 11.56 | -1.88 |
| 5,885.00 | 36.800 | 89.50 | 5,843.15 | -237.58 | -158.26 | -139.74 | 13.73 | 13.23 | 6.45 |
| 5,917.00 | 40.800 | 91.70 | 5,868.08 | -237.81 | -138.22 | -119.73 | 13.22 | 12.50 | 6.88 |
| 5,949.00 | 42.900 | 90.70 | 5,891.92 | -238.25 | -116.88 | -98.42 | 6.89 | 6.56 | -3.13 |
| 5,980.00 | 45.400 | 91.20 | 5,914.16 | -238.61 | -95.29 | -76.87 | 8.14 | 8.06 | 1.61 |
| 6,011.00 | 48.700 | 91.20 | 5,935.28 | -239.09 | -72.61 | -54.21 | 10.65 | 10.65 | 0.00 |
| 6,044.00 | 51.400 | 90.40 | 5,956.47 | -239.44 | -47.31 | -28.97 | 8.39 | 8.18 | -2.42 |
| 6,075.00 | 53.900 | 90.40 | 5,975.27 | -239.61 | -22.67 | -4.38 | 8.06 | 8.06 | 0.00 |
| 6,107.00 | 57.100 | 90.40 | 5,993.40 | -239.80 | 3.70 | 21.92 | 10.00 | 10.00 | 0.00 |
| 6,138.00 | 60.000 | 89.70 | 6,009.57 | -239.82 | 30.14 | 48.29 | 9.55 | 9.35 | -2.26 |
| 6,170.00 | 61.900 | 90.00 | 6,025.11 | -239.74 | 58.11 | 76.18 | 5.99 | 5.94 | 0.94 |
| 6,202.00 | 64.200 | 90.50 | 6,039.61 | -239.87 | 86.63 | 104.63 | 7.32 | 7.19 | 1.56 |
| 6,234.00 | 67.800 | 90.40 | 6,052.62 | -240.10 | 115.86 | 133.79 | 11.25 | 11.25 | -0.31 |
| 6,265.00 | 70.700 | 90.20 | 6,063.60 | -240.25 | 144.85 | 162.70 | 9.37 | 9.35 | -0.65 |
| 6,297.00 | 71.400 | 89.90 | 6,074.00 | -240.28 | 175.11 | 192.88 | 2.36 | 2.19 | -0.94 |
| 6,328.00 | 73.900 | 91.10 | 6,083.24 | -240.54 | 204.70 | 222.40 | 8.87 | 8.06 | 3.87 |
| 6,360.00 | 77.600 | 91.60 | 6,091.12 | -241.27 | 235.70 | 253.37 | 11.66 | 11.56 | 1.56 |
| 6,391.00 | 79.900 | 90.90 | 6,097.16 | -241.93 | 266.09 | 283.72 | 7.74 | 7.42 | -2.26 |
| 6,431.00 | 83.600 | 91.40 | 6,102.90 | -242.73 | 305.66 | 323.24 | 9.33 | 9.25 | 1.25 |
| 6,471.00 | 89.500 | 92.60 | 6,105.31 | -244.12 | 345.55 | 363.11 | 15.05 | 14.75 | 3.00 |
| 6,476.54 | 89.549 | 92.71 | 6,105.35 | -244.38 | 351.08 | 368.65 | 2.16 | 0.88 | 1.98 |
| 4956BH Entry Point | | | | | | | | | |
| 6,562.00 | 90.300 | 94.40 | 6,105.47 | -249.67 | 436.38 | 454.10 | 2.16 | 0.88 | 1.98 |
| 6,657.00 | 89.900 | 91.90 | 6,105.30 | -254.89 | 531.22 | 549.07 | 2.67 | -0.42 | -2.63 |
| 6,752.00 | 89.800 | 91.90 | 6,105.55 | -258.04 | 626.17 | 643.98 | 0.11 | -0.11 | 0.00 |
| 6,848.00 | 90.300 | 91.70 | 6,105.47 | -261.06 | 722.12 | 739.89 | 0.56 | 0.52 | -0.21 |
| 6,942.00 | 90.300 | 91.40 | 6,104.97 | -263.60 | 816.09 | 833.77 | 0.32 | 0.00 | -0.32 |

| | | | |
|------------------|------------------------|-------------------------------------|-----------------------------|
| Company: | Bill Barrett Corp. | Local Co-ordinate Reference: | Well Hawkins 5-61-21-4956BH |
| Project: | Weld Co., CO (NAD 83) | TVD Reference: | KB @ 4683.00ft |
| Site: | Sec. 21-T5N-R61W | MD Reference: | KB @ 4683.00ft |
| Well: | Hawkins 5-61-21-4956BH | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | CompassVM |

| 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) |
| 7,038.00 | 89.900 | 91.50 | 6,104.81 | -266.03 | 912.06 | 929.65 | 0.43 | -0.42 | 0.10 |
| 7,133.00 | 89.600 | 91.60 | 6,105.22 | -268.60 | 1,007.02 | 1,024.53 | 0.33 | -0.32 | 0.11 |
| 7,227.00 | 90.500 | 91.20 | 6,105.14 | -270.90 | 1,100.99 | 1,118.41 | 1.05 | 0.96 | -0.43 |
| 7,322.00 | 90.300 | 91.20 | 6,104.48 | -272.89 | 1,195.97 | 1,213.26 | 0.21 | -0.21 | 0.00 |
| 7,417.00 | 89.600 | 91.20 | 6,104.56 | -274.88 | 1,290.95 | 1,308.11 | 0.74 | -0.74 | 0.00 |
| 7,511.00 | 89.400 | 91.10 | 6,105.38 | -276.76 | 1,384.92 | 1,401.96 | 0.24 | -0.21 | -0.11 |
| 7,606.00 | 91.400 | 90.00 | 6,104.72 | -277.68 | 1,479.91 | 1,496.74 | 2.40 | 2.11 | -1.16 |
| 7,702.00 | 90.700 | 89.70 | 6,102.96 | -277.42 | 1,575.89 | 1,592.43 | 0.79 | -0.73 | -0.31 |
| 7,797.00 | 90.900 | 90.00 | 6,101.63 | -277.18 | 1,670.88 | 1,687.13 | 0.38 | 0.21 | 0.32 |
| 7,893.00 | 90.300 | 90.10 | 6,100.62 | -277.26 | 1,766.88 | 1,782.85 | 0.63 | -0.63 | 0.10 |
| 7,988.00 | 89.600 | 89.80 | 6,100.71 | -277.18 | 1,861.88 | 1,877.57 | 0.80 | -0.74 | -0.32 |
| 8,083.00 | 88.500 | 89.90 | 6,102.28 | -276.93 | 1,956.86 | 1,972.26 | 1.16 | -1.16 | 0.11 |
| 8,178.00 | 89.300 | 91.40 | 6,104.11 | -278.01 | 2,051.84 | 2,067.04 | 1.79 | 0.84 | 1.58 |
| 8,273.00 | 88.600 | 91.90 | 6,105.85 | -280.74 | 2,146.78 | 2,161.91 | 0.91 | -0.74 | 0.53 |
| 8,367.00 | 89.400 | 91.70 | 6,107.49 | -283.69 | 2,240.72 | 2,255.80 | 0.88 | 0.85 | -0.21 |
| 8,462.00 | 88.600 | 91.90 | 6,109.15 | -286.68 | 2,335.66 | 2,350.69 | 0.87 | -0.84 | 0.21 |
| 8,557.00 | 89.000 | 91.20 | 6,111.14 | -289.24 | 2,430.60 | 2,445.56 | 0.85 | 0.42 | -0.74 |
| 8,653.00 | 90.000 | 91.20 | 6,111.97 | -291.26 | 2,526.57 | 2,541.41 | 1.04 | 1.04 | 0.00 |
| 8,749.00 | 88.800 | 90.60 | 6,112.98 | -292.76 | 2,622.55 | 2,637.22 | 1.40 | -1.25 | -0.63 |
| 8,844.00 | 91.800 | 91.40 | 6,112.48 | -294.42 | 2,717.53 | 2,732.05 | 3.27 | 3.16 | 0.84 |
| 8,939.00 | 91.600 | 91.40 | 6,109.66 | -296.74 | 2,812.46 | 2,826.88 | 0.21 | -0.21 | 0.00 |
| 9,035.00 | 91.500 | 91.60 | 6,107.07 | -299.25 | 2,908.39 | 2,922.72 | 0.23 | -0.10 | 0.21 |
| 9,129.00 | 91.200 | 90.90 | 6,104.85 | -301.30 | 3,002.34 | 3,016.56 | 0.81 | -0.32 | -0.74 |
| 9,224.00 | 90.500 | 90.60 | 6,103.44 | -302.55 | 3,097.32 | 3,111.36 | 0.80 | -0.74 | -0.32 |
| As of 9-30 | | | | | | | | | |
| 9,320.00 | 90.400 | 90.50 | 6,102.69 | -303.47 | 3,193.31 | 3,207.14 | 0.15 | -0.10 | -0.10 |
| 9,415.00 | 91.100 | 91.50 | 6,101.44 | -305.13 | 3,288.29 | 3,301.97 | 1.28 | 0.74 | 1.05 |
| 9,509.00 | 90.200 | 91.70 | 6,100.38 | -307.75 | 3,382.25 | 3,395.85 | 0.98 | -0.96 | 0.21 |
| 9,603.00 | 91.100 | 91.40 | 6,099.31 | -310.29 | 3,476.20 | 3,489.73 | 1.01 | 0.96 | -0.32 |
| 9,699.00 | 90.700 | 92.60 | 6,097.80 | -313.64 | 3,572.13 | 3,585.64 | 1.32 | -0.42 | 1.25 |
| 9,794.00 | 89.600 | 92.90 | 6,097.56 | -318.20 | 3,667.02 | 3,680.60 | 1.20 | -1.16 | 0.32 |
| 9,889.00 | 91.800 | 90.60 | 6,096.39 | -321.10 | 3,761.96 | 3,775.48 | 3.35 | 2.32 | -2.42 |
| 9,985.00 | 90.800 | 89.50 | 6,094.22 | -321.18 | 3,857.93 | 3,871.18 | 1.55 | -1.04 | -1.15 |
| 10,080.00 | 93.100 | 92.50 | 6,090.98 | -322.84 | 3,952.84 | 3,965.95 | 3.98 | 2.42 | 3.16 |
| 10,174.00 | 92.700 | 92.30 | 6,086.23 | -326.77 | 4,046.64 | 4,059.77 | 0.48 | -0.43 | -0.21 |
| 10,268.00 | 92.600 | 92.20 | 6,081.88 | -330.46 | 4,140.47 | 4,153.61 | 0.15 | -0.11 | -0.11 |
| 10,362.00 | 89.300 | 93.00 | 6,080.32 | -334.72 | 4,234.34 | 4,247.54 | 3.61 | -3.51 | 0.85 |
| 10,457.00 | 88.400 | 92.80 | 6,082.23 | -339.53 | 4,329.20 | 4,342.48 | 0.97 | -0.95 | -0.21 |
| 10,553.00 | 87.800 | 93.10 | 6,085.41 | -344.46 | 4,425.02 | 4,438.40 | 0.70 | -0.63 | 0.31 |
| 10,586.00 | 87.500 | 92.90 | 6,086.77 | -346.19 | 4,457.95 | 4,471.37 | 1.09 | -0.91 | -0.61 |
| 10,645.00 | 87.500 | 92.90 | 6,089.34 | -349.17 | 4,516.82 | 4,530.29 | 0.00 | 0.00 | 0.00 |
| Proj TD - 4956BH PBHL 2 500' FEL, 1120' FSL | | | | | | | | | |

| | | | |
|------------------|------------------------|-------------------------------------|-----------------------------|
| Company: | Bill Barrett Corp. | Local Co-ordinate Reference: | Well Hawkins 5-61-21-4956BH |
| Project: | Weld Co., CO (NAD 83) | TVD Reference: | KB @ 4683.00ft |
| Site: | Sec. 21-T5N-R61W | MD Reference: | KB @ 4683.00ft |
| Well: | Hawkins 5-61-21-4956BH | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | CompassVM |

Survey Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
|---------------------------|---------------------------|-------------------|---------------|------------|
| | | +N/-S (ft) | +E/-W (ft) | |
| 1,236.00 | 1,234.97 | -12.44 | -22.34 | As of 9-24 |
| 3,701.00 | 3,688.22 | -174.24 | -198.65 | As of 9-25 |
| 5,126.00 | 5,108.60 | -241.33 | -275.65 | As of 9-26 |
| 5,759.00 | 5,733.99 | -238.91 | -220.70 | As of 9-27 |
| 9,224.00 | 6,103.44 | -302.55 | 3,097.32 | As of 9-30 |
| 10,645.00 | 6,089.34 | -349.17 | 4,516.82 | Proj TD |

Checked By: _____ Approved By: _____ Date: _____