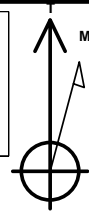


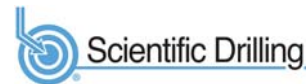
**PROJECT DETAILS: Weld County, CO NAD 83**

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: Anschutz Equus Farms 4-62-32 SESE Pad  
 Well: Anschutz Equus Farms 4-62-33-6457CN  
 Wellbore: OH  
 Design: Plan 2



Azimuths to True North  
 Magnetic North: 8.27°



Magnetic Field  
 Strength: 52362.7nT  
 Dip Angle: 66.92°  
 Date: 7/19/2017  
 Model: HDGM

Plan: Plan 2 (Anschutz Equus Farms 4-62-33-6457CN/OH)

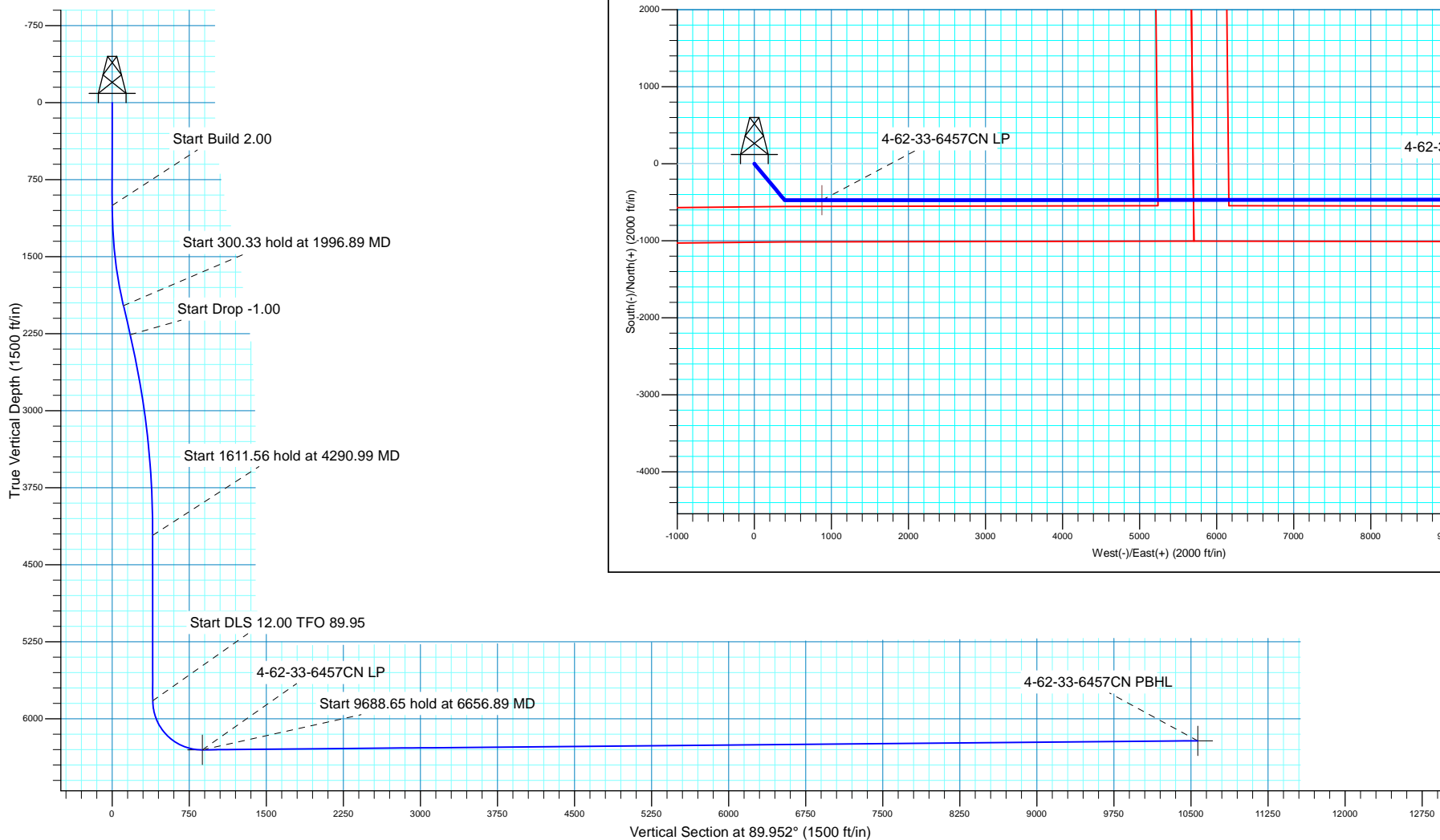
Created By: Seth Burstad Date: 7-20-2017

**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
1000.00	0.00	0.000	1000.00	0.00	0.00	0.00	0.00	0.00
1996.89	19.94	140.128	1976.89	-131.78	110.08	2.00	140.13	109.97
2297.21	19.94	140.128	2259.22	-210.38	175.73	0.00	0.00	175.55
4290.99	0.00	0.000	4213.00	-473.94	395.88	1.00	180.00	395.48
5902.55	0.00	0.000	5824.56	-473.94	395.88	0.00	0.00	395.48
6656.89	90.52	89.952	6302.01	-473.54	877.68	12.00	89.95	877.28
16345.54	90.52	89.952	6214.00	-465.46	10565.93	0.00	0.00	10565.53

**WELL DETAILS: Anschutz Equus Farms 4-62-33-6457CN**

		GL 4681' & KB 20' @ 4701.00ft		4681.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1341437.56	3323771.94	40° 15' 53.391 N	104° 20' 23.161 W	





**Bill Barrett Corporation**

## **Bill Barrett Corp.**

**Weld County, CO NAD 83**

**Anschutz Equus Farms 4-62-32 SESE Pad**

**Anschutz Equus Farms 4-62-33-6457CN**

**OH**

**Plan: Plan 2**

## **Standard Planning Report**

**20 July, 2017**



**Scientific Drilling**

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



<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-33-6457CN
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-32 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-33-6457CN	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 2		

<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		

Site						Anschutz Equus Farms 4-62-32 SESE Pad, Site Center : Anschutz Equus Farms 4-62-32-4148C											
Site Position:			Northing:			1,341,471.99 usft			Latitude:			40° 15' 53.708 N					
From:			Lat/Long			Easting:			3,323,950.67 usft			Longitude:			104° 20' 20.850 W		
Position Uncertainty:			0.00 ft			Slot Radius:			13.200 in			Grid Convergence:			0.75		

Well	Anschutz Equus Farms 4-62-33-6457CN, 1018' FSL 410' FEL Sec 32 T4N R62W					
Well Position	+N/-S	-32.09 ft	Northing:	1,341,437.57 usft	Latitude:	40° 15' 53.391 N
	+E/-W	-179.16 ft	Easting:	3,323,771.95 usft	Longitude:	104° 20' 23.161 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,681.00 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	5/9/2017	8.28	66.93	52,386	
	HDGM	7/19/2017	8.27	66.92	52,363	

<b>Design</b>	Plan 2				
<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	89.952	

<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	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,996.89	19.94	140.128	1,976.89	-131.78	110.08	2.00	2.00	0.00	140.13	
2,297.21	19.94	140.128	2,259.22	-210.38	175.73	0.00	0.00	0.00	0.00	
4,290.99	0.00	0.000	4,213.00	-473.94	395.88	1.00	-1.00	0.00	180.00	
5,902.55	0.00	0.000	5,824.56	-473.94	395.88	0.00	0.00	0.00	0.00	
6,656.89	90.52	89.952	6,302.01	-473.54	877.68	12.00	12.00	11.92	89.95	
16,345.54	90.52	89.952	6,214.00	-465.46	10,565.93	0.00	0.00	0.00	0.00	4-62-33-6457CN PBH

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-33-6457CN
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-32 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-33-6457CN	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 2		

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
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
1,100.00	2.00	140.128	1,099.98	-1.34	1.12	1.12	2.00	2.00	0.00
1,200.00	4.00	140.128	1,199.84	-5.36	4.47	4.47	2.00	2.00	0.00
1,300.00	6.00	140.128	1,299.45	-12.04	10.06	10.05	2.00	2.00	0.00
1,400.00	8.00	140.128	1,398.70	-21.40	17.87	17.86	2.00	2.00	0.00
1,500.00	10.00	140.128	1,497.47	-33.40	27.90	27.87	2.00	2.00	0.00
1,600.00	12.00	140.128	1,595.62	-48.05	40.13	40.09	2.00	2.00	0.00
1,700.00	14.00	140.128	1,693.06	-65.31	54.55	54.50	2.00	2.00	0.00
1,800.00	16.00	140.128	1,789.64	-85.17	71.14	71.07	2.00	2.00	0.00
1,900.00	18.00	140.128	1,885.27	-107.61	89.89	89.80	2.00	2.00	0.00
1,996.89	19.94	140.128	1,976.89	-131.78	110.08	109.97	2.00	2.00	0.00
<b>Start 300.33 hold at 1996.89 MD</b>									
2,000.00	19.94	140.128	1,979.82	-132.59	110.76	110.64	0.00	0.00	0.00
2,100.00	19.94	140.128	2,073.82	-158.77	132.62	132.48	0.00	0.00	0.00
2,200.00	19.94	140.128	2,167.83	-184.94	154.48	154.32	0.00	0.00	0.00
2,297.21	19.94	140.128	2,259.22	-210.38	175.73	175.55	0.00	0.00	0.00
<b>Start Drop -1.00</b>									
2,300.00	19.91	140.128	2,261.84	-211.11	176.34	176.16	1.00	-1.00	0.00
2,400.00	18.91	140.128	2,356.15	-236.61	197.64	197.44	1.00	-1.00	0.00
2,500.00	17.91	140.128	2,451.03	-260.85	217.89	217.67	1.00	-1.00	0.00
2,600.00	16.91	140.128	2,546.45	-283.81	237.07	236.83	1.00	-1.00	0.00
2,700.00	15.91	140.128	2,642.37	-305.49	255.18	254.92	1.00	-1.00	0.00
2,800.00	14.91	140.128	2,738.78	-325.89	272.21	271.94	1.00	-1.00	0.00
2,900.00	13.91	140.128	2,835.63	-344.99	288.17	287.88	1.00	-1.00	0.00
3,000.00	12.91	140.128	2,932.90	-362.79	303.03	302.73	1.00	-1.00	0.00
3,100.00	11.91	140.128	3,030.57	-379.28	316.81	316.49	1.00	-1.00	0.00
3,200.00	10.91	140.128	3,128.59	-394.46	329.49	329.16	1.00	-1.00	0.00
3,300.00	9.91	140.128	3,226.94	-408.33	341.08	340.73	1.00	-1.00	0.00
3,400.00	8.91	140.128	3,325.59	-420.88	351.56	351.20	1.00	-1.00	0.00
3,500.00	7.91	140.128	3,424.52	-432.10	360.93	360.57	1.00	-1.00	0.00
3,600.00	6.91	140.128	3,523.68	-442.00	369.20	368.83	1.00	-1.00	0.00
3,700.00	5.91	140.128	3,623.05	-450.57	376.36	375.98	1.00	-1.00	0.00
3,800.00	4.91	140.128	3,722.61	-457.80	382.40	382.02	1.00	-1.00	0.00
3,900.00	3.91	140.128	3,822.31	-463.71	387.33	386.94	1.00	-1.00	0.00
4,000.00	2.91	140.128	3,922.13	-468.27	391.14	390.75	1.00	-1.00	0.00
4,100.00	1.91	140.128	4,022.04	-471.50	393.84	393.44	1.00	-1.00	0.00
4,200.00	0.91	140.128	4,122.01	-473.39	395.42	395.02	1.00	-1.00	0.00
4,290.99	0.00	0.000	4,213.00	-473.94	395.88	395.48	1.00	-1.00	0.00
<b>Start 1611.56 hold at 4290.99 MD</b>									
4,300.00	0.00	0.000	4,222.01	-473.94	395.88	395.48	0.00	0.00	0.00
4,400.00	0.00	0.000	4,322.01	-473.94	395.88	395.48	0.00	0.00	0.00
4,500.00	0.00	0.000	4,422.01	-473.94	395.88	395.48	0.00	0.00	0.00
4,600.00	0.00	0.000	4,522.01	-473.94	395.88	395.48	0.00	0.00	0.00

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-33-6457CN
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-32 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-33-6457CN	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 2		

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	4,622.01	-473.94	395.88	395.48	0.00	0.00	0.00
4,800.00	0.00	0.000	4,722.01	-473.94	395.88	395.48	0.00	0.00	0.00
4,900.00	0.00	0.000	4,822.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,000.00	0.00	0.000	4,922.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,100.00	0.00	0.000	5,022.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,200.00	0.00	0.000	5,122.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,300.00	0.00	0.000	5,222.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,400.00	0.00	0.000	5,322.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,500.00	0.00	0.000	5,422.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,600.00	0.00	0.000	5,522.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,700.00	0.00	0.000	5,622.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,800.00	0.00	0.000	5,722.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,900.00	0.00	0.000	5,822.01	-473.94	395.88	395.48	0.00	0.00	0.00
5,902.55	0.00	0.000	5,824.56	-473.94	395.88	395.48	0.00	0.00	0.00
<b>Start DLS 12.00 TFO 89.95</b>									
6,000.00	11.69	89.952	5,921.33	-473.93	405.79	405.39	12.00	12.00	0.00
6,100.00	23.69	89.952	6,016.43	-473.91	436.13	435.73	12.00	12.00	0.00
6,200.00	35.69	89.952	6,103.14	-473.87	485.57	485.18	12.00	12.00	0.00
6,300.00	47.69	89.952	6,177.67	-473.81	551.97	551.57	12.00	12.00	0.00
6,400.00	59.69	89.952	6,236.77	-473.74	632.40	632.01	12.00	12.00	0.00
6,500.00	71.69	89.952	6,277.86	-473.67	723.37	722.98	12.00	12.00	0.00
6,600.00	83.69	89.952	6,299.14	-473.59	820.90	820.50	12.00	12.00	0.00
6,656.89	90.52	89.952	6,302.01	-473.54	877.68	877.28	12.00	12.00	0.00
<b>Start 9688.65 hold at 6656.89 MD</b>									
6,700.00	90.52	89.952	6,301.61	-473.50	920.79	920.39	0.00	0.00	0.00
6,800.00	90.52	89.952	6,300.71	-473.42	1,020.79	1,020.39	0.00	0.00	0.00
6,900.00	90.52	89.952	6,299.80	-473.34	1,120.78	1,120.38	0.00	0.00	0.00
7,000.00	90.52	89.952	6,298.89	-473.25	1,220.78	1,220.38	0.00	0.00	0.00
7,100.00	90.52	89.952	6,297.98	-473.17	1,320.77	1,320.38	0.00	0.00	0.00
7,200.00	90.52	89.952	6,297.07	-473.09	1,420.77	1,420.37	0.00	0.00	0.00
7,300.00	90.52	89.952	6,296.16	-473.00	1,520.77	1,520.37	0.00	0.00	0.00
7,400.00	90.52	89.952	6,295.26	-472.92	1,620.76	1,620.36	0.00	0.00	0.00
7,500.00	90.52	89.952	6,294.35	-472.84	1,720.76	1,720.36	0.00	0.00	0.00
7,600.00	90.52	89.952	6,293.44	-472.75	1,820.75	1,820.36	0.00	0.00	0.00
7,700.00	90.52	89.952	6,292.53	-472.67	1,920.75	1,920.35	0.00	0.00	0.00
7,800.00	90.52	89.952	6,291.62	-472.59	2,020.74	2,020.35	0.00	0.00	0.00
7,900.00	90.52	89.952	6,290.71	-472.50	2,120.74	2,120.34	0.00	0.00	0.00
8,000.00	90.52	89.952	6,289.81	-472.42	2,220.74	2,220.34	0.00	0.00	0.00
8,100.00	90.52	89.952	6,288.90	-472.34	2,320.73	2,320.34	0.00	0.00	0.00
8,200.00	90.52	89.952	6,287.99	-472.25	2,420.73	2,420.33	0.00	0.00	0.00
8,300.00	90.52	89.952	6,287.08	-472.17	2,520.72	2,520.33	0.00	0.00	0.00
8,400.00	90.52	89.952	6,286.17	-472.09	2,620.72	2,620.32	0.00	0.00	0.00
8,500.00	90.52	89.952	6,285.26	-472.00	2,720.72	2,720.32	0.00	0.00	0.00
8,600.00	90.52	89.952	6,284.36	-471.92	2,820.71	2,820.31	0.00	0.00	0.00
8,700.00	90.52	89.952	6,283.45	-471.84	2,920.71	2,920.31	0.00	0.00	0.00
8,800.00	90.52	89.952	6,282.54	-471.75	3,020.70	3,020.31	0.00	0.00	0.00
8,900.00	90.52	89.952	6,281.63	-471.67	3,120.70	3,120.30	0.00	0.00	0.00
9,000.00	90.52	89.952	6,280.72	-471.58	3,220.69	3,220.30	0.00	0.00	0.00
9,100.00	90.52	89.952	6,279.81	-471.50	3,320.69	3,320.29	0.00	0.00	0.00
9,200.00	90.52	89.952	6,278.91	-471.42	3,420.69	3,420.29	0.00	0.00	0.00
9,300.00	90.52	89.952	6,278.00	-471.33	3,520.68	3,520.29	0.00	0.00	0.00
9,400.00	90.52	89.952	6,277.09	-471.25	3,620.68	3,620.28	0.00	0.00	0.00
9,500.00	90.52	89.952	6,276.18	-471.17	3,720.67	3,720.28	0.00	0.00	0.00

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-33-6457CN
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-32 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-33-6457CN	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 2		

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	90.52	89.952	6,275.27	-471.08	3,820.67	3,820.27	0.00	0.00	0.00
9,700.00	90.52	89.952	6,274.36	-471.00	3,920.67	3,920.27	0.00	0.00	0.00
9,800.00	90.52	89.952	6,273.46	-470.92	4,020.66	4,020.27	0.00	0.00	0.00
9,900.00	90.52	89.952	6,272.55	-470.83	4,120.66	4,120.26	0.00	0.00	0.00
10,000.00	90.52	89.952	6,271.64	-470.75	4,220.65	4,220.26	0.00	0.00	0.00
10,100.00	90.52	89.952	6,270.73	-470.67	4,320.65	4,320.25	0.00	0.00	0.00
10,200.00	90.52	89.952	6,269.82	-470.58	4,420.64	4,420.25	0.00	0.00	0.00
10,300.00	90.52	89.952	6,268.91	-470.50	4,520.64	4,520.24	0.00	0.00	0.00
10,400.00	90.52	89.952	6,268.01	-470.42	4,620.64	4,620.24	0.00	0.00	0.00
10,500.00	90.52	89.952	6,267.10	-470.33	4,720.63	4,720.24	0.00	0.00	0.00
10,600.00	90.52	89.952	6,266.19	-470.25	4,820.63	4,820.23	0.00	0.00	0.00
10,700.00	90.52	89.952	6,265.28	-470.17	4,920.62	4,920.23	0.00	0.00	0.00
10,800.00	90.52	89.952	6,264.37	-470.08	5,020.62	5,020.22	0.00	0.00	0.00
10,900.00	90.52	89.952	6,263.46	-470.00	5,120.62	5,120.22	0.00	0.00	0.00
11,000.00	90.52	89.952	6,262.56	-469.92	5,220.61	5,220.22	0.00	0.00	0.00
11,100.00	90.52	89.952	6,261.65	-469.83	5,320.61	5,320.21	0.00	0.00	0.00
11,200.00	90.52	89.952	6,260.74	-469.75	5,420.60	5,420.21	0.00	0.00	0.00
11,300.00	90.52	89.952	6,259.83	-469.67	5,520.60	5,520.20	0.00	0.00	0.00
11,400.00	90.52	89.952	6,258.92	-469.58	5,620.59	5,620.20	0.00	0.00	0.00
11,500.00	90.52	89.952	6,258.01	-469.50	5,720.59	5,720.20	0.00	0.00	0.00
11,600.00	90.52	89.952	6,257.11	-469.42	5,820.59	5,820.19	0.00	0.00	0.00
11,700.00	90.52	89.952	6,256.20	-469.33	5,920.58	5,920.19	0.00	0.00	0.00
11,800.00	90.52	89.952	6,255.29	-469.25	6,020.58	6,020.18	0.00	0.00	0.00
11,900.00	90.52	89.952	6,254.38	-469.17	6,120.57	6,120.18	0.00	0.00	0.00
12,000.00	90.52	89.952	6,253.47	-469.08	6,220.57	6,220.17	0.00	0.00	0.00
12,100.00	90.52	89.952	6,252.56	-469.00	6,320.57	6,320.17	0.00	0.00	0.00
12,200.00	90.52	89.952	6,251.66	-468.92	6,420.56	6,420.17	0.00	0.00	0.00
12,300.00	90.52	89.952	6,250.75	-468.83	6,520.56	6,520.16	0.00	0.00	0.00
12,400.00	90.52	89.952	6,249.84	-468.75	6,620.55	6,620.16	0.00	0.00	0.00
12,500.00	90.52	89.952	6,248.93	-468.67	6,720.55	6,720.15	0.00	0.00	0.00
12,600.00	90.52	89.952	6,248.02	-468.58	6,820.54	6,820.15	0.00	0.00	0.00
12,700.00	90.52	89.952	6,247.11	-468.50	6,920.54	6,920.15	0.00	0.00	0.00
12,800.00	90.52	89.952	6,246.21	-468.42	7,020.54	7,020.14	0.00	0.00	0.00
12,900.00	90.52	89.952	6,245.30	-468.33	7,120.53	7,120.14	0.00	0.00	0.00
13,000.00	90.52	89.952	6,244.39	-468.25	7,220.53	7,220.13	0.00	0.00	0.00
13,100.00	90.52	89.952	6,243.48	-468.17	7,320.52	7,320.13	0.00	0.00	0.00
13,200.00	90.52	89.952	6,242.57	-468.08	7,420.52	7,420.12	0.00	0.00	0.00
13,300.00	90.52	89.952	6,241.66	-468.00	7,520.52	7,520.12	0.00	0.00	0.00
13,400.00	90.52	89.952	6,240.76	-467.92	7,620.51	7,620.12	0.00	0.00	0.00
13,500.00	90.52	89.952	6,239.85	-467.83	7,720.51	7,720.11	0.00	0.00	0.00
13,600.00	90.52	89.952	6,238.94	-467.75	7,820.50	7,820.11	0.00	0.00	0.00
13,700.00	90.52	89.952	6,238.03	-467.67	7,920.50	7,920.10	0.00	0.00	0.00
13,800.00	90.52	89.952	6,237.12	-467.58	8,020.49	8,020.10	0.00	0.00	0.00
13,900.00	90.52	89.952	6,236.21	-467.50	8,120.49	8,120.10	0.00	0.00	0.00
14,000.00	90.52	89.952	6,235.31	-467.42	8,220.49	8,220.09	0.00	0.00	0.00
14,100.00	90.52	89.952	6,234.40	-467.33	8,320.48	8,320.09	0.00	0.00	0.00
14,200.00	90.52	89.952	6,233.49	-467.25	8,420.48	8,420.08	0.00	0.00	0.00
14,300.00	90.52	89.952	6,232.58	-467.17	8,520.47	8,520.08	0.00	0.00	0.00
14,400.00	90.52	89.952	6,231.67	-467.08	8,620.47	8,620.08	0.00	0.00	0.00
14,500.00	90.52	89.952	6,230.76	-467.00	8,720.47	8,720.07	0.00	0.00	0.00
14,600.00	90.52	89.952	6,229.86	-466.92	8,820.46	8,820.07	0.00	0.00	0.00
14,700.00	90.52	89.952	6,228.95	-466.83	8,920.46	8,920.06	0.00	0.00	0.00
14,800.00	90.52	89.952	6,228.04	-466.75	9,020.45	9,020.06	0.00	0.00	0.00
14,900.00	90.52	89.952	6,227.13	-466.67	9,120.45	9,120.05	0.00	0.00	0.00

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-33-6457CN
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4681' & KB 20' @ 4701.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-32 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-33-6457CN	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 2		

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	90.52	89.952	6,226.22	-466.58	9,220.44	9,220.05	0.00	0.00	0.00
15,100.00	90.52	89.952	6,225.31	-466.50	9,320.44	9,320.05	0.00	0.00	0.00
15,200.00	90.52	89.952	6,224.41	-466.42	9,420.44	9,420.04	0.00	0.00	0.00
15,300.00	90.52	89.952	6,223.50	-466.33	9,520.43	9,520.04	0.00	0.00	0.00
15,400.00	90.52	89.952	6,222.59	-466.25	9,620.43	9,620.03	0.00	0.00	0.00
15,500.00	90.52	89.952	6,221.68	-466.17	9,720.42	9,720.03	0.00	0.00	0.00
15,600.00	90.52	89.952	6,220.77	-466.08	9,820.42	9,820.03	0.00	0.00	0.00
15,700.00	90.52	89.952	6,219.86	-466.00	9,920.42	9,920.02	0.00	0.00	0.00
15,800.00	90.52	89.952	6,218.96	-465.92	10,020.41	10,020.02	0.00	0.00	0.00
15,900.00	90.52	89.952	6,218.05	-465.83	10,120.41	10,120.01	0.00	0.00	0.00
16,000.00	90.52	89.952	6,217.14	-465.75	10,220.40	10,220.01	0.00	0.00	0.00
16,100.00	90.52	89.952	6,216.23	-465.67	10,320.40	10,320.01	0.00	0.00	0.00
16,200.00	90.52	89.952	6,215.32	-465.58	10,420.39	10,420.00	0.00	0.00	0.00
16,300.00	90.52	89.952	6,214.41	-465.50	10,520.39	10,520.00	0.00	0.00	0.00
16,345.54	90.52	89.952	6,214.00	-465.46	10,565.93	10,565.53	0.00	0.00	0.00
TD at 16345.54									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
4-62-33-6457CN PBHL	0.00	0.000	6,214.00	-465.46	10,565.93	1,341,110.39	3,334,343.04	40° 15' 48.769 N	104° 18' 6.862 W
- plan hits target center									
- Point									
4-62-33-6457CN LP	0.00	0.000	6,302.00	-473.53	877.68	1,340,975.56	3,324,655.75	40° 15' 48.712 N	104° 20' 11.839 W
- plan misses target center by 0.01ft at 6656.89ft MD (6302.01 TVD, -473.54 N, 877.68 E)									
- Point									

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00
1,996.89	1,976.89	-131.78	110.08	Start 300.33 hold at 1996.89 MD
2,297.21	2,259.22	-210.38	175.73	Start Drop -1.00
4,290.99	4,213.00	-473.94	395.88	Start 1611.56 hold at 4290.99 MD
5,902.55	5,824.56	-473.94	395.88	Start DLS 12.00 TFO 89.95
6,656.89	6,302.01	-473.54	877.68	Start 9688.65 hold at 6656.89 MD
16,345.54	6,214.00	-465.46	10,565.93	TD at 16345.54