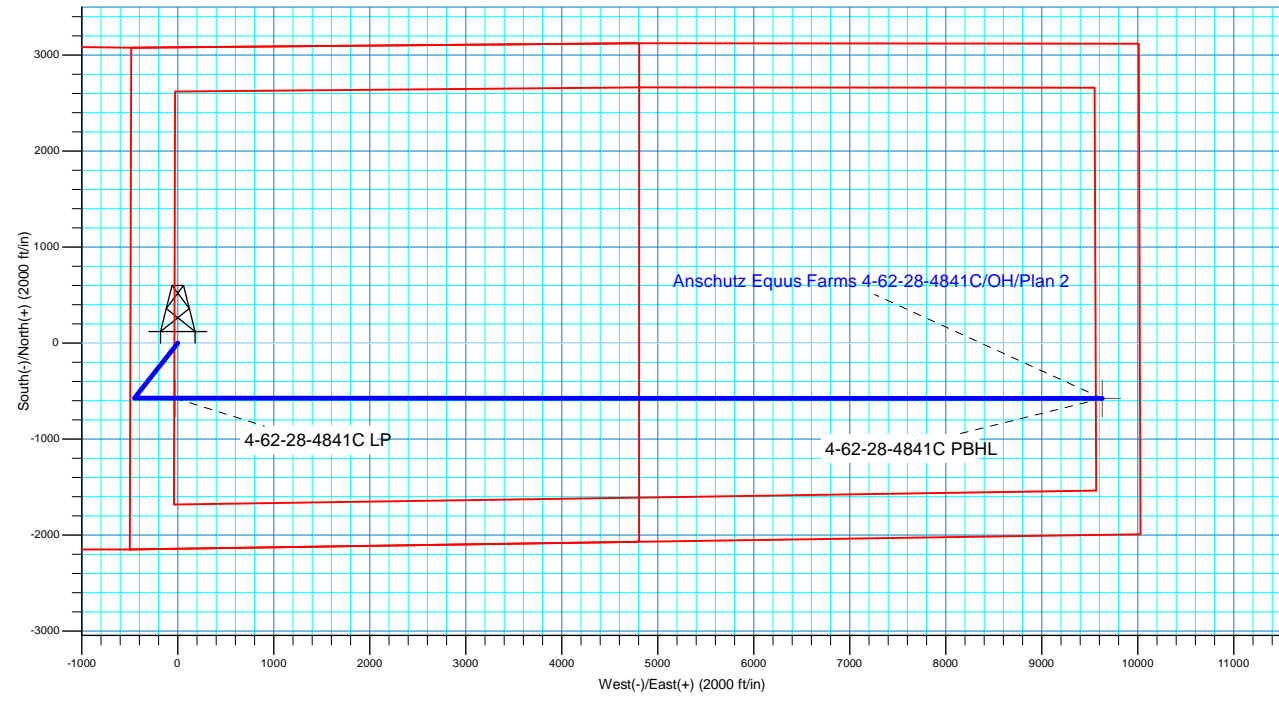
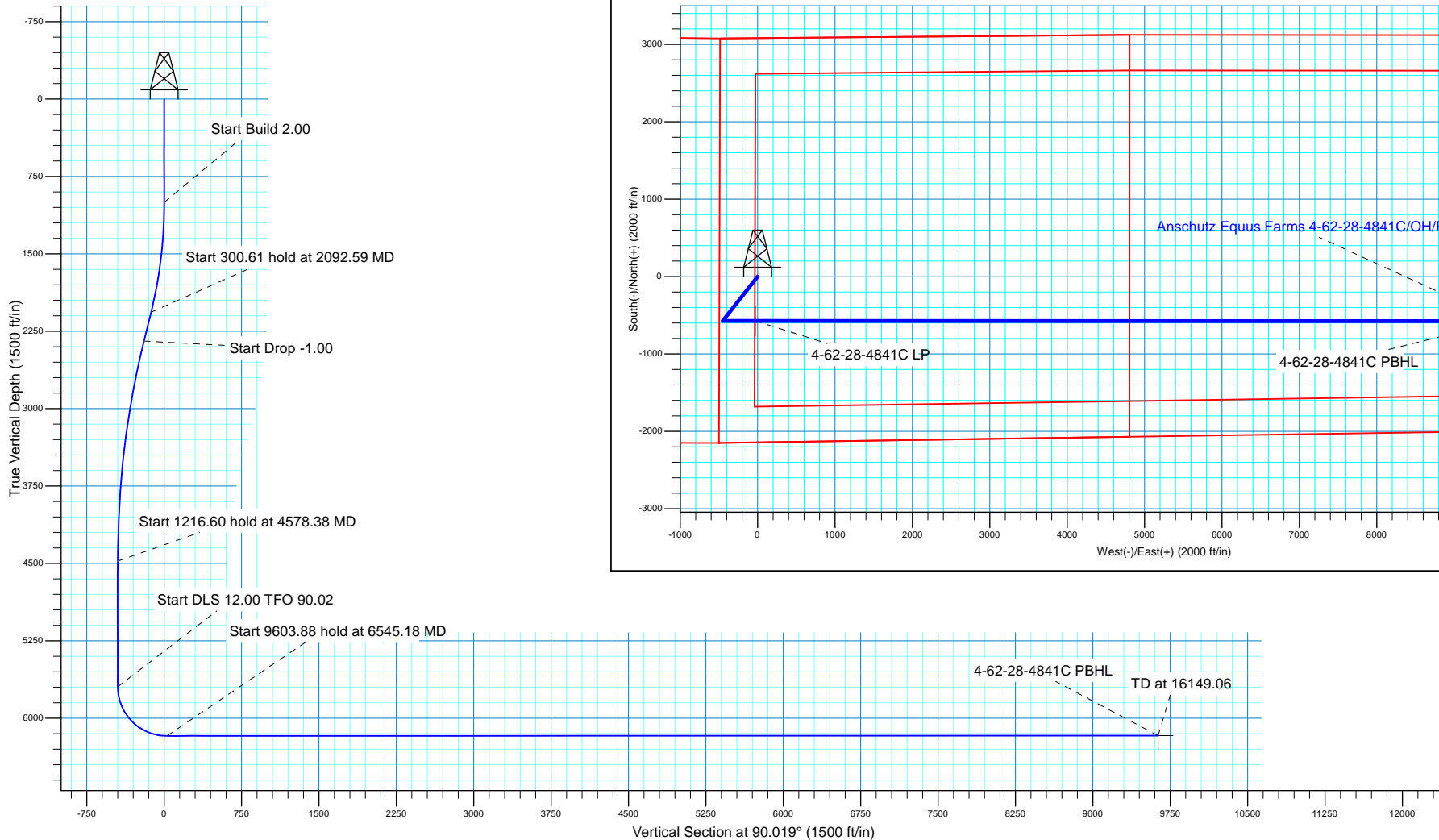



SECTION DETAILS

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
2092.59	21.85	218.153	2066.30	-161.86	-127.16	2.00	218.15	-127.11
2393.20	21.85	218.153	2345.31	-249.85	-196.28	0.00	0.00	-196.20
4578.38	0.00	0.000	4477.90	-573.57	-450.60	1.00	180.00	-450.41
5794.98	0.00	0.000	5694.50	-573.57	-450.60	0.00	0.00	-450.41
6545.18	90.02	90.019	6171.96	-573.73	27.06	12.00	90.02	27.25
16149.06	90.02	90.019	6168.00	-576.96	9630.94	0.00	0.00	9631.13

WELL DETAILS: Anschutz Equus Farms 4-62-28-4841C

		GL 4624' & KB 20' @ 4644.00ft		4624.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1347532.37	3324530.93	40° 16' 53.519 N	104° 20' 12.340 W	





Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz Equus Farms 4-62-28_27 NWSW Pad

Anschutz Equus Farms 4-62-28-4841C

OH

Plan: Plan 2

Standard Planning Report

28 June, 2017



Scientific Drilling

www.scientificdrilling.com



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-4841C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4624' & KB 20' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4624' & KB 20' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28_27 NWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-4841C	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 4-62-28_27 NWSW Pad, Site Center : Anschutz Equus Farms 4-62-28-3240C		
Site Position:		Northing:	1,347,562.99 usft
From:	Lat/Long	Easting:	3,324,530.53 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	40° 16' 53.821 N
		Longitude:	104° 20' 12.340 W
		Grid Convergence:	0.75 °

Well	Anschutz Equus Farms 4-62-28-4841C, 2140' FSL 486' FWL Sec 28 T4N R62W		
Well Position	+N/-S	-30.63 ft	Northing: 1,347,532.37 usft
	+E/-W	0.00 ft	Easting: 3,324,530.94 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Latitude:	40° 16' 53.518 N
		Longitude:	104° 20' 12.340 W
		Ground Level:	4,624.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	4/18/2017	8.14	66.86	52,417
	HDGM	6/28/2017	8.27	66.95	52,366

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	90.019

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	
2,092.59	21.85	218.153	2,066.30	-161.86	-127.16	2.00	2.00	0.00	218.15	
2,393.20	21.85	218.153	2,345.31	-249.85	-196.28	0.00	0.00	0.00	0.00	
4,578.39	0.00	0.000	4,477.90	-573.57	-450.60	1.00	-1.00	0.00	180.00	
5,794.99	0.00	0.000	5,694.50	-573.57	-450.60	0.00	0.00	0.00	0.00	
6,545.18	90.02	90.019	6,171.96	-573.73	27.06	12.00	12.00	12.00	90.02	
16,149.07	90.02	90.019	6,168.00	-576.95	9,630.94	0.00	0.00	0.00	0.00	4-62-28-4841C PBHL

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-4841C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4624' & KB 20' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4624' & KB 20' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28_27 NWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-4841C	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	218.153	1,099.98	-1.37	-1.08	-1.08	2.00	2.00	0.00
1,200.00	4.00	218.153	1,199.84	-5.49	-4.31	-4.31	2.00	2.00	0.00
1,300.00	6.00	218.153	1,299.45	-12.34	-9.70	-9.69	2.00	2.00	0.00
1,400.00	8.00	218.153	1,398.70	-21.92	-17.22	-17.22	2.00	2.00	0.00
1,500.00	10.00	218.153	1,497.47	-34.22	-26.89	-26.88	2.00	2.00	0.00
1,600.00	12.00	218.153	1,595.62	-49.23	-38.67	-38.66	2.00	2.00	0.00
1,700.00	14.00	218.153	1,693.06	-66.92	-52.57	-52.55	2.00	2.00	0.00
1,800.00	16.00	218.153	1,789.64	-87.27	-68.56	-68.53	2.00	2.00	0.00
1,900.00	18.00	218.153	1,885.27	-110.26	-86.62	-86.58	2.00	2.00	0.00
2,000.00	20.00	218.153	1,979.82	-135.86	-106.73	-106.69	2.00	2.00	0.00
2,092.59	21.85	218.153	2,066.30	-161.86	-127.16	-127.11	2.00	2.00	0.00
Start 300.61 hold at 2092.59 MD									
2,100.00	21.85	218.153	2,073.17	-164.03	-128.86	-128.81	0.00	0.00	0.00
2,200.00	21.85	218.153	2,165.99	-193.30	-151.86	-151.79	0.00	0.00	0.00
2,300.00	21.85	218.153	2,258.80	-222.57	-174.85	-174.78	0.00	0.00	0.00
2,393.20	21.85	218.153	2,345.31	-249.85	-196.28	-196.20	0.00	0.00	0.00
Start Drop -1.00									
2,400.00	21.78	218.153	2,351.62	-251.83	-197.84	-197.76	1.00	-1.00	0.00
2,500.00	20.78	218.153	2,444.80	-280.38	-220.27	-220.17	1.00	-1.00	0.00
2,600.00	19.78	218.153	2,538.59	-307.64	-241.68	-241.58	1.00	-1.00	0.00
2,700.00	18.78	218.153	2,632.98	-333.61	-262.08	-261.97	1.00	-1.00	0.00
2,800.00	17.78	218.153	2,727.93	-358.28	-281.46	-281.35	1.00	-1.00	0.00
2,900.00	16.78	218.153	2,823.42	-381.64	-299.82	-299.69	1.00	-1.00	0.00
3,000.00	15.78	218.153	2,919.40	-403.69	-317.14	-317.01	1.00	-1.00	0.00
3,100.00	14.78	218.153	3,015.87	-424.42	-333.42	-333.28	1.00	-1.00	0.00
3,200.00	13.78	218.153	3,112.77	-443.82	-348.67	-348.52	1.00	-1.00	0.00
3,300.00	12.78	218.153	3,210.10	-461.89	-362.86	-362.71	1.00	-1.00	0.00
3,400.00	11.78	218.153	3,307.80	-478.62	-376.00	-375.85	1.00	-1.00	0.00
3,500.00	10.78	218.153	3,405.87	-494.00	-388.09	-387.93	1.00	-1.00	0.00
3,600.00	9.78	218.153	3,504.26	-508.04	-399.12	-398.95	1.00	-1.00	0.00
3,700.00	8.78	218.153	3,602.95	-520.73	-409.09	-408.91	1.00	-1.00	0.00
3,800.00	7.78	218.153	3,701.91	-532.06	-417.99	-417.81	1.00	-1.00	0.00
3,900.00	6.78	218.153	3,801.10	-542.03	-425.82	-425.64	1.00	-1.00	0.00
4,000.00	5.78	218.153	3,900.50	-550.63	-432.58	-432.40	1.00	-1.00	0.00
4,100.00	4.78	218.153	4,000.07	-557.87	-438.27	-438.08	1.00	-1.00	0.00
4,200.00	3.78	218.153	4,099.79	-563.75	-442.88	-442.70	1.00	-1.00	0.00
4,300.00	2.78	218.153	4,199.62	-568.25	-446.42	-446.23	1.00	-1.00	0.00
4,400.00	1.78	218.153	4,299.54	-571.39	-448.88	-448.70	1.00	-1.00	0.00
4,500.00	0.78	218.153	4,399.52	-573.15	-450.27	-450.08	1.00	-1.00	0.00
4,578.39	0.00	0.000	4,477.90	-573.57	-450.60	-450.41	1.00	-1.00	0.00
Start 1216.60 hold at 4578.38 MD									

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-4841C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4624' & KB 20' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4624' & KB 20' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28_27 NWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-4841C	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	4,499.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
4,700.00	0.00	0.000	4,599.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
4,800.00	0.00	0.000	4,699.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
4,900.00	0.00	0.000	4,799.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
5,000.00	0.00	0.000	4,899.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
5,100.00	0.00	0.000	4,999.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
5,200.00	0.00	0.000	5,099.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
5,300.00	0.00	0.000	5,199.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
5,400.00	0.00	0.000	5,299.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
5,500.00	0.00	0.000	5,399.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
5,600.00	0.00	0.000	5,499.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
5,700.00	0.00	0.000	5,599.52	-573.57	-450.60	-450.41	0.00	0.00	0.00
5,794.99	0.00	0.000	5,694.50	-573.57	-450.60	-450.41	0.00	0.00	0.00
Start DLS 12.00 TFO 90.02									
5,800.00	0.60	90.019	5,699.52	-573.57	-450.57	-450.38	12.00	12.00	0.00
5,900.00	12.60	90.019	5,798.67	-573.57	-439.10	-438.91	12.00	12.00	0.00
6,000.00	24.60	90.019	5,893.27	-573.58	-407.26	-407.07	12.00	12.00	0.00
6,100.00	36.60	90.019	5,979.19	-573.60	-356.44	-356.25	12.00	12.00	0.00
6,200.00	48.60	90.019	6,052.66	-573.62	-288.88	-288.69	12.00	12.00	0.00
6,300.00	60.60	90.019	6,110.48	-573.65	-207.51	-207.32	12.00	12.00	0.00
6,400.00	72.60	90.019	6,150.12	-573.68	-115.90	-115.71	12.00	12.00	0.00
6,500.00	84.60	90.019	6,169.85	-573.72	-18.05	-17.86	12.00	12.00	0.00
6,545.18	90.02	90.019	6,171.96	-573.73	27.06	27.25	12.00	12.00	0.00
Start 9603.88 hold at 6545.18 MD									
6,600.00	90.02	90.019	6,171.94	-573.75	81.88	82.07	0.00	0.00	0.00
6,700.00	90.02	90.019	6,171.90	-573.78	181.88	182.07	0.00	0.00	0.00
6,800.00	90.02	90.019	6,171.86	-573.82	281.88	282.07	0.00	0.00	0.00
6,900.00	90.02	90.019	6,171.82	-573.85	381.88	382.07	0.00	0.00	0.00
7,000.00	90.02	90.019	6,171.78	-573.88	481.88	482.07	0.00	0.00	0.00
7,100.00	90.02	90.019	6,171.74	-573.92	581.88	582.07	0.00	0.00	0.00
7,200.00	90.02	90.019	6,171.69	-573.95	681.88	682.07	0.00	0.00	0.00
7,300.00	90.02	90.019	6,171.65	-573.98	781.88	782.07	0.00	0.00	0.00
7,400.00	90.02	90.019	6,171.61	-574.02	881.88	882.07	0.00	0.00	0.00
7,500.00	90.02	90.019	6,171.57	-574.05	981.88	982.07	0.00	0.00	0.00
7,600.00	90.02	90.019	6,171.53	-574.08	1,081.88	1,082.07	0.00	0.00	0.00
7,700.00	90.02	90.019	6,171.49	-574.12	1,181.88	1,182.07	0.00	0.00	0.00
7,800.00	90.02	90.019	6,171.45	-574.15	1,281.88	1,282.07	0.00	0.00	0.00
7,900.00	90.02	90.019	6,171.41	-574.18	1,381.88	1,382.07	0.00	0.00	0.00
8,000.00	90.02	90.019	6,171.36	-574.22	1,481.88	1,482.07	0.00	0.00	0.00
8,100.00	90.02	90.019	6,171.32	-574.25	1,581.88	1,582.07	0.00	0.00	0.00
8,200.00	90.02	90.019	6,171.28	-574.29	1,681.88	1,682.07	0.00	0.00	0.00
8,300.00	90.02	90.019	6,171.24	-574.32	1,781.88	1,782.07	0.00	0.00	0.00
8,400.00	90.02	90.019	6,171.20	-574.35	1,881.88	1,882.07	0.00	0.00	0.00
8,500.00	90.02	90.019	6,171.16	-574.39	1,981.88	1,982.07	0.00	0.00	0.00
8,600.00	90.02	90.019	6,171.12	-574.42	2,081.88	2,082.07	0.00	0.00	0.00
8,700.00	90.02	90.019	6,171.08	-574.45	2,181.88	2,182.07	0.00	0.00	0.00
8,800.00	90.02	90.019	6,171.03	-574.49	2,281.88	2,282.07	0.00	0.00	0.00
8,900.00	90.02	90.019	6,170.99	-574.52	2,381.88	2,382.07	0.00	0.00	0.00
9,000.00	90.02	90.019	6,170.95	-574.55	2,481.88	2,482.07	0.00	0.00	0.00
9,100.00	90.02	90.019	6,170.91	-574.59	2,581.88	2,582.07	0.00	0.00	0.00
9,200.00	90.02	90.019	6,170.87	-574.62	2,681.88	2,682.07	0.00	0.00	0.00
9,300.00	90.02	90.019	6,170.83	-574.65	2,781.88	2,782.07	0.00	0.00	0.00
9,400.00	90.02	90.019	6,170.79	-574.69	2,881.88	2,882.07	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-4841C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4624' & KB 20' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4624' & KB 20' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28_27 NWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-4841C	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	90.02	90.019	6,170.75	-574.72	2,981.88	2,982.07	0.00	0.00	0.00
9,600.00	90.02	90.019	6,170.70	-574.75	3,081.88	3,082.07	0.00	0.00	0.00
9,700.00	90.02	90.019	6,170.66	-574.79	3,181.88	3,182.07	0.00	0.00	0.00
9,800.00	90.02	90.019	6,170.62	-574.82	3,281.88	3,282.07	0.00	0.00	0.00
9,900.00	90.02	90.019	6,170.58	-574.86	3,381.88	3,382.07	0.00	0.00	0.00
10,000.00	90.02	90.019	6,170.54	-574.89	3,481.88	3,482.07	0.00	0.00	0.00
10,100.00	90.02	90.019	6,170.50	-574.92	3,581.88	3,582.07	0.00	0.00	0.00
10,200.00	90.02	90.019	6,170.46	-574.96	3,681.88	3,682.07	0.00	0.00	0.00
10,300.00	90.02	90.019	6,170.41	-574.99	3,781.88	3,782.07	0.00	0.00	0.00
10,400.00	90.02	90.019	6,170.37	-575.02	3,881.88	3,882.07	0.00	0.00	0.00
10,500.00	90.02	90.019	6,170.33	-575.06	3,981.88	3,982.07	0.00	0.00	0.00
10,600.00	90.02	90.019	6,170.29	-575.09	4,081.88	4,082.07	0.00	0.00	0.00
10,700.00	90.02	90.019	6,170.25	-575.12	4,181.88	4,182.07	0.00	0.00	0.00
10,800.00	90.02	90.019	6,170.21	-575.16	4,281.88	4,282.07	0.00	0.00	0.00
10,900.00	90.02	90.019	6,170.17	-575.19	4,381.88	4,382.07	0.00	0.00	0.00
11,000.00	90.02	90.019	6,170.13	-575.22	4,481.88	4,482.07	0.00	0.00	0.00
11,100.00	90.02	90.019	6,170.08	-575.26	4,581.88	4,582.07	0.00	0.00	0.00
11,200.00	90.02	90.019	6,170.04	-575.29	4,681.88	4,682.07	0.00	0.00	0.00
11,300.00	90.02	90.019	6,170.00	-575.33	4,781.88	4,782.07	0.00	0.00	0.00
11,400.00	90.02	90.019	6,169.96	-575.36	4,881.88	4,882.07	0.00	0.00	0.00
11,500.00	90.02	90.019	6,169.92	-575.39	4,981.88	4,982.07	0.00	0.00	0.00
11,600.00	90.02	90.019	6,169.88	-575.43	5,081.88	5,082.07	0.00	0.00	0.00
11,700.00	90.02	90.019	6,169.84	-575.46	5,181.88	5,182.07	0.00	0.00	0.00
11,800.00	90.02	90.019	6,169.80	-575.49	5,281.88	5,282.07	0.00	0.00	0.00
11,900.00	90.02	90.019	6,169.75	-575.53	5,381.88	5,382.07	0.00	0.00	0.00
12,000.00	90.02	90.019	6,169.71	-575.56	5,481.88	5,482.07	0.00	0.00	0.00
12,100.00	90.02	90.019	6,169.67	-575.59	5,581.88	5,582.07	0.00	0.00	0.00
12,200.00	90.02	90.019	6,169.63	-575.63	5,681.88	5,682.07	0.00	0.00	0.00
12,300.00	90.02	90.019	6,169.59	-575.66	5,781.88	5,782.07	0.00	0.00	0.00
12,400.00	90.02	90.019	6,169.55	-575.69	5,881.88	5,882.07	0.00	0.00	0.00
12,500.00	90.02	90.019	6,169.51	-575.73	5,981.88	5,982.07	0.00	0.00	0.00
12,600.00	90.02	90.019	6,169.47	-575.76	6,081.88	6,082.07	0.00	0.00	0.00
12,700.00	90.02	90.019	6,169.42	-575.79	6,181.88	6,182.07	0.00	0.00	0.00
12,800.00	90.02	90.019	6,169.38	-575.83	6,281.88	6,282.07	0.00	0.00	0.00
12,900.00	90.02	90.019	6,169.34	-575.86	6,381.88	6,382.07	0.00	0.00	0.00
13,000.00	90.02	90.019	6,169.30	-575.90	6,481.88	6,482.07	0.00	0.00	0.00
13,100.00	90.02	90.019	6,169.26	-575.93	6,581.88	6,582.07	0.00	0.00	0.00
13,200.00	90.02	90.019	6,169.22	-575.96	6,681.88	6,682.07	0.00	0.00	0.00
13,300.00	90.02	90.019	6,169.18	-576.00	6,781.88	6,782.07	0.00	0.00	0.00
13,400.00	90.02	90.019	6,169.14	-576.03	6,881.88	6,882.07	0.00	0.00	0.00
13,500.00	90.02	90.019	6,169.09	-576.06	6,981.88	6,982.07	0.00	0.00	0.00
13,600.00	90.02	90.019	6,169.05	-576.10	7,081.88	7,082.07	0.00	0.00	0.00
13,700.00	90.02	90.019	6,169.01	-576.13	7,181.88	7,182.07	0.00	0.00	0.00
13,800.00	90.02	90.019	6,168.97	-576.16	7,281.88	7,282.07	0.00	0.00	0.00
13,900.00	90.02	90.019	6,168.93	-576.20	7,381.88	7,382.07	0.00	0.00	0.00
14,000.00	90.02	90.019	6,168.89	-576.23	7,481.88	7,482.07	0.00	0.00	0.00
14,100.00	90.02	90.019	6,168.85	-576.26	7,581.88	7,582.07	0.00	0.00	0.00
14,200.00	90.02	90.019	6,168.80	-576.30	7,681.88	7,682.07	0.00	0.00	0.00
14,300.00	90.02	90.019	6,168.76	-576.33	7,781.88	7,782.07	0.00	0.00	0.00
14,400.00	90.02	90.019	6,168.72	-576.36	7,881.88	7,882.07	0.00	0.00	0.00
14,500.00	90.02	90.019	6,168.68	-576.40	7,981.88	7,982.07	0.00	0.00	0.00
14,600.00	90.02	90.019	6,168.64	-576.43	8,081.88	8,082.07	0.00	0.00	0.00
14,700.00	90.02	90.019	6,168.60	-576.47	8,181.88	8,182.07	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-4841C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4624' & KB 20' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4624' & KB 20' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28_27 NWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-4841C	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	90.02	90.019	6,168.56	-576.50	8,281.88	8,282.07	0.00	0.00	0.00	
14,900.00	90.02	90.019	6,168.52	-576.53	8,381.88	8,382.07	0.00	0.00	0.00	
15,000.00	90.02	90.019	6,168.47	-576.57	8,481.88	8,482.07	0.00	0.00	0.00	
15,100.00	90.02	90.019	6,168.43	-576.60	8,581.88	8,582.07	0.00	0.00	0.00	
15,200.00	90.02	90.019	6,168.39	-576.63	8,681.88	8,682.07	0.00	0.00	0.00	
15,300.00	90.02	90.019	6,168.35	-576.67	8,781.88	8,782.07	0.00	0.00	0.00	
15,400.00	90.02	90.019	6,168.31	-576.70	8,881.88	8,882.07	0.00	0.00	0.00	
15,500.00	90.02	90.019	6,168.27	-576.73	8,981.88	8,982.07	0.00	0.00	0.00	
15,600.00	90.02	90.019	6,168.23	-576.77	9,081.88	9,082.07	0.00	0.00	0.00	
15,700.00	90.02	90.019	6,168.19	-576.80	9,181.88	9,182.07	0.00	0.00	0.00	
15,800.00	90.02	90.019	6,168.14	-576.83	9,281.88	9,282.07	0.00	0.00	0.00	
15,900.00	90.02	90.019	6,168.10	-576.87	9,381.88	9,382.07	0.00	0.00	0.00	
16,000.00	90.02	90.019	6,168.06	-576.90	9,481.88	9,482.07	0.00	0.00	0.00	
16,100.00	90.02	90.019	6,168.02	-576.94	9,581.88	9,582.07	0.00	0.00	0.00	
16,149.07	90.02	90.019	6,168.00	-576.95	9,630.94	9,631.13	0.00	0.00	0.00	
TD at 16149.06										

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										
4-62-28-4841C PBHL	0.00	0.000	6,168.00	-576.95	9,630.94	1,347,081.80	3,334,168.60	40° 16' 47.798 N	104° 18' 8.071 W	
- plan hits target center										
- Point										
4-62-28-4841C LP	0.00	0.000	6,271.00	-573.73	-27.06	1,346,958.34	3,324,511.40	40° 16' 47.849 N	104° 20' 12.689 W	
- plan misses target center by 101.55ft at 6500.00ft MD (6169.85 TVD, -573.72 N, -18.05 E)										
- Point										

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00	
2,092.59	2,066.30	-161.86	-127.16	Start 300.61 hold at 2092.59 MD	
2,393.20	2,345.31	-249.85	-196.28	Start Drop -1.00	
4,578.39	4,477.90	-573.57	-450.60	Start 1216.60 hold at 4578.38 MD	
5,794.99	5,694.50	-573.57	-450.60	Start DLS 12.00 TFO 90.02	
6,545.18	6,171.96	-573.73	27.06	Start 9603.88 hold at 6545.18 MD	
16,149.07	6,168.00	-576.95	9,630.94	TD at 16149.06	