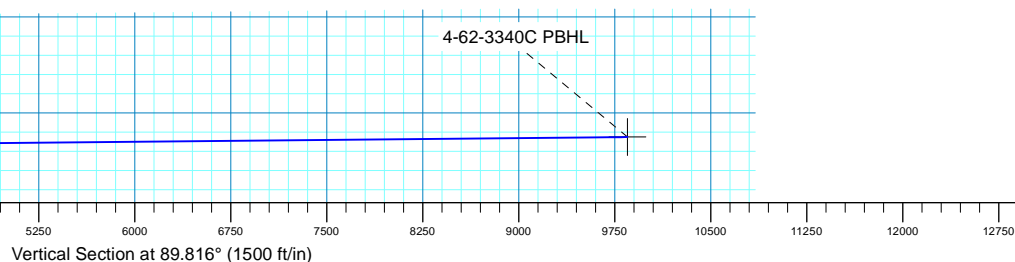
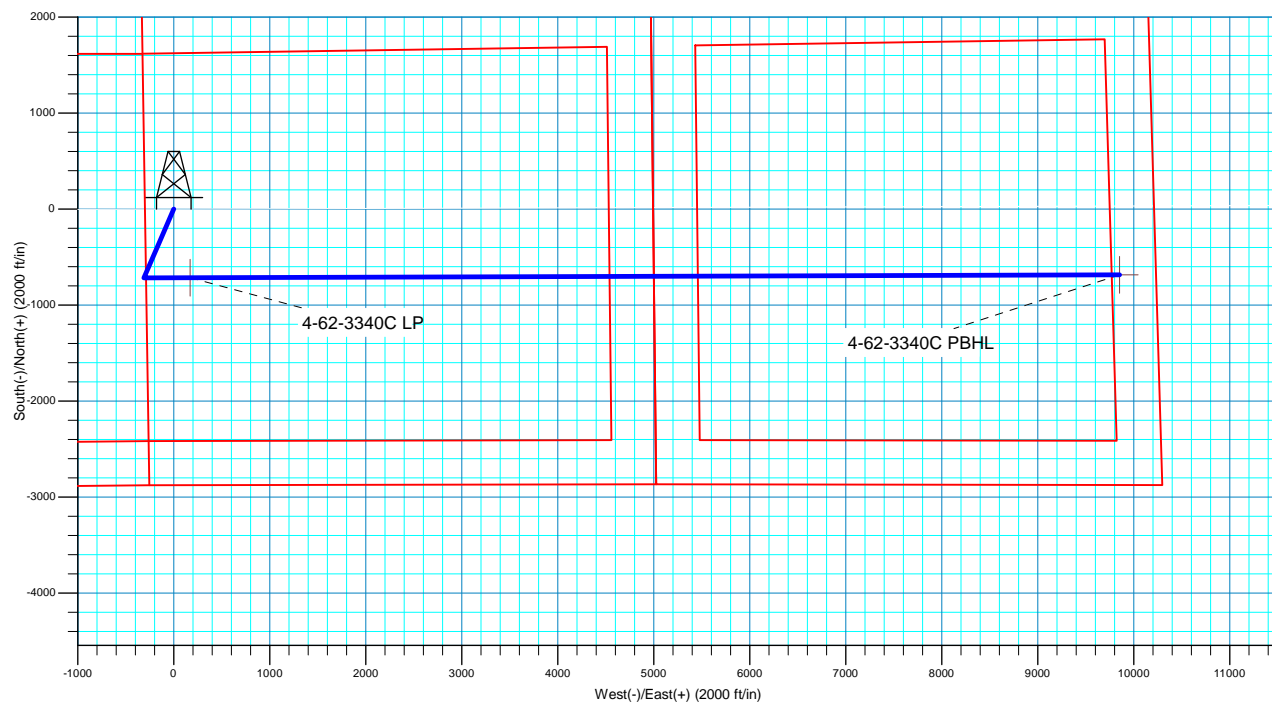
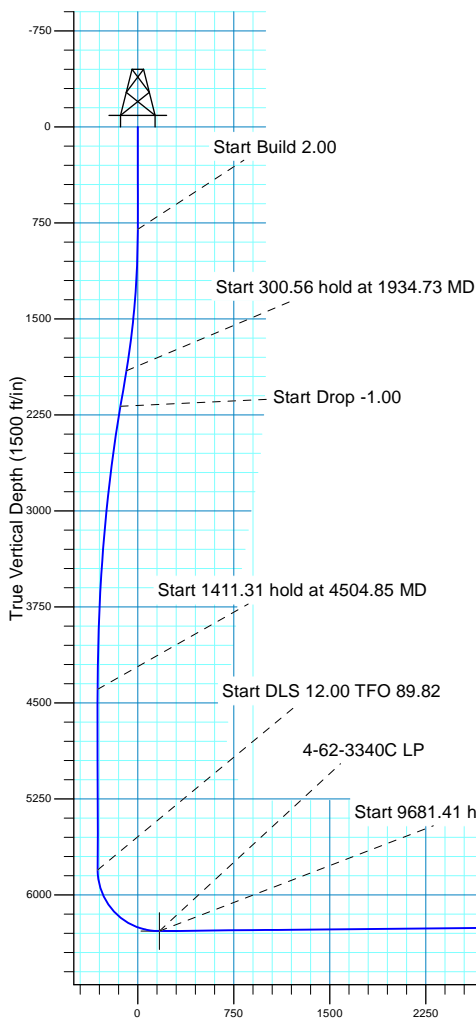

SECTION DETAILS

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
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00
1934.73	22.70	203.433	1905.29	-203.52	-88.21	2.00	203.43	-88.87
2235.29	22.70	203.433	2182.58	-309.93	-134.33	0.00	0.00	-135.32
4504.85	0.00	0.000	4393.25	-716.99	-310.76	1.00	180.00	-313.06
5916.16	0.00	0.000	5804.56	-716.99	-310.76	0.00	0.00	-313.06
6670.80	90.56	89.816	6282.00	-715.44	171.34	12.00	89.82	169.04
16352.21	90.56	89.816	6188.00	-684.32	9852.24	0.00	0.00	9849.99

WELL DETAILS: Anschutz Equus Farms 4-62-3340C

		GL 4657' & KB 20' @ 4677.00ft		4657.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1343308.19	3324428.11	40° 16' 11.791 N	104° 20' 14.381 W	





Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz Equus Farms 4-62-33_34 SWNW Pad

Anschutz Equus Farms 4-62-3340C

OH

Plan: Plan 2

Standard Planning Report

20 July, 2017



Scientific Drilling

www.scientificdrilling.com



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-3340C
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 4-62-3340C	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 4-62-3340C, 2081' FNL 300' FWL Sec 33 T4N R62W					
Well Position	+N-S	-181.08 ft	Northing:	1,343,308.19 usft	Latitude:	40° 16' 11.791 N
	+E-W	-41.86 ft	Easting:	3,324,428.12 usft	Longitude:	104° 20' 14.381 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	52,411
	HDGM	7/19/2017	8.27	66.93	52,362

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	89.816

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	
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,934.73	22.70	203.433	1,905.29	-203.52	-88.21	2.00	2.00	0.00	203.43	
2,235.29	22.70	203.433	2,182.58	-309.93	-134.33	0.00	0.00	0.00	0.00	
4,504.85	0.00	0.000	4,393.25	-716.99	-310.76	1.00	-1.00	0.00	180.00	
5,916.16	0.00	0.000	5,804.56	-716.99	-310.76	0.00	0.00	0.00	0.00	
6,670.80	90.56	89.816	6,282.00	-715.44	171.34	12.00	12.00	11.90	89.82	
16,352.21	90.56	89.816	6,188.00	-684.33	9,852.24	0.00	0.00	0.00	0.00	4-62-3340C PBHL

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-3340C
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 4-62-3340C	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
Start Build 2.00									
900.00	2.00	203.433	899.98	-1.60	-0.69	-0.70	2.00	2.00	0.00
1,000.00	4.00	203.433	999.84	-6.40	-2.78	-2.80	2.00	2.00	0.00
1,100.00	6.00	203.433	1,099.45	-14.40	-6.24	-6.29	2.00	2.00	0.00
1,200.00	8.00	203.433	1,198.70	-25.58	-11.09	-11.17	2.00	2.00	0.00
1,300.00	10.00	203.433	1,297.47	-39.93	-17.31	-17.44	2.00	2.00	0.00
1,400.00	12.00	203.433	1,395.62	-57.44	-24.90	-25.08	2.00	2.00	0.00
1,500.00	14.00	203.433	1,493.05	-78.08	-33.84	-34.09	2.00	2.00	0.00
1,600.00	16.00	203.433	1,589.64	-101.83	-44.13	-44.46	2.00	2.00	0.00
1,700.00	18.00	203.433	1,685.27	-128.65	-55.76	-56.17	2.00	2.00	0.00
1,800.00	20.00	203.433	1,779.81	-158.53	-68.71	-69.22	2.00	2.00	0.00
1,900.00	22.00	203.433	1,873.17	-191.41	-82.96	-83.57	2.00	2.00	0.00
1,934.73	22.70	203.433	1,905.29	-203.52	-88.21	-88.87	2.00	2.00	0.00
Start 300.56 hold at 1934.73 MD									
2,000.00	22.70	203.433	1,965.50	-226.63	-98.23	-98.95	0.00	0.00	0.00
2,100.00	22.70	203.433	2,057.76	-262.03	-113.57	-114.41	0.00	0.00	0.00
2,200.00	22.70	203.433	2,150.02	-297.43	-128.91	-129.87	0.00	0.00	0.00
2,235.29	22.70	203.433	2,182.58	-309.93	-134.33	-135.32	0.00	0.00	0.00
Start Drop -1.00									
2,300.00	22.05	203.433	2,242.41	-332.52	-144.12	-145.19	1.00	-1.00	0.00
2,400.00	21.05	203.433	2,335.42	-366.22	-158.73	-159.90	1.00	-1.00	0.00
2,500.00	20.05	203.433	2,429.06	-398.43	-172.69	-173.97	1.00	-1.00	0.00
2,600.00	19.05	203.433	2,523.29	-429.13	-185.99	-187.37	1.00	-1.00	0.00
2,700.00	18.05	203.433	2,618.10	-458.31	-198.64	-200.11	1.00	-1.00	0.00
2,800.00	17.05	203.433	2,713.44	-485.98	-210.63	-212.19	1.00	-1.00	0.00
2,900.00	16.05	203.433	2,809.30	-512.11	-221.96	-223.60	1.00	-1.00	0.00
3,000.00	15.05	203.433	2,905.64	-536.71	-232.62	-234.34	1.00	-1.00	0.00
3,100.00	14.05	203.433	3,002.43	-559.75	-242.61	-244.41	1.00	-1.00	0.00
3,200.00	13.05	203.433	3,099.65	-581.25	-251.93	-253.79	1.00	-1.00	0.00
3,300.00	12.05	203.433	3,197.26	-601.18	-260.57	-262.50	1.00	-1.00	0.00
3,400.00	11.05	203.433	3,295.23	-619.55	-268.53	-270.52	1.00	-1.00	0.00
3,500.00	10.05	203.433	3,393.54	-636.35	-275.81	-277.85	1.00	-1.00	0.00
3,600.00	9.05	203.433	3,492.15	-651.57	-282.40	-284.50	1.00	-1.00	0.00
3,700.00	8.05	203.433	3,591.04	-665.21	-288.32	-290.45	1.00	-1.00	0.00
3,800.00	7.05	203.433	3,690.17	-677.26	-293.54	-295.71	1.00	-1.00	0.00
3,900.00	6.05	203.433	3,789.52	-687.72	-298.08	-300.28	1.00	-1.00	0.00
4,000.00	5.05	203.433	3,889.05	-696.60	-301.92	-304.16	1.00	-1.00	0.00
4,100.00	4.05	203.433	3,988.73	-703.87	-305.07	-307.33	1.00	-1.00	0.00
4,200.00	3.05	203.433	4,088.54	-709.55	-307.54	-309.81	1.00	-1.00	0.00
4,300.00	2.05	203.433	4,188.44	-713.63	-309.30	-311.59	1.00	-1.00	0.00
4,400.00	1.05	203.433	4,288.40	-716.11	-310.38	-312.68	1.00	-1.00	0.00
4,500.00	0.05	203.433	4,388.40	-716.99	-310.76	-313.06	1.00	-1.00	0.00
4,504.85	0.00	0.000	4,393.25	-716.99	-310.76	-313.06	1.00	-1.00	0.00
Start 1411.31 hold at 4504.85 MD									

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-3340C
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 4-62-3340C	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	4,488.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
4,700.00	0.00	0.000	4,588.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
4,800.00	0.00	0.000	4,688.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
4,900.00	0.00	0.000	4,788.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,000.00	0.00	0.000	4,888.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,100.00	0.00	0.000	4,988.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,200.00	0.00	0.000	5,088.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,300.00	0.00	0.000	5,188.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,400.00	0.00	0.000	5,288.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,500.00	0.00	0.000	5,388.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,600.00	0.00	0.000	5,488.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,700.00	0.00	0.000	5,588.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,800.00	0.00	0.000	5,688.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,900.00	0.00	0.000	5,788.40	-716.99	-310.76	-313.06	0.00	0.00	0.00
5,916.16	0.00	0.000	5,804.56	-716.99	-310.76	-313.06	0.00	0.00	0.00
Start DLS 12.00 TFO 89.82									
6,000.00	10.06	89.816	5,887.97	-716.97	-303.42	-305.72	12.00	12.00	0.00
6,100.00	22.06	89.816	5,983.89	-716.88	-275.80	-278.10	12.00	12.00	0.00
6,200.00	34.06	89.816	6,071.97	-716.73	-228.85	-231.15	12.00	12.00	0.00
6,300.00	46.06	89.816	6,148.37	-716.52	-164.61	-166.91	12.00	12.00	0.00
6,400.00	58.06	89.816	6,209.74	-716.27	-85.89	-88.19	12.00	12.00	0.00
6,500.00	70.06	89.816	6,253.40	-715.98	3.87	1.57	12.00	12.00	0.00
6,600.00	82.06	89.816	6,277.45	-715.67	100.75	98.45	12.00	12.00	0.00
6,670.80	90.56	89.816	6,282.00	-715.44	171.34	169.04	12.00	12.00	0.00
Start 9681.41 hold at 6670.80 MD									
6,700.00	90.56	89.816	6,281.72	-715.35	200.54	198.24	0.00	0.00	0.00
6,800.00	90.56	89.816	6,280.75	-715.03	300.53	298.24	0.00	0.00	0.00
6,900.00	90.56	89.816	6,279.78	-714.70	400.53	398.23	0.00	0.00	0.00
7,000.00	90.56	89.816	6,278.81	-714.38	500.52	498.23	0.00	0.00	0.00
7,100.00	90.56	89.816	6,277.84	-714.06	600.52	598.22	0.00	0.00	0.00
7,200.00	90.56	89.816	6,276.86	-713.74	700.51	698.22	0.00	0.00	0.00
7,300.00	90.56	89.816	6,275.89	-713.42	800.51	798.21	0.00	0.00	0.00
7,400.00	90.56	89.816	6,274.92	-713.10	900.50	898.21	0.00	0.00	0.00
7,500.00	90.56	89.816	6,273.95	-712.78	1,000.50	998.20	0.00	0.00	0.00
7,600.00	90.56	89.816	6,272.98	-712.45	1,100.49	1,098.20	0.00	0.00	0.00
7,700.00	90.56	89.816	6,272.01	-712.13	1,200.49	1,198.19	0.00	0.00	0.00
7,800.00	90.56	89.816	6,271.04	-711.81	1,300.48	1,298.19	0.00	0.00	0.00
7,900.00	90.56	89.816	6,270.07	-711.49	1,400.48	1,398.18	0.00	0.00	0.00
8,000.00	90.56	89.816	6,269.10	-711.17	1,500.47	1,498.18	0.00	0.00	0.00
8,100.00	90.56	89.816	6,268.13	-710.85	1,600.46	1,598.17	0.00	0.00	0.00
8,200.00	90.56	89.816	6,267.15	-710.53	1,700.46	1,698.17	0.00	0.00	0.00
8,300.00	90.56	89.816	6,266.18	-710.21	1,800.45	1,798.16	0.00	0.00	0.00
8,400.00	90.56	89.816	6,265.21	-709.88	1,900.45	1,898.16	0.00	0.00	0.00
8,500.00	90.56	89.816	6,264.24	-709.56	2,000.44	1,998.15	0.00	0.00	0.00
8,600.00	90.56	89.816	6,263.27	-709.24	2,100.44	2,098.15	0.00	0.00	0.00
8,700.00	90.56	89.816	6,262.30	-708.92	2,200.43	2,198.15	0.00	0.00	0.00
8,800.00	90.56	89.816	6,261.33	-708.60	2,300.43	2,298.14	0.00	0.00	0.00
8,900.00	90.56	89.816	6,260.36	-708.28	2,400.42	2,398.14	0.00	0.00	0.00
9,000.00	90.56	89.816	6,259.39	-707.96	2,500.42	2,498.13	0.00	0.00	0.00
9,100.00	90.56	89.816	6,258.42	-707.63	2,600.41	2,598.13	0.00	0.00	0.00
9,200.00	90.56	89.816	6,257.45	-707.31	2,700.41	2,698.12	0.00	0.00	0.00
9,300.00	90.56	89.816	6,256.47	-706.99	2,800.40	2,798.12	0.00	0.00	0.00
9,400.00	90.56	89.816	6,255.50	-706.67	2,900.40	2,898.11	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-3340C
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 4-62-3340C	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	90.56	89.816	6,254.53	-706.35	3,000.39	2,998.11	0.00	0.00	0.00
9,600.00	90.56	89.816	6,253.56	-706.03	3,100.39	3,098.10	0.00	0.00	0.00
9,700.00	90.56	89.816	6,252.59	-705.71	3,200.38	3,198.10	0.00	0.00	0.00
9,800.00	90.56	89.816	6,251.62	-705.38	3,300.38	3,298.09	0.00	0.00	0.00
9,900.00	90.56	89.816	6,250.65	-705.06	3,400.37	3,398.09	0.00	0.00	0.00
10,000.00	90.56	89.816	6,249.68	-704.74	3,500.37	3,498.08	0.00	0.00	0.00
10,100.00	90.56	89.816	6,248.71	-704.42	3,600.36	3,598.08	0.00	0.00	0.00
10,200.00	90.56	89.816	6,247.74	-704.10	3,700.36	3,698.07	0.00	0.00	0.00
10,300.00	90.56	89.816	6,246.76	-703.78	3,800.35	3,798.07	0.00	0.00	0.00
10,400.00	90.56	89.816	6,245.79	-703.46	3,900.34	3,898.07	0.00	0.00	0.00
10,500.00	90.56	89.816	6,244.82	-703.14	4,000.34	3,998.06	0.00	0.00	0.00
10,600.00	90.56	89.816	6,243.85	-702.81	4,100.33	4,098.06	0.00	0.00	0.00
10,700.00	90.56	89.816	6,242.88	-702.49	4,200.33	4,198.05	0.00	0.00	0.00
10,800.00	90.56	89.816	6,241.91	-702.17	4,300.32	4,298.05	0.00	0.00	0.00
10,900.00	90.56	89.816	6,240.94	-701.85	4,400.32	4,398.04	0.00	0.00	0.00
11,000.00	90.56	89.816	6,239.97	-701.53	4,500.31	4,498.04	0.00	0.00	0.00
11,100.00	90.56	89.816	6,239.00	-701.21	4,600.31	4,598.03	0.00	0.00	0.00
11,200.00	90.56	89.816	6,238.03	-700.89	4,700.30	4,698.03	0.00	0.00	0.00
11,300.00	90.56	89.816	6,237.05	-700.56	4,800.30	4,798.02	0.00	0.00	0.00
11,400.00	90.56	89.816	6,236.08	-700.24	4,900.29	4,898.02	0.00	0.00	0.00
11,500.00	90.56	89.816	6,235.11	-699.92	5,000.29	4,998.01	0.00	0.00	0.00
11,600.00	90.56	89.816	6,234.14	-699.60	5,100.28	5,098.01	0.00	0.00	0.00
11,700.00	90.56	89.816	6,233.17	-699.28	5,200.28	5,198.00	0.00	0.00	0.00
11,800.00	90.56	89.816	6,232.20	-698.96	5,300.27	5,298.00	0.00	0.00	0.00
11,900.00	90.56	89.816	6,231.23	-698.64	5,400.27	5,397.99	0.00	0.00	0.00
12,000.00	90.56	89.816	6,230.26	-698.31	5,500.26	5,497.99	0.00	0.00	0.00
12,100.00	90.56	89.816	6,229.29	-697.99	5,600.26	5,597.99	0.00	0.00	0.00
12,200.00	90.56	89.816	6,228.32	-697.67	5,700.25	5,697.98	0.00	0.00	0.00
12,300.00	90.56	89.816	6,227.35	-697.35	5,800.25	5,797.98	0.00	0.00	0.00
12,400.00	90.56	89.816	6,226.37	-697.03	5,900.24	5,897.97	0.00	0.00	0.00
12,500.00	90.56	89.816	6,225.40	-696.71	6,000.23	5,997.97	0.00	0.00	0.00
12,600.00	90.56	89.816	6,224.43	-696.39	6,100.23	6,097.96	0.00	0.00	0.00
12,700.00	90.56	89.816	6,223.46	-696.07	6,200.22	6,197.96	0.00	0.00	0.00
12,800.00	90.56	89.816	6,222.49	-695.74	6,300.22	6,297.95	0.00	0.00	0.00
12,900.00	90.56	89.816	6,221.52	-695.42	6,400.21	6,397.95	0.00	0.00	0.00
13,000.00	90.56	89.816	6,220.55	-695.10	6,500.21	6,497.94	0.00	0.00	0.00
13,100.00	90.56	89.816	6,219.58	-694.78	6,600.20	6,597.94	0.00	0.00	0.00
13,200.00	90.56	89.816	6,218.61	-694.46	6,700.20	6,697.93	0.00	0.00	0.00
13,300.00	90.56	89.816	6,217.64	-694.14	6,800.19	6,797.93	0.00	0.00	0.00
13,400.00	90.56	89.816	6,216.66	-693.82	6,900.19	6,897.92	0.00	0.00	0.00
13,500.00	90.56	89.816	6,215.69	-693.49	7,000.18	6,997.92	0.00	0.00	0.00
13,600.00	90.56	89.816	6,214.72	-693.17	7,100.18	7,097.91	0.00	0.00	0.00
13,700.00	90.56	89.816	6,213.75	-692.85	7,200.17	7,197.91	0.00	0.00	0.00
13,800.00	90.56	89.816	6,212.78	-692.53	7,300.17	7,297.91	0.00	0.00	0.00
13,900.00	90.56	89.816	6,211.81	-692.21	7,400.16	7,397.90	0.00	0.00	0.00
14,000.00	90.56	89.816	6,210.84	-691.89	7,500.16	7,497.90	0.00	0.00	0.00
14,100.00	90.56	89.816	6,209.87	-691.57	7,600.15	7,597.89	0.00	0.00	0.00
14,200.00	90.56	89.816	6,208.90	-691.24	7,700.15	7,697.89	0.00	0.00	0.00
14,300.00	90.56	89.816	6,207.93	-690.92	7,800.14	7,797.88	0.00	0.00	0.00
14,400.00	90.56	89.816	6,206.96	-690.60	7,900.14	7,897.88	0.00	0.00	0.00
14,500.00	90.56	89.816	6,205.98	-690.28	8,000.13	7,997.87	0.00	0.00	0.00
14,600.00	90.56	89.816	6,205.01	-689.96	8,100.13	8,097.87	0.00	0.00	0.00
14,700.00	90.56	89.816	6,204.04	-689.64	8,200.12	8,197.86	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-3340C
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 4-62-3340C	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	90.56	89.816	6,203.07	-689.32	8,300.11	8,297.86	0.00	0.00	0.00	
14,900.00	90.56	89.816	6,202.10	-689.00	8,400.11	8,397.85	0.00	0.00	0.00	
15,000.00	90.56	89.816	6,201.13	-688.67	8,500.10	8,497.85	0.00	0.00	0.00	
15,100.00	90.56	89.816	6,200.16	-688.35	8,600.10	8,597.84	0.00	0.00	0.00	
15,200.00	90.56	89.816	6,199.19	-688.03	8,700.09	8,697.84	0.00	0.00	0.00	
15,300.00	90.56	89.816	6,198.22	-687.71	8,800.09	8,797.83	0.00	0.00	0.00	
15,400.00	90.56	89.816	6,197.25	-687.39	8,900.08	8,897.83	0.00	0.00	0.00	
15,500.00	90.56	89.816	6,196.27	-687.07	9,000.08	8,997.83	0.00	0.00	0.00	
15,600.00	90.56	89.816	6,195.30	-686.75	9,100.07	9,097.82	0.00	0.00	0.00	
15,700.00	90.56	89.816	6,194.33	-686.42	9,200.07	9,197.82	0.00	0.00	0.00	
15,800.00	90.56	89.816	6,193.36	-686.10	9,300.06	9,297.81	0.00	0.00	0.00	
15,900.00	90.56	89.816	6,192.39	-685.78	9,400.06	9,397.81	0.00	0.00	0.00	
16,000.00	90.56	89.816	6,191.42	-685.46	9,500.05	9,497.80	0.00	0.00	0.00	
16,100.00	90.56	89.816	6,190.45	-685.14	9,600.05	9,597.80	0.00	0.00	0.00	
16,200.00	90.56	89.816	6,189.48	-684.82	9,700.04	9,697.79	0.00	0.00	0.00	
16,300.00	90.56	89.816	6,188.51	-684.50	9,800.04	9,797.79	0.00	0.00	0.00	
16,352.21	90.56	89.816	6,188.00	-684.33	9,852.24	9,850.00	0.00	0.00	0.00	
TD at 16352.21										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
4-62-3340C PBHL - hit/miss target - Shape - Point	0.00	0.000	6,188.00	-684.33	9,852.24	1,342,753.10	3,334,288.47	40° 16' 5.009 N	104° 18' 7.279 W	
4-62-3340C LP - plan misses target center by 0.01ft at 6670.80ft MD (6282.00 TVD, -715.44 N, 171.34 E) - Point	0.00	0.000	6,282.00	-715.43	171.34	1,342,595.07	3,324,608.82	40° 16' 4.721 N	104° 20' 12.170 W	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
800.00	800.00	0.00	0.00	Start Build 2.00	
1,934.73	1,905.29	-203.52	-88.21	Start 300.56 hold at 1934.73 MD	
2,235.29	2,182.58	-309.93	-134.33	Start Drop -1.00	
4,504.85	4,393.25	-716.99	-310.76	Start 1411.31 hold at 4504.85 MD	
5,916.16	5,804.56	-716.99	-310.76	Start DLS 12.00 TFO 89.82	
6,670.80	6,282.00	-715.44	171.34	Start 9681.41 hold at 6670.80 MD	
16,352.21	6,188.00	-684.33	9,852.24	TD at 16352.21	