

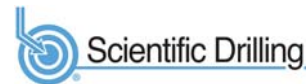
PROJECT DETAILS: Weld County, CO NAD 83

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 3-62-4\_5 SESE Pad  
 Well: Anschutz Equus Farm 3-62-4-4148C  
 Wellbore: OH  
 Design: Plan 1



Azimuths to True North  
 Magnetic North: 8.27°



Magnetic Field  
 Strength: 52358.6nT  
 Dip Angle: 66.92°  
 Date: 9/6/2017  
 Model: HDGM

Plan: Plan 1 (Anschutz Equus Farm 3-62-4-4148C/OH)

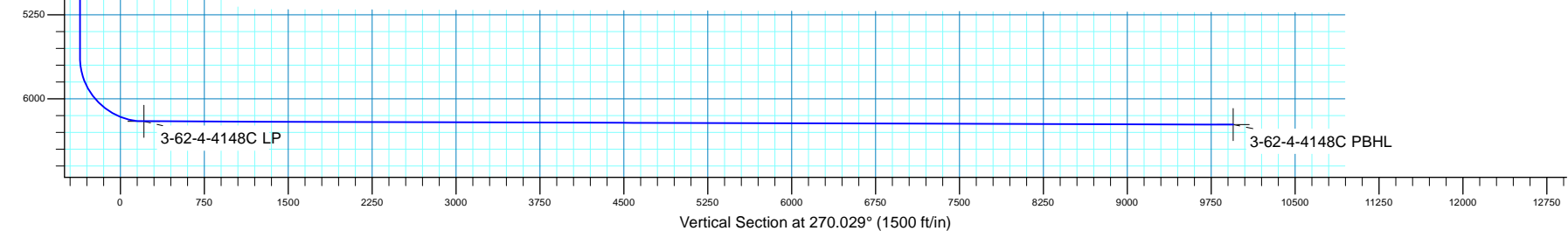
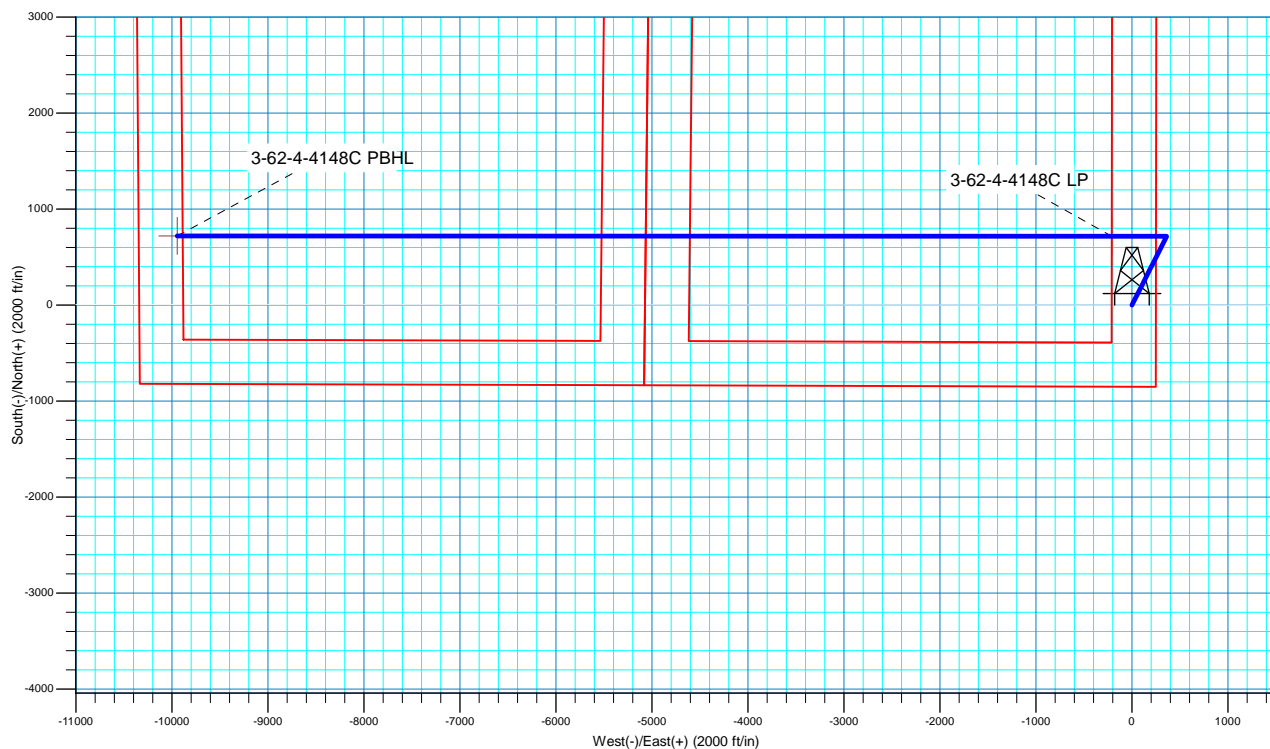
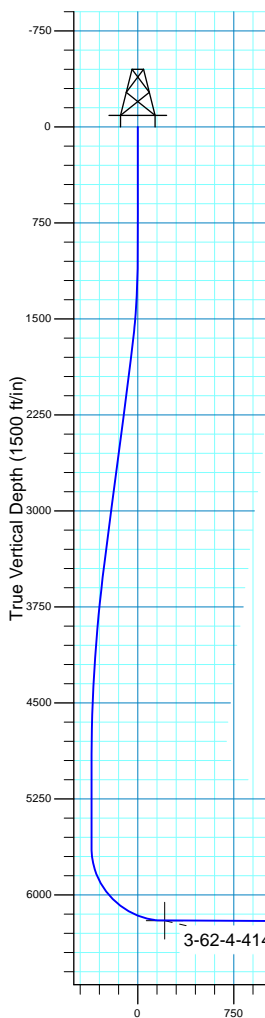
Created By: Seth Burstad Date: 9-06-2017

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
1803.05	16.06	26.806	1792.58	99.80	50.43	2.00	26.81	-50.38
3491.22	16.06	26.806	3414.85	516.66	261.05	0.00	0.00	-260.79
5097.32	0.00	0.000	5000.00	716.27	361.91	1.00	180.00	-361.55
5725.36	0.00	0.000	5628.04	716.27	361.91	0.00	0.00	-361.55
6623.65	89.83	270.029	6201.00	716.56	-209.34	10.00	270.03	209.70
16360.20	89.83	270.029	6230.00	721.48	-9945.84	0.00	0.00	9946.20

WELL DETAILS: Anschutz Equus Farm 3-62-4-4148C

		GL 4591.4' & KB 20' @ 4611.40ft				
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1336129.45	3329293.48	40° 15' 0.219 N	104° 19' 12.850 W	





**Bill Barrett Corporation**

## **Bill Barrett Corp.**

**Weld County, CO NAD 83**

**Anschutz Equus Farms 3-62-4\_5 SESE Pad**

**Anschutz Equus Farm 3-62-4-4148C**

**OH**

**Plan: Plan 1**

## **Standard Planning Report**

**06 September, 2017**



**Scientific Drilling**

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



<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farm 3-62-4-4148C
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Site:</b>	Anschutz Equus Farms 3-62-4_5 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farm 3-62-4-4148C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1		

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

Site						Anschutz Equus Farms 3-62-4_5 SESE Pad, Site Center : Anschutz Equus Farm 3-62-4-4148C					
Site Position:				Northing:		1,336,129.47 usft		Latitude:		40° 15' 0.220 N	
From:		Lat/Long		Easting:		3,329,293.49 usft		Longitude:		104° 19' 12.850 W	
Position Uncertainty:		0.00 ft		Slot Radius:		13.200 in		Grid Convergence:		0.76 °	

Well	Anschutz Equus Farm 3-62-4-4148C, 850' FSL 250' FEL Sec 4 T3N R62W					
Well Position	+N/-S	-0.01 ft	Northing:	1,336,129.46 usft	Latitude:	40° 15' 0.219 N
	+E/-W	0.00 ft	Easting:	3,329,293.49 usft	Longitude:	104° 19' 12.850 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,591.40 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	9/6/2017	8.27	66.92	52,359

<b>Design</b>	Plan 1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	270.029

<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	
1,803.05	16.06	26.806	1,792.58	99.80	50.43	2.00	2.00	0.00	26.81	
3,491.22	16.06	26.806	3,414.85	516.66	261.05	0.00	0.00	0.00	0.00	
5,097.32	0.00	0.000	5,000.00	716.27	361.91	1.00	-1.00	0.00	180.00	
5,725.36	0.00	0.000	5,628.04	716.27	361.91	0.00	0.00	0.00	0.00	
6,623.65	89.83	270.029	6,201.00	716.56	-209.34	10.00	10.00	-10.02	270.03	
16,360.20	89.83	270.029	6,230.00	721.48	-9,945.84	0.00	0.00	0.00	0.00	3-62-4-4148C PBHL

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farm 3-62-4-4148C
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Site:</b>	Anschutz Equus Farms 3-62-4_5 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farm 3-62-4-4148C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
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	26.806	1,099.98	1.56	0.79	-0.79	2.00	2.00	0.00
1,200.00	4.00	26.806	1,199.84	6.23	3.15	-3.14	2.00	2.00	0.00
1,300.00	6.00	26.806	1,299.45	14.01	7.08	-7.07	2.00	2.00	0.00
1,400.00	8.00	26.806	1,398.70	24.88	12.57	-12.56	2.00	2.00	0.00
1,500.00	10.00	26.806	1,497.47	38.85	19.63	-19.61	2.00	2.00	0.00
1,600.00	12.00	26.806	1,595.62	55.88	28.23	-28.20	2.00	2.00	0.00
1,700.00	14.00	26.806	1,693.06	75.95	38.38	-38.34	2.00	2.00	0.00
1,800.00	16.00	26.806	1,789.64	99.05	50.05	-50.00	2.00	2.00	0.00
1,803.05	16.06	26.806	1,792.58	99.80	50.43	-50.38	2.00	2.00	0.00
<b>Start 1688.16 hold at 1803.05 MD</b>									
1,900.00	16.06	26.806	1,885.74	123.74	62.52	-62.46	0.00	0.00	0.00
2,000.00	16.06	26.806	1,981.84	148.44	75.00	-74.93	0.00	0.00	0.00
2,100.00	16.06	26.806	2,077.93	173.13	87.48	-87.39	0.00	0.00	0.00
2,200.00	16.06	26.806	2,174.03	197.82	99.95	-99.85	0.00	0.00	0.00
2,300.00	16.06	26.806	2,270.13	222.52	112.43	-112.32	0.00	0.00	0.00
2,400.00	16.06	26.806	2,366.22	247.21	124.91	-124.78	0.00	0.00	0.00
2,500.00	16.06	26.806	2,462.32	271.90	137.38	-137.25	0.00	0.00	0.00
2,600.00	16.06	26.806	2,558.42	296.59	149.86	-149.71	0.00	0.00	0.00
2,700.00	16.06	26.806	2,654.51	321.29	162.34	-162.17	0.00	0.00	0.00
2,800.00	16.06	26.806	2,750.61	345.98	174.81	-174.64	0.00	0.00	0.00
2,900.00	16.06	26.806	2,846.71	370.67	187.29	-187.10	0.00	0.00	0.00
3,000.00	16.06	26.806	2,942.80	395.37	199.77	-199.57	0.00	0.00	0.00
3,100.00	16.06	26.806	3,038.90	420.06	212.24	-212.03	0.00	0.00	0.00
3,200.00	16.06	26.806	3,135.00	444.75	224.72	-224.50	0.00	0.00	0.00
3,300.00	16.06	26.806	3,231.09	469.45	237.20	-236.96	0.00	0.00	0.00
3,400.00	16.06	26.806	3,327.19	494.14	249.67	-249.42	0.00	0.00	0.00
3,491.22	16.06	26.806	3,414.85	516.66	261.05	-260.79	0.00	0.00	0.00
<b>Start Drop -1.00</b>									
3,500.00	15.97	26.806	3,423.29	518.83	262.15	-261.88	1.00	-1.00	0.00
3,600.00	14.97	26.806	3,519.66	542.64	274.18	-273.90	1.00	-1.00	0.00
3,700.00	13.97	26.806	3,616.49	564.94	285.45	-285.16	1.00	-1.00	0.00
3,800.00	12.97	26.806	3,713.74	585.74	295.96	-295.66	1.00	-1.00	0.00
3,900.00	11.97	26.806	3,811.37	605.02	305.70	-305.39	1.00	-1.00	0.00
4,000.00	10.97	26.806	3,909.38	622.77	314.67	-314.35	1.00	-1.00	0.00
4,100.00	9.97	26.806	4,007.71	638.99	322.86	-322.54	1.00	-1.00	0.00
4,200.00	8.97	26.806	4,106.34	653.68	330.29	-329.96	1.00	-1.00	0.00
4,300.00	7.97	26.806	4,205.25	666.83	336.93	-336.59	1.00	-1.00	0.00
4,400.00	6.97	26.806	4,304.40	678.44	342.80	-342.45	1.00	-1.00	0.00
4,500.00	5.97	26.806	4,403.76	688.51	347.88	-347.53	1.00	-1.00	0.00
4,600.00	4.97	26.806	4,503.30	697.02	352.18	-351.83	1.00	-1.00	0.00
4,700.00	3.97	26.806	4,603.00	703.98	355.70	-355.34	1.00	-1.00	0.00

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farm 3-62-4-4148C
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Site:</b>	Anschutz Equus Farms 3-62-4_5 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farm 3-62-4-4148C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,800.00	2.97	26.806	4,702.81	709.39	358.43	-358.07	1.00	-1.00	0.00
4,900.00	1.97	26.806	4,802.72	713.24	360.38	-360.02	1.00	-1.00	0.00
5,000.00	0.97	26.806	4,902.68	715.53	361.54	-361.18	1.00	-1.00	0.00
5,097.32	0.00	0.000	5,000.00	716.27	361.91	-361.55	1.00	-1.00	0.00
<b>Start 628.04 hold at 5097.32 MD</b>									
5,100.00	0.00	0.000	5,002.68	716.27	361.91	-361.55	0.00	0.00	0.00
5,200.00	0.00	0.000	5,102.68	716.27	361.91	-361.55	0.00	0.00	0.00
5,300.00	0.00	0.000	5,202.68	716.27	361.91	-361.55	0.00	0.00	0.00
5,400.00	0.00	0.000	5,302.68	716.27	361.91	-361.55	0.00	0.00	0.00
5,500.00	0.00	0.000	5,402.68	716.27	361.91	-361.55	0.00	0.00	0.00
5,600.00	0.00	0.000	5,502.68	716.27	361.91	-361.55	0.00	0.00	0.00
5,700.00	0.00	0.000	5,602.68	716.27	361.91	-361.55	0.00	0.00	0.00
5,725.36	0.00	0.000	5,628.04	716.27	361.91	-361.55	0.00	0.00	0.00
<b>Start DLS 10.00 TFO 270.03</b>									
5,800.00	7.46	270.029	5,702.47	716.27	357.06	-356.69	10.00	10.00	0.00
5,900.00	17.46	270.029	5,799.99	716.28	335.50	-335.14	10.00	10.00	0.00
6,000.00	27.46	270.029	5,892.28	716.30	297.34	-296.98	10.00	10.00	0.00
6,100.00	37.46	270.029	5,976.55	716.33	243.73	-243.37	10.00	10.00	0.00
6,200.00	47.46	270.029	6,050.23	716.36	176.30	-175.94	10.00	10.00	0.00
6,300.00	57.46	270.029	6,111.07	716.40	97.11	-96.74	10.00	10.00	0.00
6,400.00	67.46	270.029	6,157.25	716.45	8.55	-8.18	10.00	10.00	0.00
6,500.00	77.46	270.029	6,187.34	716.50	-86.68	87.05	10.00	10.00	0.00
6,600.00	87.46	270.029	6,200.44	716.55	-185.70	186.06	10.00	10.00	0.00
6,623.65	89.83	270.029	6,201.00	716.56	-209.34	209.70	10.00	10.00	0.00
<b>Start 9736.54 hold at 6623.65 MD</b>									
6,700.00	89.83	270.029	6,201.22	716.60	-285.69	286.05	0.00	0.00	0.00
6,800.00	89.83	270.029	6,201.52	716.65	-385.69	386.05	0.00	0.00	0.00
6,900.00	89.83	270.029	6,201.82	716.70	-485.69	486.05	0.00	0.00	0.00
7,000.00	89.83	270.029	6,202.12	716.75	-585.69	586.05	0.00	0.00	0.00
7,100.00	89.83	270.029	6,202.41	716.80	-685.68	686.05	0.00	0.00	0.00
7,200.00	89.83	270.029	6,202.71	716.85	-785.68	786.05	0.00	0.00	0.00
7,300.00	89.83	270.029	6,203.01	716.90	-885.68	886.05	0.00	0.00	0.00
7,400.00	89.83	270.029	6,203.31	716.95	-985.68	986.05	0.00	0.00	0.00
7,500.00	89.83	270.029	6,203.61	717.00	-1,085.68	1,086.05	0.00	0.00	0.00
7,600.00	89.83	270.029	6,203.90	717.05	-1,185.68	1,186.05	0.00	0.00	0.00
7,700.00	89.83	270.029	6,204.20	717.10	-1,285.68	1,286.04	0.00	0.00	0.00
7,800.00	89.83	270.029	6,204.50	717.15	-1,385.68	1,386.04	0.00	0.00	0.00
7,900.00	89.83	270.029	6,204.80	717.20	-1,485.68	1,486.04	0.00	0.00	0.00
8,000.00	89.83	270.029	6,205.10	717.25	-1,585.68	1,586.04	0.00	0.00	0.00
8,100.00	89.83	270.029	6,205.39	717.30	-1,685.68	1,686.04	0.00	0.00	0.00
8,200.00	89.83	270.029	6,205.69	717.35	-1,785.68	1,786.04	0.00	0.00	0.00
8,300.00	89.83	270.029	6,205.99	717.41	-1,885.68	1,886.04	0.00	0.00	0.00
8,400.00	89.83	270.029	6,206.29	717.46	-1,985.68	1,986.04	0.00	0.00	0.00
8,500.00	89.83	270.029	6,206.58	717.51	-2,085.68	2,086.04	0.00	0.00	0.00
8,600.00	89.83	270.029	6,206.88	717.56	-2,185.68	2,186.04	0.00	0.00	0.00
8,700.00	89.83	270.029	6,207.18	717.61	-2,285.68	2,286.04	0.00	0.00	0.00
8,800.00	89.83	270.029	6,207.48	717.66	-2,385.68	2,386.04	0.00	0.00	0.00
8,900.00	89.83	270.029	6,207.78	717.71	-2,485.68	2,486.04	0.00	0.00	0.00
9,000.00	89.83	270.029	6,208.07	717.76	-2,585.68	2,586.04	0.00	0.00	0.00
9,100.00	89.83	270.029	6,208.37	717.81	-2,685.68	2,686.04	0.00	0.00	0.00
9,200.00	89.83	270.029	6,208.67	717.86	-2,785.68	2,786.04	0.00	0.00	0.00
9,300.00	89.83	270.029	6,208.97	717.91	-2,885.67	2,886.04	0.00	0.00	0.00
9,400.00	89.83	270.029	6,209.27	717.96	-2,985.67	2,986.04	0.00	0.00	0.00

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farm 3-62-4-4148C
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Site:</b>	Anschutz Equus Farms 3-62-4_5 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farm 3-62-4-4148C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,500.00	89.83	270.029	6,209.56	718.01	-3,085.67	3,086.04	0.00	0.00	0.00
9,600.00	89.83	270.029	6,209.86	718.06	-3,185.67	3,186.04	0.00	0.00	0.00
9,700.00	89.83	270.029	6,210.16	718.11	-3,285.67	3,286.04	0.00	0.00	0.00
9,800.00	89.83	270.029	6,210.46	718.16	-3,385.67	3,386.04	0.00	0.00	0.00
9,900.00	89.83	270.029	6,210.76	718.21	-3,485.67	3,486.04	0.00	0.00	0.00
10,000.00	89.83	270.029	6,211.05	718.26	-3,585.67	3,586.03	0.00	0.00	0.00
10,100.00	89.83	270.029	6,211.35	718.31	-3,685.67	3,686.03	0.00	0.00	0.00
10,200.00	89.83	270.029	6,211.65	718.37	-3,785.67	3,786.03	0.00	0.00	0.00
10,300.00	89.83	270.029	6,211.95	718.42	-3,885.67	3,886.03	0.00	0.00	0.00
10,400.00	89.83	270.029	6,212.24	718.47	-3,985.67	3,986.03	0.00	0.00	0.00
10,500.00	89.83	270.029	6,212.54	718.52	-4,085.67	4,086.03	0.00	0.00	0.00
10,600.00	89.83	270.029	6,212.84	718.57	-4,185.67	4,186.03	0.00	0.00	0.00
10,700.00	89.83	270.029	6,213.14	718.62	-4,285.67	4,286.03	0.00	0.00	0.00
10,800.00	89.83	270.029	6,213.44	718.67	-4,385.67	4,386.03	0.00	0.00	0.00
10,900.00	89.83	270.029	6,213.73	718.72	-4,485.67	4,486.03	0.00	0.00	0.00
11,000.00	89.83	270.029	6,214.03	718.77	-4,585.67	4,586.03	0.00	0.00	0.00
11,100.00	89.83	270.029	6,214.33	718.82	-4,685.67	4,686.03	0.00	0.00	0.00
11,200.00	89.83	270.029	6,214.63	718.87	-4,785.67	4,786.03	0.00	0.00	0.00
11,300.00	89.83	270.029	6,214.93	718.92	-4,885.67	4,886.03	0.00	0.00	0.00
11,400.00	89.83	270.029	6,215.22	718.97	-4,985.67	4,986.03	0.00	0.00	0.00
11,500.00	89.83	270.029	6,215.52	719.02	-5,085.66	5,086.03	0.00	0.00	0.00
11,600.00	89.83	270.029	6,215.82	719.07	-5,185.66	5,186.03	0.00	0.00	0.00
11,700.00	89.83	270.029	6,216.12	719.12	-5,285.66	5,286.03	0.00	0.00	0.00
11,800.00	89.83	270.029	6,216.42	719.17	-5,385.66	5,386.03	0.00	0.00	0.00
11,900.00	89.83	270.029	6,216.71	719.22	-5,485.66	5,486.03	0.00	0.00	0.00
12,000.00	89.83	270.029	6,217.01	719.27	-5,585.66	5,586.03	0.00	0.00	0.00
12,100.00	89.83	270.029	6,217.31	719.33	-5,685.66	5,686.03	0.00	0.00	0.00
12,200.00	89.83	270.029	6,217.61	719.38	-5,785.66	5,786.02	0.00	0.00	0.00
12,300.00	89.83	270.029	6,217.90	719.43	-5,885.66	5,886.02	0.00	0.00	0.00
12,400.00	89.83	270.029	6,218.20	719.48	-5,985.66	5,986.02	0.00	0.00	0.00
12,500.00	89.83	270.029	6,218.50	719.53	-6,085.66	6,086.02	0.00	0.00	0.00
12,600.00	89.83	270.029	6,218.80	719.58	-6,185.66	6,186.02	0.00	0.00	0.00
12,700.00	89.83	270.029	6,219.10	719.63	-6,285.66	6,286.02	0.00	0.00	0.00
12,800.00	89.83	270.029	6,219.39	719.68	-6,385.66	6,386.02	0.00	0.00	0.00
12,900.00	89.83	270.029	6,219.69	719.73	-6,485.66	6,486.02	0.00	0.00	0.00
13,000.00	89.83	270.029	6,219.99	719.78	-6,585.66	6,586.02	0.00	0.00	0.00
13,100.00	89.83	270.029	6,220.29	719.83	-6,685.66	6,686.02	0.00	0.00	0.00
13,200.00	89.83	270.029	6,220.59	719.88	-6,785.66	6,786.02	0.00	0.00	0.00
13,300.00	89.83	270.029	6,220.88	719.93	-6,885.66	6,886.02	0.00	0.00	0.00
13,400.00	89.83	270.029	6,221.18	719.98	-6,985.66	6,986.02	0.00	0.00	0.00
13,500.00	89.83	270.029	6,221.48	720.03	-7,085.66	7,086.02	0.00	0.00	0.00
13,600.00	89.83	270.029	6,221.78	720.08	-7,185.66	7,186.02	0.00	0.00	0.00
13,700.00	89.83	270.029	6,222.08	720.13	-7,285.65	7,286.02	0.00	0.00	0.00
13,800.00	89.83	270.029	6,222.37	720.18	-7,385.65	7,386.02	0.00	0.00	0.00
13,900.00	89.83	270.029	6,222.67	720.23	-7,485.65	7,486.02	0.00	0.00	0.00
14,000.00	89.83	270.029	6,222.97	720.29	-7,585.65	7,586.02	0.00	0.00	0.00
14,100.00	89.83	270.029	6,223.27	720.34	-7,685.65	7,686.02	0.00	0.00	0.00
14,200.00	89.83	270.029	6,223.57	720.39	-7,785.65	7,786.02	0.00	0.00	0.00
14,300.00	89.83	270.029	6,223.86	720.44	-7,885.65	7,886.02	0.00	0.00	0.00
14,400.00	89.83	270.029	6,224.16	720.49	-7,985.65	7,986.02	0.00	0.00	0.00
14,500.00	89.83	270.029	6,224.46	720.54	-8,085.65	8,086.01	0.00	0.00	0.00
14,600.00	89.83	270.029	6,224.76	720.59	-8,185.65	8,186.01	0.00	0.00	0.00
14,700.00	89.83	270.029	6,225.05	720.64	-8,285.65	8,286.01	0.00	0.00	0.00
14,800.00	89.83	270.029	6,225.35	720.69	-8,385.65	8,386.01	0.00	0.00	0.00

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farm 3-62-4-4148C
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4591.4' & KB 20' @ 4611.40ft
<b>Site:</b>	Anschutz Equus Farms 3-62-4_5 SESE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farm 3-62-4-4148C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
14,900.00	89.83	270.029	6,225.65	720.74	-8,485.65	8,486.01	0.00	0.00	0.00
15,000.00	89.83	270.029	6,225.95	720.79	-8,585.65	8,586.01	0.00	0.00	0.00
15,100.00	89.83	270.029	6,226.25	720.84	-8,685.65	8,686.01	0.00	0.00	0.00
15,200.00	89.83	270.029	6,226.54	720.89	-8,785.65	8,786.01	0.00	0.00	0.00
15,300.00	89.83	270.029	6,226.84	720.94	-8,885.65	8,886.01	0.00	0.00	0.00
15,400.00	89.83	270.029	6,227.14	720.99	-8,985.65	8,986.01	0.00	0.00	0.00
15,500.00	89.83	270.029	6,227.44	721.04	-9,085.65	9,086.01	0.00	0.00	0.00
15,600.00	89.83	270.029	6,227.74	721.09	-9,185.65	9,186.01	0.00	0.00	0.00
15,700.00	89.83	270.029	6,228.03	721.14	-9,285.65	9,286.01	0.00	0.00	0.00
15,800.00	89.83	270.029	6,228.33	721.19	-9,385.65	9,386.01	0.00	0.00	0.00
15,900.00	89.83	270.029	6,228.63	721.25	-9,485.64	9,486.01	0.00	0.00	0.00
16,000.00	89.83	270.029	6,228.93	721.30	-9,585.64	9,586.01	0.00	0.00	0.00
16,100.00	89.83	270.029	6,229.23	721.35	-9,685.64	9,686.01	0.00	0.00	0.00
16,200.00	89.83	270.029	6,229.52	721.40	-9,785.64	9,786.01	0.00	0.00	0.00
16,300.00	89.83	270.029	6,229.82	721.45	-9,885.64	9,886.01	0.00	0.00	0.00
16,360.20	89.83	270.029	6,230.00	721.48	-9,945.84	9,946.20	0.00	0.00	0.00
TD at 16360.20									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
3-62-4-4148C LP	0.00	0.000	6,201.00	716.57	-209.34	1,336,843.17	3,329,074.63	40° 15' 7.301 N	104° 19' 15.550 W
- hit/miss target									
- Shape									
- Point									
3-62-4-4148C PBHL	0.00	0.000	6,230.00	721.48	-9,945.84	1,336,718.55	3,319,338.95	40° 15' 7.330 N	104° 21' 21.128 W
- plan misses target center by 0.01ft at 6623.65ft MD (6201.00 TVD, 716.56 N, -209.34 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
1,803.05	1,792.58	99.80	50.43	Start 1688.16 hold at 1803.05 MD
3,491.22	3,414.85	516.66	261.05	Start Drop -1.00
5,097.32	5,000.00	716.27	361.91	Start 628.04 hold at 5097.32 MD
5,725.36	5,628.04	716.27	361.91	Start DLS 10.00 TFO 270.03
6,623.65	6,201.00	716.56	-209.34	Start 9736.54 hold at 6623.65 MD
16,360.20	6,230.00	721.48	-9,945.84	TD at 16360.20