

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 NENE Pad
 Well: Anschutz Equus Farm 3-62-4-0916C
 Wellbore: OH
 Design: Plan 1



Azimuths to True North
 Magnetic North: 8.27°



Magnetic Field
 Strength: 52355.5nT
 Dip Angle: 66.93°
 Date: 9/6/2017
 Model: HDGM

Plan: Plan 1 (Anschutz Equus Farm 3-62-4-0916C/OH)

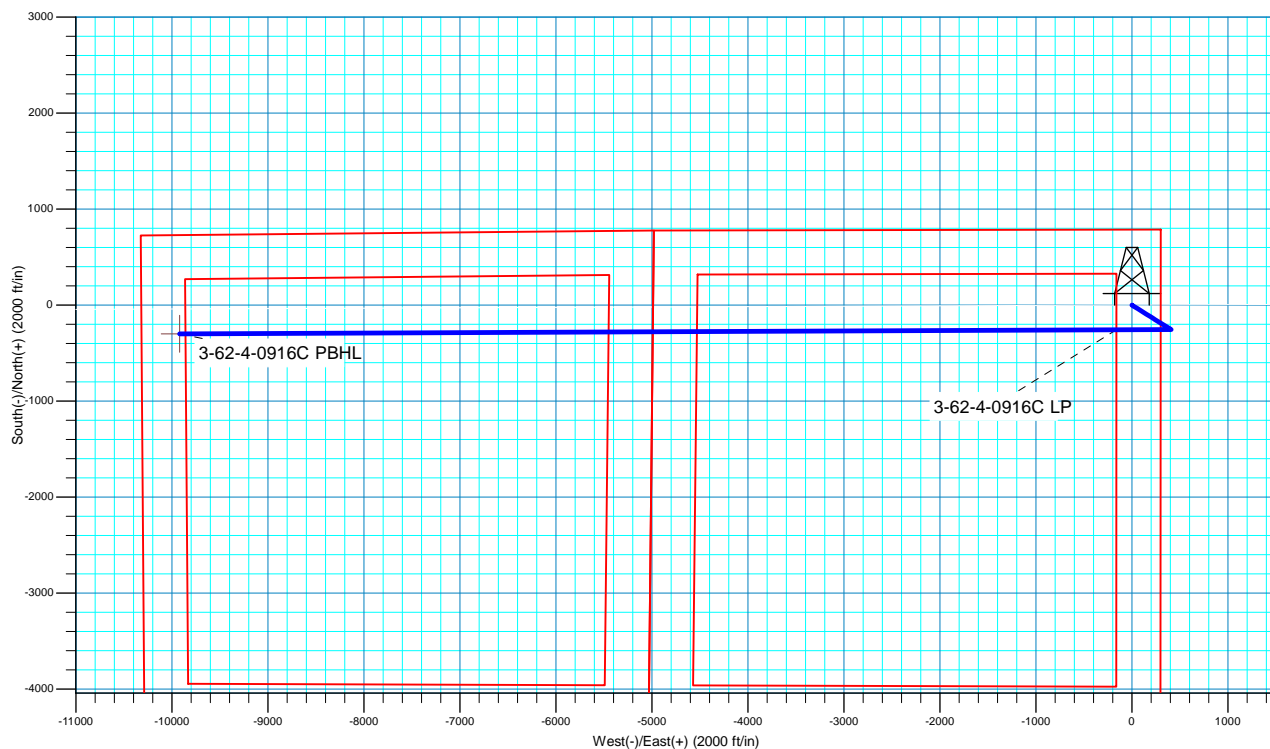
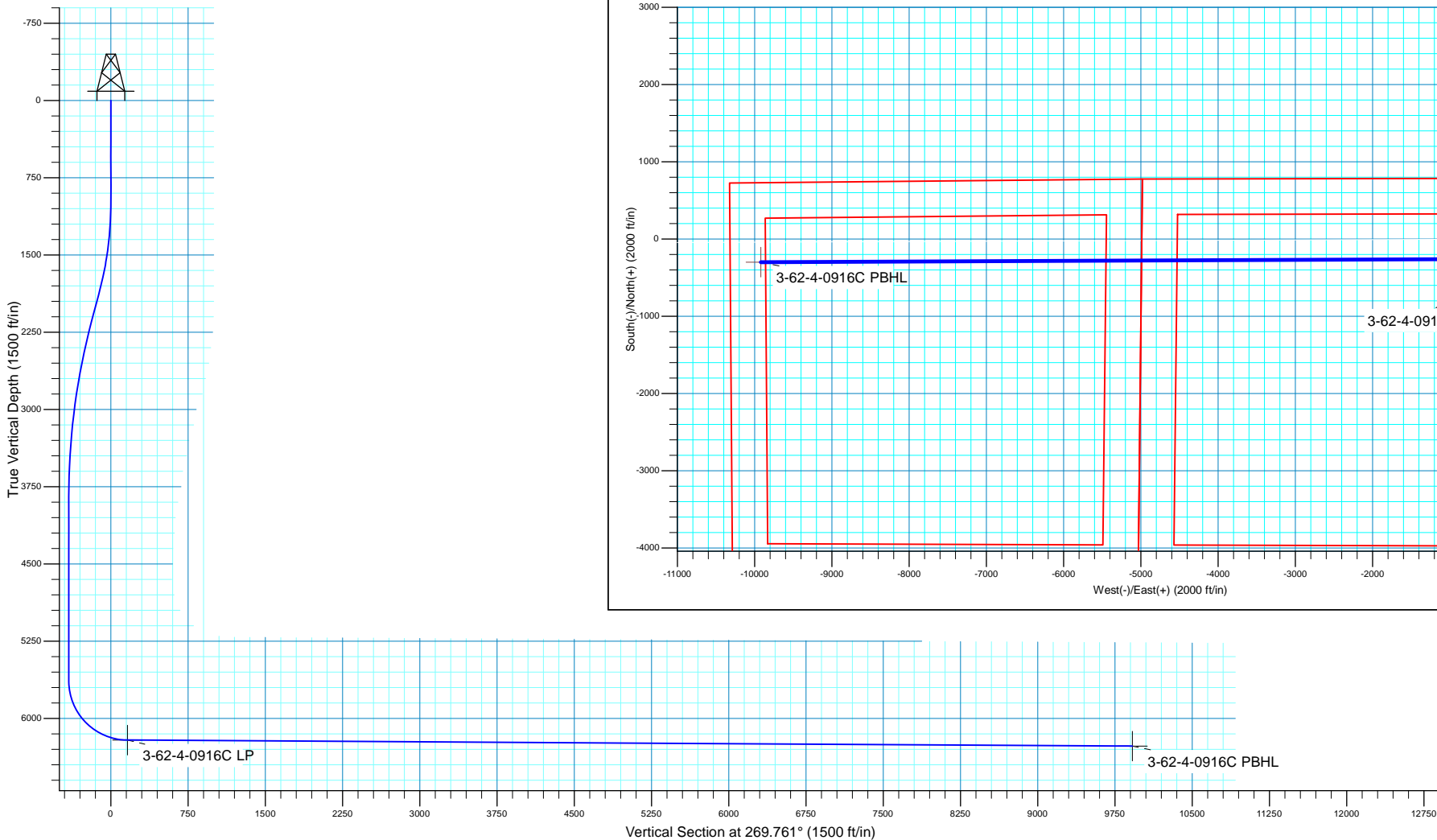
Created By: Seth Burstad Date: 9-06-2017

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
1869.22	17.38	121.992	1855.95	-69.33	110.98	2.00	121.99	-110.69
2169.60	17.38	121.992	2142.60	-116.88	187.10	0.00	0.00	-186.61
3908.05	0.00	0.000	3854.50	-255.54	409.07	1.00	180.00	-408.00
5690.60	0.00	0.000	5637.05	-255.54	409.07	0.00	0.00	-408.00
6587.19	89.66	269.762	6210.00	-257.91	-160.48	10.00	269.76	161.55
16345.54	89.66	269.762	6268.00	-298.53	-9918.57	0.00	0.00	9919.73

WELL DETAILS: Anschutz Equus Farm 3-62-4-0916C

		GL 4612.6' & KB 20' @ 4632.60ft			Longitude
+N/-S	+E/-W	Northing	Easting	Latitude	
0.00	0.00	1339716.73	3329199.14	40° 15' 35.679 N	104° 19' 13.451 W





Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz Equus Farms 3-62-4_5 NENE Pad

Anschutz Equus Farm 3-62-4-0916C

OH

Plan: Plan 1

Standard Planning Report

06 September, 2017



Scientific Drilling

www.scientificdrilling.com



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Site:	Anschutz Equus Farms 3-62-4_5 NENE Pad	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

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 3-62-4_5 NENE Pad, Side Center : Anschutz Equus Farm 3-62-4-0801C			
Site Position:		Northing:	1,339,732.05 usft	Latitude: 40° 15' 35.831 N
From:	Lat/Long	Easting:	3,329,198.94 usft	Longitude: 104° 19' 13.451 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence: 0.76 °

Well	Anschutz Equus Farm 3-62-4-0916C, 786' FNL 300' FEL Sec 4 T3N R62W			
Well Position	+N/-S	-15.32 ft	Northing:	1,339,716.74 usft
	+E/-W	0.00 ft	Easting:	3,329,199.15 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft
			Ground Level:	4,612.60 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/6/2017	8.27	66.93	52,356

Design	Plan 1			
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	269.761

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	
1,869.22	17.38	121.992	1,855.95	-69.33	110.98	2.00	2.00	0.00	121.99	
2,169.60	17.38	121.992	2,142.60	-116.88	187.10	0.00	0.00	0.00	0.00	
3,908.05	0.00	0.000	3,854.50	-255.54	409.07	1.00	-1.00	0.00	180.00	
5,690.60	0.00	0.000	5,637.05	-255.54	409.07	0.00	0.00	0.00	0.00	
6,587.19	89.66	269.761	6,210.00	-257.91	-160.48	10.00	10.00	-10.06	269.76	
16,345.55	89.66	269.761	6,268.00	-298.53	-9,918.57	0.00	0.00	0.00	0.00	3-62-4-0916C PBHL

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Site:	Anschutz Equus Farms 3-62-4_5 NENE Pad	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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
Start Build 2.00									
1,100.00	2.00	121.992	1,099.98	-0.92	1.48	-1.48	2.00	2.00	0.00
1,200.00	4.00	121.992	1,199.84	-3.70	5.92	-5.90	2.00	2.00	0.00
1,300.00	6.00	121.992	1,299.45	-8.31	13.31	-13.28	2.00	2.00	0.00
1,400.00	8.00	121.992	1,398.70	-14.77	23.65	-23.58	2.00	2.00	0.00
1,500.00	10.00	121.992	1,497.47	-23.06	36.91	-36.82	2.00	2.00	0.00
1,600.00	12.00	121.992	1,595.62	-33.17	53.09	-52.96	2.00	2.00	0.00
1,700.00	14.00	121.992	1,693.06	-45.08	72.17	-71.98	2.00	2.00	0.00
1,800.00	16.00	121.992	1,789.64	-58.80	94.12	-93.88	2.00	2.00	0.00
1,869.22	17.38	121.992	1,855.95	-69.33	110.98	-110.69	2.00	2.00	0.00
Start 300.38 hold at 1869.22 MD									
1,900.00	17.38	121.992	1,885.32	-74.20	118.78	-118.47	0.00	0.00	0.00
2,000.00	17.38	121.992	1,980.75	-90.03	144.12	-143.75	0.00	0.00	0.00
2,100.00	17.38	121.992	2,076.18	-105.86	169.46	-169.02	0.00	0.00	0.00
2,169.60	17.38	121.992	2,142.60	-116.88	187.10	-186.61	0.00	0.00	0.00
Start Drop -1.00									
2,200.00	17.08	121.992	2,171.64	-121.65	194.74	-194.23	1.00	-1.00	0.00
2,300.00	16.08	121.992	2,267.48	-136.77	218.94	-218.37	1.00	-1.00	0.00
2,400.00	15.08	121.992	2,363.80	-151.00	241.72	-241.09	1.00	-1.00	0.00
2,500.00	14.08	121.992	2,460.58	-164.34	263.07	-262.38	1.00	-1.00	0.00
2,600.00	13.08	121.992	2,557.78	-176.78	282.98	-282.24	1.00	-1.00	0.00
2,700.00	12.08	121.992	2,655.38	-188.32	301.46	-300.67	1.00	-1.00	0.00
2,800.00	11.08	121.992	2,753.35	-198.95	318.48	-317.65	1.00	-1.00	0.00
2,900.00	10.08	121.992	2,851.64	-208.68	334.06	-333.18	1.00	-1.00	0.00
3,000.00	9.08	121.992	2,950.25	-217.50	348.17	-347.26	1.00	-1.00	0.00
3,100.00	8.08	121.992	3,049.13	-225.40	360.82	-359.88	1.00	-1.00	0.00
3,200.00	7.08	121.992	3,148.25	-232.39	372.01	-371.04	1.00	-1.00	0.00
3,300.00	6.08	121.992	3,247.59	-238.46	381.73	-380.73	1.00	-1.00	0.00
3,400.00	5.08	121.992	3,347.12	-243.61	389.98	-388.96	1.00	-1.00	0.00
3,500.00	4.08	121.992	3,446.80	-247.85	396.75	-395.71	1.00	-1.00	0.00
3,600.00	3.08	121.992	3,546.60	-251.15	402.05	-401.00	1.00	-1.00	0.00
3,700.00	2.08	121.992	3,646.50	-253.54	405.87	-404.81	1.00	-1.00	0.00
3,800.00	1.08	121.992	3,746.46	-255.00	408.21	-407.14	1.00	-1.00	0.00
3,900.00	0.08	121.992	3,846.45	-255.54	409.07	-408.00	1.00	-1.00	0.00
3,908.05	0.00	0.000	3,854.50	-255.54	409.07	-408.00	1.00	-1.00	0.00
Start 1782.55 hold at 3908.05 MD									
4,000.00	0.00	0.000	3,946.45	-255.54	409.07	-408.00	0.00	0.00	0.00
4,100.00	0.00	0.000	4,046.45	-255.54	409.07	-408.00	0.00	0.00	0.00
4,200.00	0.00	0.000	4,146.45	-255.54	409.07	-408.00	0.00	0.00	0.00
4,300.00	0.00	0.000	4,246.45	-255.54	409.07	-408.00	0.00	0.00	0.00
4,400.00	0.00	0.000	4,346.45	-255.54	409.07	-408.00	0.00	0.00	0.00
4,500.00	0.00	0.000	4,446.45	-255.54	409.07	-408.00	0.00	0.00	0.00
4,600.00	0.00	0.000	4,546.45	-255.54	409.07	-408.00	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Site:	Anschutz Equus Farms 3-62-4_5 NENE Pad	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
4,700.00	0.00	0.000	4,646.45	-255.54	409.07	-408.00	0.00	0.00	0.00
4,800.00	0.00	0.000	4,746.45	-255.54	409.07	-408.00	0.00	0.00	0.00
4,900.00	0.00	0.000	4,846.45	-255.54	409.07	-408.00	0.00	0.00	0.00
5,000.00	0.00	0.000	4,946.45	-255.54	409.07	-408.00	0.00	0.00	0.00
5,100.00	0.00	0.000	5,046.45	-255.54	409.07	-408.00	0.00	0.00	0.00
5,200.00	0.00	0.000	5,146.45	-255.54	409.07	-408.00	0.00	0.00	0.00
5,300.00	0.00	0.000	5,246.45	-255.54	409.07	-408.00	0.00	0.00	0.00
5,400.00	0.00	0.000	5,346.45	-255.54	409.07	-408.00	0.00	0.00	0.00
5,500.00	0.00	0.000	5,446.45	-255.54	409.07	-408.00	0.00	0.00	0.00
5,600.00	0.00	0.000	5,546.45	-255.54	409.07	-408.00	0.00	0.00	0.00
5,690.60	0.00	0.000	5,637.05	-255.54	409.07	-408.00	0.00	0.00	0.00
Start DLS 10.00 TFO 269.76									
5,700.00	0.94	269.761	5,646.45	-255.54	408.99	-407.92	10.00	10.00	0.00
5,800.00	10.94	269.761	5,745.79	-255.58	398.66	-397.59	10.00	10.00	0.00
5,900.00	20.94	269.761	5,841.82	-255.70	371.23	-370.16	10.00	10.00	0.00
6,000.00	30.94	269.761	5,931.63	-255.88	327.54	-326.47	10.00	10.00	0.00
6,100.00	40.94	269.761	6,012.49	-256.12	268.92	-267.85	10.00	10.00	0.00
6,200.00	50.94	269.761	6,081.95	-256.42	197.15	-196.08	10.00	10.00	0.00
6,300.00	60.94	269.761	6,137.88	-256.77	114.41	-113.34	10.00	10.00	0.00
6,400.00	70.94	269.761	6,178.60	-257.15	23.22	-22.14	10.00	10.00	0.00
6,500.00	80.94	269.761	6,202.86	-257.55	-73.66	74.74	10.00	10.00	0.00
6,587.19	89.66	269.761	6,210.00	-257.91	-160.48	161.55	10.00	10.00	0.00
Start 9758.35 hold at 6587.19 MD									
6,600.00	89.66	269.761	6,210.07	-257.96	-173.28	174.36	0.00	0.00	0.00
6,700.00	89.66	269.761	6,210.67	-258.38	-273.28	274.36	0.00	0.00	0.00
6,800.00	89.66	269.761	6,211.26	-258.80	-373.28	374.36	0.00	0.00	0.00
6,900.00	89.66	269.761	6,211.86	-259.21	-473.28	474.35	0.00	0.00	0.00
7,000.00	89.66	269.761	6,212.45	-259.63	-573.27	574.35	0.00	0.00	0.00
7,100.00	89.66	269.761	6,213.05	-260.05	-673.27	674.35	0.00	0.00	0.00
7,200.00	89.66	269.761	6,213.64	-260.46	-773.27	774.35	0.00	0.00	0.00
7,300.00	89.66	269.761	6,214.23	-260.88	-873.27	874.35	0.00	0.00	0.00
7,400.00	89.66	269.761	6,214.83	-261.29	-973.26	974.34	0.00	0.00	0.00
7,500.00	89.66	269.761	6,215.42	-261.71	-1,073.26	1,074.34	0.00	0.00	0.00
7,600.00	89.66	269.761	6,216.02	-262.13	-1,173.26	1,174.34	0.00	0.00	0.00
7,700.00	89.66	269.761	6,216.61	-262.54	-1,273.26	1,274.34	0.00	0.00	0.00
7,800.00	89.66	269.761	6,217.21	-262.96	-1,373.25	1,374.34	0.00	0.00	0.00
7,900.00	89.66	269.761	6,217.80	-263.38	-1,473.25	1,474.34	0.00	0.00	0.00
8,000.00	89.66	269.761	6,218.40	-263.79	-1,573.25	1,574.33	0.00	0.00	0.00
8,100.00	89.66	269.761	6,218.99	-264.21	-1,673.24	1,674.33	0.00	0.00	0.00
8,200.00	89.66	269.761	6,219.58	-264.62	-1,773.24	1,774.33	0.00	0.00	0.00
8,300.00	89.66	269.761	6,220.18	-265.04	-1,873.24	1,874.33	0.00	0.00	0.00
8,400.00	89.66	269.761	6,220.77	-265.46	-1,973.24	1,974.33	0.00	0.00	0.00
8,500.00	89.66	269.761	6,221.37	-265.87	-2,073.23	2,074.33	0.00	0.00	0.00
8,600.00	89.66	269.761	6,221.96	-266.29	-2,173.23	2,174.32	0.00	0.00	0.00
8,700.00	89.66	269.761	6,222.56	-266.71	-2,273.23	2,274.32	0.00	0.00	0.00
8,800.00	89.66	269.761	6,223.15	-267.12	-2,373.23	2,374.32	0.00	0.00	0.00
8,900.00	89.66	269.761	6,223.74	-267.54	-2,473.22	2,474.32	0.00	0.00	0.00
9,000.00	89.66	269.761	6,224.34	-267.96	-2,573.22	2,574.32	0.00	0.00	0.00
9,100.00	89.66	269.761	6,224.93	-268.37	-2,673.22	2,674.31	0.00	0.00	0.00
9,200.00	89.66	269.761	6,225.53	-268.79	-2,773.22	2,774.31	0.00	0.00	0.00
9,300.00	89.66	269.761	6,226.12	-269.20	-2,873.21	2,874.31	0.00	0.00	0.00
9,400.00	89.66	269.761	6,226.72	-269.62	-2,973.21	2,974.31	0.00	0.00	0.00
9,500.00	89.66	269.761	6,227.31	-270.04	-3,073.21	3,074.31	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Site:	Anschutz Equus Farms 3-62-4_5 NENE Pad	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
9,600.00	89.66	269.761	6,227.91	-270.45	-3,173.21	3,174.31	0.00	0.00	0.00
9,700.00	89.66	269.761	6,228.50	-270.87	-3,273.20	3,274.30	0.00	0.00	0.00
9,800.00	89.66	269.761	6,229.09	-271.29	-3,373.20	3,374.30	0.00	0.00	0.00
9,900.00	89.66	269.761	6,229.69	-271.70	-3,473.20	3,474.30	0.00	0.00	0.00
10,000.00	89.66	269.761	6,230.28	-272.12	-3,573.19	3,574.30	0.00	0.00	0.00
10,100.00	89.66	269.761	6,230.88	-272.53	-3,673.19	3,674.30	0.00	0.00	0.00
10,200.00	89.66	269.761	6,231.47	-272.95	-3,773.19	3,774.30	0.00	0.00	0.00
10,300.00	89.66	269.761	6,232.07	-273.37	-3,873.19	3,874.29	0.00	0.00	0.00
10,400.00	89.66	269.761	6,232.66	-273.78	-3,973.18	3,974.29	0.00	0.00	0.00
10,500.00	89.66	269.761	6,233.26	-274.20	-4,073.18	4,074.29	0.00	0.00	0.00
10,600.00	89.66	269.761	6,233.85	-274.62	-4,173.18	4,174.29	0.00	0.00	0.00
10,700.00	89.66	269.761	6,234.44	-275.03	-4,273.18	4,274.29	0.00	0.00	0.00
10,800.00	89.66	269.761	6,235.04	-275.45	-4,373.17	4,374.28	0.00	0.00	0.00
10,900.00	89.66	269.761	6,235.63	-275.86	-4,473.17	4,474.28	0.00	0.00	0.00
11,000.00	89.66	269.761	6,236.23	-276.28	-4,573.17	4,574.28	0.00	0.00	0.00
11,100.00	89.66	269.761	6,236.82	-276.70	-4,673.17	4,674.28	0.00	0.00	0.00
11,200.00	89.66	269.761	6,237.42	-277.11	-4,773.16	4,774.28	0.00	0.00	0.00
11,300.00	89.66	269.761	6,238.01	-277.53	-4,873.16	4,874.28	0.00	0.00	0.00
11,400.00	89.66	269.761	6,238.60	-277.95	-4,973.16	4,974.27	0.00	0.00	0.00
11,500.00	89.66	269.761	6,239.20	-278.36	-5,073.16	5,074.27	0.00	0.00	0.00
11,600.00	89.66	269.761	6,239.79	-278.78	-5,173.15	5,174.27	0.00	0.00	0.00
11,700.00	89.66	269.761	6,240.39	-279.19	-5,273.15	5,274.27	0.00	0.00	0.00
11,800.00	89.66	269.761	6,240.98	-279.61	-5,373.15	5,374.27	0.00	0.00	0.00
11,900.00	89.66	269.761	6,241.58	-280.03	-5,473.14	5,474.27	0.00	0.00	0.00
12,000.00	89.66	269.761	6,242.17	-280.44	-5,573.14	5,574.26	0.00	0.00	0.00
12,100.00	89.66	269.761	6,242.77	-280.86	-5,673.14	5,674.26	0.00	0.00	0.00
12,200.00	89.66	269.761	6,243.36	-281.28	-5,773.14	5,774.26	0.00	0.00	0.00
12,300.00	89.66	269.761	6,243.95	-281.69	-5,873.13	5,874.26	0.00	0.00	0.00
12,400.00	89.66	269.761	6,244.55	-282.11	-5,973.13	5,974.26	0.00	0.00	0.00
12,500.00	89.66	269.761	6,245.14	-282.52	-6,073.13	6,074.25	0.00	0.00	0.00
12,600.00	89.66	269.761	6,245.74	-282.94	-6,173.13	6,174.25	0.00	0.00	0.00
12,700.00	89.66	269.761	6,246.33	-283.36	-6,273.12	6,274.25	0.00	0.00	0.00
12,800.00	89.66	269.761	6,246.93	-283.77	-6,373.12	6,374.25	0.00	0.00	0.00
12,900.00	89.66	269.761	6,247.52	-284.19	-6,473.12	6,474.25	0.00	0.00	0.00
13,000.00	89.66	269.761	6,248.11	-284.61	-6,573.12	6,574.25	0.00	0.00	0.00
13,100.00	89.66	269.761	6,248.71	-285.02	-6,673.11	6,674.24	0.00	0.00	0.00
13,200.00	89.66	269.761	6,249.30	-285.44	-6,773.11	6,774.24	0.00	0.00	0.00
13,300.00	89.66	269.761	6,249.90	-285.86	-6,873.11	6,874.24	0.00	0.00	0.00
13,400.00	89.66	269.761	6,250.49	-286.27	-6,973.11	6,974.24	0.00	0.00	0.00
13,500.00	89.66	269.761	6,251.09	-286.69	-7,073.10	7,074.24	0.00	0.00	0.00
13,600.00	89.66	269.761	6,251.68	-287.10	-7,173.10	7,174.24	0.00	0.00	0.00
13,700.00	89.66	269.761	6,252.28	-287.52	-7,273.10	7,274.23	0.00	0.00	0.00
13,800.00	89.66	269.761	6,252.87	-287.94	-7,373.09	7,374.23	0.00	0.00	0.00
13,900.00	89.66	269.761	6,253.46	-288.35	-7,473.09	7,474.23	0.00	0.00	0.00
14,000.00	89.66	269.761	6,254.06	-288.77	-7,573.09	7,574.23	0.00	0.00	0.00
14,100.00	89.66	269.761	6,254.65	-289.19	-7,673.09	7,674.23	0.00	0.00	0.00
14,200.00	89.66	269.761	6,255.25	-289.60	-7,773.08	7,774.22	0.00	0.00	0.00
14,300.00	89.66	269.761	6,255.84	-290.02	-7,873.08	7,874.22	0.00	0.00	0.00
14,400.00	89.66	269.761	6,256.44	-290.43	-7,973.08	7,974.22	0.00	0.00	0.00
14,500.00	89.66	269.761	6,257.03	-290.85	-8,073.08	8,074.22	0.00	0.00	0.00
14,600.00	89.66	269.761	6,257.62	-291.27	-8,173.07	8,174.22	0.00	0.00	0.00
14,700.00	89.66	269.761	6,258.22	-291.68	-8,273.07	8,274.22	0.00	0.00	0.00
14,800.00	89.66	269.761	6,258.81	-292.10	-8,373.07	8,374.21	0.00	0.00	0.00
14,900.00	89.66	269.761	6,259.41	-292.52	-8,473.07	8,474.21	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-0916C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft
Site:	Anschutz Equus Farms 3-62-4_5 NENE Pad	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-0916C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
15,000.00	89.66	269.761	6,260.00	-292.93	-8,573.06	8,574.21	0.00	0.00	0.00
15,100.00	89.66	269.761	6,260.60	-293.35	-8,673.06	8,674.21	0.00	0.00	0.00
15,200.00	89.66	269.761	6,261.19	-293.76	-8,773.06	8,774.21	0.00	0.00	0.00
15,300.00	89.66	269.761	6,261.79	-294.18	-8,873.06	8,874.21	0.00	0.00	0.00
15,400.00	89.66	269.761	6,262.38	-294.60	-8,973.05	8,974.20	0.00	0.00	0.00
15,500.00	89.66	269.761	6,262.97	-295.01	-9,073.05	9,074.20	0.00	0.00	0.00
15,600.00	89.66	269.761	6,263.57	-295.43	-9,173.05	9,174.20	0.00	0.00	0.00
15,700.00	89.66	269.761	6,264.16	-295.85	-9,273.05	9,274.20	0.00	0.00	0.00
15,800.00	89.66	269.761	6,264.76	-296.26	-9,373.04	9,374.20	0.00	0.00	0.00
15,900.00	89.66	269.761	6,265.35	-296.68	-9,473.04	9,474.19	0.00	0.00	0.00
16,000.00	89.66	269.761	6,265.95	-297.09	-9,573.04	9,574.19	0.00	0.00	0.00
16,100.00	89.66	269.761	6,266.54	-297.51	-9,673.03	9,674.19	0.00	0.00	0.00
16,200.00	89.66	269.761	6,267.14	-297.93	-9,773.03	9,774.19	0.00	0.00	0.00
16,300.00	89.66	269.761	6,267.73	-298.34	-9,873.03	9,874.19	0.00	0.00	0.00
16,345.55	89.66	269.761	6,268.00	-298.53	-9,918.57	9,919.73	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									
3-62-4-0916C LP	0.00	0.000	6,210.00	-257.90	-160.48	1,339,456.73	3,329,042.11	40° 15' 33.131 N	104° 19' 15.521 W
- plan misses target center by 0.01ft at 6587.19ft MD (6210.00 TVD, -257.91 N, -160.48 E)									
- Point									
3-62-4-0916C PBHL	0.00	0.000	6,268.00	-298.53	-9,918.57	1,339,286.29	3,319,285.44	40° 15' 32.710 N	104° 21' 21.391 W
- plan hits target center									
- 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
1,869.22	1,855.95	-69.33	110.98	Start 300.38 hold at 1869.22 MD
2,169.60	2,142.60	-116.88	187.10	Start Drop -1.00
3,908.05	3,854.50	-255.54	409.07	Start 1782.55 hold at 3908.05 MD
5,690.60	5,637.05	-255.54	409.07	Start DLS 10.00 TFO 269.76
6,587.19	6,210.00	-257.91	-160.48	Start 9758.35 hold at 6587.19 MD
16,345.55	6,268.00	-298.53	-9,918.57	TD at 16345.54