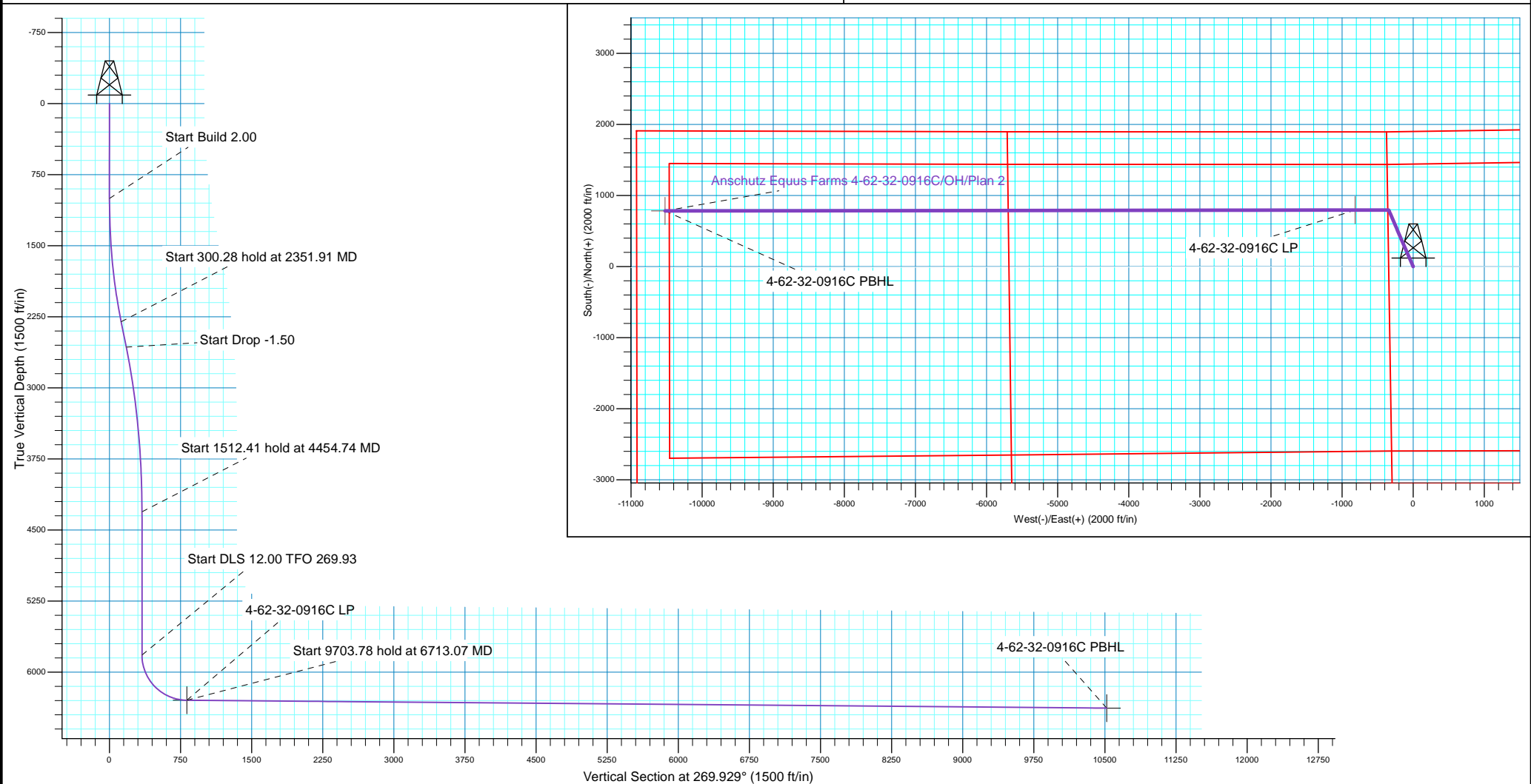



SECTION DETAILS

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
2351.91	27.04	336.613	2302.29	287.39	-124.29	2.00	336.61	123.93
2652.19	27.04	336.613	2569.75	412.68	-178.47	0.00	0.00	177.96
4454.74	0.00	0.000	4306.14	795.86	-344.19	1.50	180.00	343.20
5967.15	0.00	0.000	5818.55	795.86	-344.19	0.00	0.00	343.20
6713.07	89.51	269.929	6296.00	795.28	-817.57	12.00	269.93	816.58
16416.85	89.51	269.929	6379.00	783.29	-10520.99	0.00	0.00	10520.01

WELL DETAILS: Anschutz Equus Farms 4-62-32-0916C

		GL 4657' & KB 20' @ 4677.00ft		4657.00	Longitude
+N/-S	+E/-W	Northing	Easting	Latitude	
0.00	0.00	1343489.79	3324467.59	40° 16' 13.580 N	104° 20' 13.841 W





Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz Equus Farms 4-62-33_34 SWNW Pad

Anschutz Equus Farms 4-62-32-0916C

OH

Plan: Plan 2

Standard Planning Report

18 July, 2017



Scientific Drilling

www.scientificdrilling.com



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-32-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4657' & KB 20' @ 4677.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4657' & KB 20' @ 4677.00ft
Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-32-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

Project	Weld County, 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		

Site						Anschutz Equus Farms 4-62-33_34 SWNW Pad, Site Center : Anschutz Equus Farms 4-62-32-0916C											
Site Position:			Northing:			1,343,489.81 usft			Latitude:			40° 16' 13.580 N					
From:			Lat/Long			Easting:			3,324,467.60 usft			Longitude:			104° 20' 13.841 W		
Position Uncertainty:			0.00 ft			Slot Radius:			13.200 in			Grid Convergence:			0.75		

Well	Anschutz Equus Farms 4-62-32-0916C, 1901' FNL 345' FWL Sec 33 T4N R62W					
Well Position	+N-S	-0.01 ft	Northing:	1,343,489.79 usft	Latitude:	40° 16' 13.580 N
	+E-W	0.00 ft	Easting:	3,324,467.60 usft	Longitude:	104° 20' 13.841 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,657.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	4/13/2017	8.14	66.85	52,412
	HDGM	7/18/2017	8.27	66.93	52,363

Design	Plan 2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	269.929

Plan Sections										
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	
2,351.91	27.04	336.613	2,302.29	287.39	-124.29	2.00	2.00	0.00	336.61	
2,652.19	27.04	336.613	2,569.75	412.68	-178.47	0.00	0.00	0.00	0.00	
4,454.74	0.00	0.000	4,306.14	795.86	-344.19	1.50	-1.50	0.00	180.00	
5,967.15	0.00	0.000	5,818.55	795.86	-344.19	0.00	0.00	0.00	0.00	
6,713.07	89.51	269.929	6,296.00	795.28	-817.57	12.00	12.00	-12.08	269.93	
16,416.85	89.51	269.929	6,379.00	783.28	-10,520.99	0.00	0.00	0.00	0.00	4-62-32-0916C PBHL

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-32-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4657' & KB 20' @ 4677.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4657' & KB 20' @ 4677.00ft
Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-32-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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
Start Build 2.00									
1,100.00	2.00	336.613	1,099.98	1.60	-0.69	0.69	2.00	2.00	0.00
1,200.00	4.00	336.613	1,199.84	6.41	-2.77	2.76	2.00	2.00	0.00
1,300.00	6.00	336.613	1,299.45	14.40	-6.23	6.21	2.00	2.00	0.00
1,400.00	8.00	336.613	1,398.70	25.59	-11.07	11.04	2.00	2.00	0.00
1,500.00	10.00	336.613	1,497.47	39.95	-17.28	17.23	2.00	2.00	0.00
1,600.00	12.00	336.613	1,595.62	57.46	-24.85	24.78	2.00	2.00	0.00
1,700.00	14.00	336.613	1,693.06	78.11	-33.78	33.68	2.00	2.00	0.00
1,800.00	16.00	336.613	1,789.64	101.86	-44.05	43.93	2.00	2.00	0.00
1,900.00	18.00	336.613	1,885.27	128.69	-55.66	55.50	2.00	2.00	0.00
2,000.00	20.00	336.613	1,979.82	158.57	-68.58	68.38	2.00	2.00	0.00
2,100.00	22.00	336.613	2,073.17	191.46	-82.80	82.57	2.00	2.00	0.00
2,200.00	24.00	336.613	2,165.21	227.33	-98.31	98.03	2.00	2.00	0.00
2,300.00	26.00	336.613	2,255.84	266.11	-115.09	114.76	2.00	2.00	0.00
2,351.91	27.04	336.613	2,302.29	287.39	-124.29	123.93	2.00	2.00	0.00
Start 300.28 hold at 2351.91 MD									
2,400.00	27.04	336.613	2,345.12	307.45	-132.97	132.58	0.00	0.00	0.00
2,500.00	27.04	336.613	2,434.19	349.18	-151.01	150.58	0.00	0.00	0.00
2,600.00	27.04	336.613	2,523.26	390.90	-169.05	168.57	0.00	0.00	0.00
2,652.19	27.04	336.613	2,569.75	412.68	-178.47	177.96	0.00	0.00	0.00
Start Drop -1.50									
2,700.00	26.32	336.613	2,612.47	432.38	-186.99	186.46	1.50	-1.50	0.00
2,800.00	24.82	336.613	2,702.67	471.99	-204.13	203.54	1.50	-1.50	0.00
2,900.00	23.32	336.613	2,793.97	509.43	-220.32	219.68	1.50	-1.50	0.00
3,000.00	21.82	336.613	2,886.31	544.66	-235.55	234.88	1.50	-1.50	0.00
3,100.00	20.32	336.613	2,979.62	577.66	-249.82	249.11	1.50	-1.50	0.00
3,200.00	18.82	336.613	3,073.84	608.40	-263.12	262.36	1.50	-1.50	0.00
3,300.00	17.32	336.613	3,168.90	636.87	-275.43	274.64	1.50	-1.50	0.00
3,400.00	15.82	336.613	3,264.75	663.05	-286.75	285.93	1.50	-1.50	0.00
3,500.00	14.32	336.613	3,361.31	686.91	-297.07	296.22	1.50	-1.50	0.00
3,600.00	12.82	336.613	3,458.51	708.45	-306.39	305.51	1.50	-1.50	0.00
3,700.00	11.32	336.613	3,556.30	727.64	-314.69	313.79	1.50	-1.50	0.00
3,800.00	9.82	336.613	3,654.60	744.48	-321.97	321.05	1.50	-1.50	0.00
3,900.00	8.32	336.613	3,753.34	758.95	-328.23	327.29	1.50	-1.50	0.00
4,000.00	6.82	336.613	3,852.47	771.04	-333.46	332.50	1.50	-1.50	0.00
4,100.00	5.32	336.613	3,951.91	780.75	-337.66	336.69	1.50	-1.50	0.00
4,200.00	3.82	336.613	4,051.58	788.07	-340.82	339.84	1.50	-1.50	0.00
4,300.00	2.32	336.613	4,151.44	792.98	-342.95	341.96	1.50	-1.50	0.00
4,400.00	0.82	336.613	4,251.40	795.50	-344.03	343.05	1.50	-1.50	0.00
4,454.74	0.00	0.000	4,306.14	795.86	-344.19	343.20	1.50	-1.50	0.00
Start 1512.41 hold at 4454.74 MD									
4,500.00	0.00	0.000	4,351.40	795.86	-344.19	343.20	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-32-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4657' & KB 20' @ 4677.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4657' & KB 20' @ 4677.00ft
Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-32-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
4,600.00	0.00	0.000	4,451.40	795.86	-344.19	343.20	0.00	0.00	0.00
4,700.00	0.00	0.000	4,551.40	795.86	-344.19	343.20	0.00	0.00	0.00
4,800.00	0.00	0.000	4,651.40	795.86	-344.19	343.20	0.00	0.00	0.00
4,900.00	0.00	0.000	4,751.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,000.00	0.00	0.000	4,851.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,100.00	0.00	0.000	4,951.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,200.00	0.00	0.000	5,051.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,300.00	0.00	0.000	5,151.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,400.00	0.00	0.000	5,251.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,500.00	0.00	0.000	5,351.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,600.00	0.00	0.000	5,451.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,700.00	0.00	0.000	5,551.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,800.00	0.00	0.000	5,651.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,900.00	0.00	0.000	5,751.40	795.86	-344.19	343.20	0.00	0.00	0.00
5,967.15	0.00	0.000	5,818.55	795.86	-344.19	343.20	0.00	0.00	0.00
Start DLS 12.00 TFO 269.93									
6,000.00	3.94	269.929	5,851.37	795.86	-345.32	344.33	12.00	12.00	0.00
6,100.00	15.94	269.929	5,949.69	795.84	-362.55	361.57	12.00	12.00	0.00
6,200.00	27.94	269.929	6,042.28	795.79	-399.85	398.86	12.00	12.00	0.00
6,300.00	39.94	269.929	6,125.09	795.72	-455.58	454.60	12.00	12.00	0.00
6,400.00	51.94	269.929	6,194.50	795.63	-527.31	526.33	12.00	12.00	0.00
6,500.00	63.94	269.929	6,247.48	795.53	-611.91	610.92	12.00	12.00	0.00
6,600.00	75.94	269.929	6,281.71	795.41	-705.67	704.69	12.00	12.00	0.00
6,700.00	87.94	269.929	6,295.71	795.29	-804.50	803.52	12.00	12.00	0.00
6,713.07	89.51	269.929	6,296.00	795.28	-817.57	816.58	12.00	12.00	0.00
Start 9703.78 hold at 6713.07 MD									
6,800.00	89.51	269.929	6,296.74	795.17	-904.50	903.51	0.00	0.00	0.00
6,900.00	89.51	269.929	6,297.60	795.04	-1,004.49	1,003.51	0.00	0.00	0.00
7,000.00	89.51	269.929	6,298.45	794.92	-1,104.49	1,103.50	0.00	0.00	0.00
7,100.00	89.51	269.929	6,299.31	794.80	-1,204.49	1,203.50	0.00	0.00	0.00
7,200.00	89.51	269.929	6,300.16	794.67	-1,304.48	1,303.50	0.00	0.00	0.00
7,300.00	89.51	269.929	6,301.02	794.55	-1,404.48	1,403.49	0.00	0.00	0.00
7,400.00	89.51	269.929	6,301.87	794.43	-1,504.47	1,503.49	0.00	0.00	0.00
7,500.00	89.51	269.929	6,302.73	794.30	-1,604.47	1,603.49	0.00	0.00	0.00
7,600.00	89.51	269.929	6,303.58	794.18	-1,704.47	1,703.48	0.00	0.00	0.00
7,700.00	89.51	269.929	6,304.44	794.06	-1,804.46	1,803.48	0.00	0.00	0.00
7,800.00	89.51	269.929	6,305.29	793.93	-1,904.46	1,903.47	0.00	0.00	0.00
7,900.00	89.51	269.929	6,306.15	793.81	-2,004.46	2,003.47	0.00	0.00	0.00
8,000.00	89.51	269.929	6,307.01	793.68	-2,104.45	2,103.47	0.00	0.00	0.00
8,100.00	89.51	269.929	6,307.86	793.56	-2,204.45	2,203.46	0.00	0.00	0.00
8,200.00	89.51	269.929	6,308.72	793.44	-2,304.45	2,303.46	0.00	0.00	0.00
8,300.00	89.51	269.929	6,309.57	793.31	-2,404.44	2,403.46	0.00	0.00	0.00
8,400.00	89.51	269.929	6,310.43	793.19	-2,504.44	2,503.45	0.00	0.00	0.00
8,500.00	89.51	269.929	6,311.28	793.07	-2,604.43	2,603.45	0.00	0.00	0.00
8,600.00	89.51	269.929	6,312.14	792.94	-2,704.43	2,703.45	0.00	0.00	0.00
8,700.00	89.51	269.929	6,312.99	792.82	-2,804.43	2,803.44	0.00	0.00	0.00
8,800.00	89.51	269.929	6,313.85	792.70	-2,904.42	2,903.44	0.00	0.00	0.00
8,900.00	89.51	269.929	6,314.70	792.57	-3,004.42	3,003.43	0.00	0.00	0.00
9,000.00	89.51	269.929	6,315.56	792.45	-3,104.42	3,103.43	0.00	0.00	0.00
9,100.00	89.51	269.929	6,316.41	792.33	-3,204.41	3,203.43	0.00	0.00	0.00
9,200.00	89.51	269.929	6,317.27	792.20	-3,304.41	3,303.42	0.00	0.00	0.00
9,300.00	89.51	269.929	6,318.13	792.08	-3,404.40	3,403.42	0.00	0.00	0.00
9,400.00	89.51	269.929	6,318.98	791.95	-3,504.40	3,503.42	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-32-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4657' & KB 20' @ 4677.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4657' & KB 20' @ 4677.00ft
Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-32-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
9,500.00	89.51	269.929	6,319.84	791.83	-3,604.40	3,603.41	0.00	0.00	0.00
9,600.00	89.51	269.929	6,320.69	791.71	-3,704.39	3,703.41	0.00	0.00	0.00
9,700.00	89.51	269.929	6,321.55	791.58	-3,804.39	3,803.41	0.00	0.00	0.00
9,800.00	89.51	269.929	6,322.40	791.46	-3,904.39	3,903.40	0.00	0.00	0.00
9,900.00	89.51	269.929	6,323.26	791.34	-4,004.38	4,003.40	0.00	0.00	0.00
10,000.00	89.51	269.929	6,324.11	791.21	-4,104.38	4,103.39	0.00	0.00	0.00
10,100.00	89.51	269.929	6,324.97	791.09	-4,204.37	4,203.39	0.00	0.00	0.00
10,200.00	89.51	269.929	6,325.82	790.97	-4,304.37	4,303.39	0.00	0.00	0.00
10,300.00	89.51	269.929	6,326.68	790.84	-4,404.37	4,403.38	0.00	0.00	0.00
10,400.00	89.51	269.929	6,327.53	790.72	-4,504.36	4,503.38	0.00	0.00	0.00
10,500.00	89.51	269.929	6,328.39	790.60	-4,604.36	4,603.38	0.00	0.00	0.00
10,600.00	89.51	269.929	6,329.24	790.47	-4,704.36	4,703.37	0.00	0.00	0.00
10,700.00	89.51	269.929	6,330.10	790.35	-4,804.35	4,803.37	0.00	0.00	0.00
10,800.00	89.51	269.929	6,330.96	790.22	-4,904.35	4,903.36	0.00	0.00	0.00
10,900.00	89.51	269.929	6,331.81	790.10	-5,004.34	5,003.36	0.00	0.00	0.00
11,000.00	89.51	269.929	6,332.67	789.98	-5,104.34	5,103.36	0.00	0.00	0.00
11,100.00	89.51	269.929	6,333.52	789.85	-5,204.34	5,203.35	0.00	0.00	0.00
11,200.00	89.51	269.929	6,334.38	789.73	-5,304.33	5,303.35	0.00	0.00	0.00
11,300.00	89.51	269.929	6,335.23	789.61	-5,404.33	5,403.35	0.00	0.00	0.00
11,400.00	89.51	269.929	6,336.09	789.48	-5,504.33	5,503.34	0.00	0.00	0.00
11,500.00	89.51	269.929	6,336.94	789.36	-5,604.32	5,603.34	0.00	0.00	0.00
11,600.00	89.51	269.929	6,337.80	789.24	-5,704.32	5,703.34	0.00	0.00	0.00
11,700.00	89.51	269.929	6,338.65	789.11	-5,804.31	5,803.33	0.00	0.00	0.00
11,800.00	89.51	269.929	6,339.51	788.99	-5,904.31	5,903.33	0.00	0.00	0.00
11,900.00	89.51	269.929	6,340.36	788.87	-6,004.31	6,003.32	0.00	0.00	0.00
12,000.00	89.51	269.929	6,341.22	788.74	-6,104.30	6,103.32	0.00	0.00	0.00
12,100.00	89.51	269.929	6,342.08	788.62	-6,204.30	6,203.32	0.00	0.00	0.00
12,200.00	89.51	269.929	6,342.93	788.49	-6,304.30	6,303.31	0.00	0.00	0.00
12,300.00	89.51	269.929	6,343.79	788.37	-6,404.29	6,403.31	0.00	0.00	0.00
12,400.00	89.51	269.929	6,344.64	788.25	-6,504.29	6,503.31	0.00	0.00	0.00
12,500.00	89.51	269.929	6,345.50	788.12	-6,604.28	6,603.30	0.00	0.00	0.00
12,600.00	89.51	269.929	6,346.35	788.00	-6,704.28	6,703.30	0.00	0.00	0.00
12,700.00	89.51	269.929	6,347.21	787.88	-6,804.28	6,803.30	0.00	0.00	0.00
12,800.00	89.51	269.929	6,348.06	787.75	-6,904.27	6,903.29	0.00	0.00	0.00
12,900.00	89.51	269.929	6,348.92	787.63	-7,004.27	7,003.29	0.00	0.00	0.00
13,000.00	89.51	269.929	6,349.77	787.51	-7,104.27	7,103.28	0.00	0.00	0.00
13,100.00	89.51	269.929	6,350.63	787.38	-7,204.26	7,203.28	0.00	0.00	0.00
13,200.00	89.51	269.929	6,351.48	787.26	-7,304.26	7,303.28	0.00	0.00	0.00
13,300.00	89.51	269.929	6,352.34	787.14	-7,404.25	7,403.27	0.00	0.00	0.00
13,400.00	89.51	269.929	6,353.20	787.01	-7,504.25	7,503.27	0.00	0.00	0.00
13,500.00	89.51	269.929	6,354.05	786.89	-7,604.25	7,603.27	0.00	0.00	0.00
13,600.00	89.51	269.929	6,354.91	786.76	-7,704.24	7,703.26	0.00	0.00	0.00
13,700.00	89.51	269.929	6,355.76	786.64	-7,804.24	7,803.26	0.00	0.00	0.00
13,800.00	89.51	269.929	6,356.62	786.52	-7,904.24	7,903.26	0.00	0.00	0.00
13,900.00	89.51	269.929	6,357.47	786.39	-8,004.23	8,003.25	0.00	0.00	0.00
14,000.00	89.51	269.929	6,358.33	786.27	-8,104.23	8,103.25	0.00	0.00	0.00
14,100.00	89.51	269.929	6,359.18	786.15	-8,204.22	8,203.24	0.00	0.00	0.00
14,200.00	89.51	269.929	6,360.04	786.02	-8,304.22	8,303.24	0.00	0.00	0.00
14,300.00	89.51	269.929	6,360.89	785.90	-8,404.22	8,403.24	0.00	0.00	0.00
14,400.00	89.51	269.929	6,361.75	785.78	-8,504.21	8,503.23	0.00	0.00	0.00
14,500.00	89.51	269.929	6,362.60	785.65	-8,604.21	8,603.23	0.00	0.00	0.00
14,600.00	89.51	269.929	6,363.46	785.53	-8,704.21	8,703.23	0.00	0.00	0.00
14,700.00	89.51	269.929	6,364.31	785.40	-8,804.20	8,803.22	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-32-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4657' & KB 20' @ 4677.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4657' & KB 20' @ 4677.00ft
Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-32-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)	
14,800.00	89.51	269.929	6,365.17	785.28	-8,904.20	8,903.22	0.00	0.00	0.00	
14,900.00	89.51	269.929	6,366.03	785.16	-9,004.19	9,003.22	0.00	0.00	0.00	
15,000.00	89.51	269.929	6,366.88	785.03	-9,104.19	9,103.21	0.00	0.00	0.00	
15,100.00	89.51	269.929	6,367.74	784.91	-9,204.19	9,203.21	0.00	0.00	0.00	
15,200.00	89.51	269.929	6,368.59	784.79	-9,304.18	9,303.20	0.00	0.00	0.00	
15,300.00	89.51	269.929	6,369.45	784.66	-9,404.18	9,403.20	0.00	0.00	0.00	
15,400.00	89.51	269.929	6,370.30	784.54	-9,504.18	9,503.20	0.00	0.00	0.00	
15,500.00	89.51	269.929	6,371.16	784.42	-9,604.17	9,603.19	0.00	0.00	0.00	
15,600.00	89.51	269.929	6,372.01	784.29	-9,704.17	9,703.19	0.00	0.00	0.00	
15,700.00	89.51	269.929	6,372.87	784.17	-9,804.17	9,803.19	0.00	0.00	0.00	
15,800.00	89.51	269.929	6,373.72	784.05	-9,904.16	9,903.18	0.00	0.00	0.00	
15,900.00	89.51	269.929	6,374.58	783.92	-10,004.16	10,003.18	0.00	0.00	0.00	
16,000.00	89.51	269.929	6,375.43	783.80	-10,104.15	10,103.17	0.00	0.00	0.00	
16,100.00	89.51	269.929	6,376.29	783.67	-10,204.15	10,203.17	0.00	0.00	0.00	
16,200.00	89.51	269.929	6,377.15	783.55	-10,304.15	10,303.17	0.00	0.00	0.00	
16,300.00	89.51	269.929	6,378.00	783.43	-10,404.14	10,403.16	0.00	0.00	0.00	
16,400.00	89.51	269.929	6,378.86	783.30	-10,504.14	10,503.16	0.00	0.00	0.00	
16,416.85	89.51	269.929	6,379.00	783.28	-10,520.99	10,520.01	0.00	0.00	0.00	
TD at 16416.85										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
4-62-32-0916C LP	0.00	0.000	6,296.00	795.27	-817.57	1,344,274.27	3,323,639.67	40° 16' 21.439 N	104° 20' 24.389 W
- plan misses target center by 0.01ft at 6713.07ft MD (6296.00 TVD, 795.27 N, -817.57 E)									
- Point									
4-62-32-0916C PBHL	0.00	0.000	6,379.00	783.28	-10,520.99	1,344,135.05	3,313,937.26	40° 16' 21.299 N	104° 22' 29.579 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
1,000.00	1,000.00	0.00	0.00	Start Build 2.00
2,351.91	2,302.29	287.39	-124.29	Start 300.28 hold at 2351.91 MD
2,652.19	2,569.75	412.68	-178.47	Start Drop -1.50
4,454.74	4,306.14	795.86	-344.19	Start 1512.41 hold at 4454.74 MD
5,967.15	5,818.55	795.86	-344.19	Start DLS 12.00 TFO 269.93
6,713.07	6,296.00	795.28	-817.57	Start 9703.78 hold at 6713.07 MD
16,416.85	6,379.00	783.28	-10,520.99	TD at 16416.85