

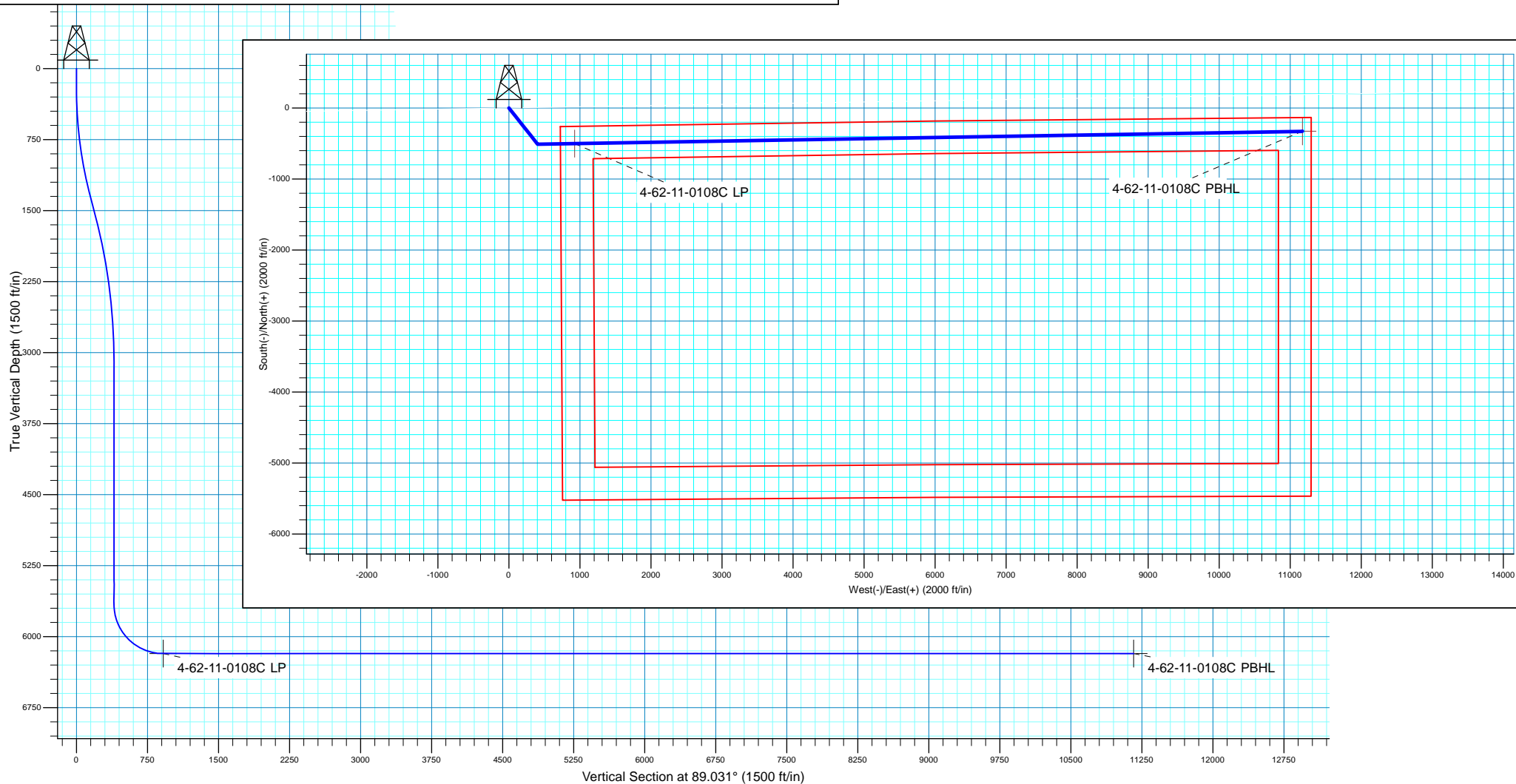
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level
Local North: True



Magnetic Field
Strength: 52288.8snT
Dip Angle: 66.97°
Date: 1/3/2018
Model: HDGM

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec
0.00	0.00	0.000	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
1352.77	23.06	141.585	1321.91	-179.29	142.18	2.00	141.59	139.12
1652.83	23.06	141.585	1598.00	-271.36	215.19	0.00	0.00	210.57
3189.85	0.00	0.000	3093.88	-510.41	404.76	1.50	180.00	396.07
5754.10	0.00	0.000	5658.13	-510.41	404.76	0.00	0.00	396.07
6572.28	90.00	89.031	6179.00	-501.60	925.56	11.00	89.03	916.94
16818.98	90.00	89.031	6179.00	-328.23	11170.79	0.00	0.00	11163.64

		GL 4523' & KB 20' @ 4543.00ft		4523.00	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1367111.93	3333225.83	40° 20' 5.849 N	104° 18' 16.751 W





Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

RSU Anschutz Fed 4-62-2_1 SE3 Pad

RSU Anschutz Fed 4-62-11-0108C

OH

Plan: Plan 1

Standard Planning Report

03 January, 2018



Scientific Drilling

www.scientificdrilling.com



Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-62-11-0108C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4523' & KB 20' @ 4543.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4523' & KB 20' @ 4543.00ft
Site:	RSU Anschutz Fed 4-62-2_1 SE3 Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-62-11-0108C	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	RSU Anschutz Fed 4-62-2_1 SE3 Pad, Site Center : RSU Anschutz Fed 4-62-11-0108C			
Site Position:		Northing:	1,367,111.95 usft	Latitude: 40° 20' 5.849 N
From:	Lat/Long	Easting:	3,333,225.84 usft	Longitude: 104° 18' 16.751 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence: 0.77 °

Well	RSU Anschutz Fed 4-62-11-0108C, 268' FSL 713' FEL Sec 3 T4N R62W			
Well Position	+N/-S	-0.02 ft	Northing:	1,367,111.94 usft
	+E/-W	0.00 ft	Easting:	3,333,225.84 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft
			Ground Level:	4,523.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	1/3/2018	8.20	66.97	52,289

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	89.031

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	
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,352.77	23.06	141.585	1,321.91	-179.29	142.18	2.00	2.00	0.00	141.59	
1,652.83	23.06	141.585	1,598.00	-271.36	215.19	0.00	0.00	0.00	0.00	
3,189.85	0.00	0.000	3,093.88	-510.41	404.76	1.50	-1.50	0.00	180.00	
5,754.10	0.00	0.000	5,658.13	-510.41	404.76	0.00	0.00	0.00	0.00	
6,572.28	90.00	89.031	6,179.00	-501.60	925.56	11.00	11.00	10.88	89.03	
16,818.98	90.00	89.031	6,179.00	-328.24	11,170.79	0.00	0.00	0.00	0.00	4-62-11-0108C PBHL

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-62-11-0108C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4523' & KB 20' @ 4543.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4523' & KB 20' @ 4543.00ft
Site:	RSU Anschutz Fed 4-62-2_1 SE3 Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-62-11-0108C	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
Start Build 2.00									
300.00	2.00	141.585	299.98	-1.37	1.08	1.06	2.00	2.00	0.00
400.00	4.00	141.585	399.84	-5.47	4.34	4.24	2.00	2.00	0.00
500.00	6.00	141.585	499.45	-12.30	9.75	9.54	2.00	2.00	0.00
600.00	8.00	141.585	598.70	-21.84	17.32	16.95	2.00	2.00	0.00
700.00	10.00	141.585	697.47	-34.10	27.04	26.46	2.00	2.00	0.00
800.00	12.00	141.585	795.62	-49.05	38.90	38.06	2.00	2.00	0.00
900.00	14.00	141.585	893.06	-66.68	52.87	51.74	2.00	2.00	0.00
1,000.00	16.00	141.585	989.64	-86.95	68.96	67.48	2.00	2.00	0.00
1,100.00	18.00	141.585	1,085.27	-109.86	87.12	85.25	2.00	2.00	0.00
1,200.00	20.00	141.585	1,179.82	-135.37	107.35	105.04	2.00	2.00	0.00
1,300.00	22.00	141.585	1,273.17	-163.45	129.62	126.83	2.00	2.00	0.00
1,352.77	23.06	141.585	1,321.91	-179.29	142.18	139.12	2.00	2.00	0.00
Start 300.06 hold at 1352.77 MD									
1,400.00	23.06	141.585	1,365.37	-193.78	153.67	150.37	0.00	0.00	0.00
1,500.00	23.06	141.585	1,457.38	-224.47	178.00	174.18	0.00	0.00	0.00
1,600.00	23.06	141.585	1,549.39	-255.15	202.34	197.99	0.00	0.00	0.00
1,652.83	23.06	141.585	1,598.00	-271.36	215.19	210.57	0.00	0.00	0.00
Start Drop -1.50									
1,700.00	22.35	141.585	1,641.52	-285.62	226.50	221.64	1.50	-1.50	0.00
1,800.00	20.85	141.585	1,734.50	-314.46	249.37	244.02	1.50	-1.50	0.00
1,900.00	19.35	141.585	1,828.40	-341.39	270.72	264.91	1.50	-1.50	0.00
2,000.00	17.85	141.585	1,923.18	-366.38	290.54	284.30	1.50	-1.50	0.00
2,100.00	16.35	141.585	2,018.76	-389.41	308.81	302.18	1.50	-1.50	0.00
2,200.00	14.85	141.585	2,115.07	-410.48	325.51	318.53	1.50	-1.50	0.00
2,300.00	13.35	141.585	2,212.06	-429.56	340.65	333.33	1.50	-1.50	0.00
2,400.00	11.85	141.585	2,309.65	-446.65	354.20	346.59	1.50	-1.50	0.00
2,500.00	10.35	141.585	2,407.77	-461.73	366.16	358.30	1.50	-1.50	0.00
2,600.00	8.85	141.585	2,506.37	-474.80	376.52	368.43	1.50	-1.50	0.00
2,700.00	7.35	141.585	2,605.37	-485.83	385.27	377.00	1.50	-1.50	0.00
2,800.00	5.85	141.585	2,704.71	-494.84	392.41	383.98	1.50	-1.50	0.00
2,900.00	4.35	141.585	2,804.31	-501.80	397.93	389.39	1.50	-1.50	0.00
3,000.00	2.85	141.585	2,904.11	-506.71	401.83	393.20	1.50	-1.50	0.00
3,100.00	1.35	141.585	3,004.04	-509.58	404.10	395.43	1.50	-1.50	0.00
3,189.85	0.00	0.000	3,093.88	-510.41	404.76	396.07	1.50	-1.50	0.00
Start 2564.25 hold at 3189.85 MD									
3,200.00	0.00	0.000	3,104.03	-510.41	404.76	396.07	0.00	0.00	0.00
3,300.00	0.00	0.000	3,204.03	-510.41	404.76	396.07	0.00	0.00	0.00
3,400.00	0.00	0.000	3,304.03	-510.41	404.76	396.07	0.00	0.00	0.00
3,500.00	0.00	0.000	3,404.03	-510.41	404.76	396.07	0.00	0.00	0.00
3,600.00	0.00	0.000	3,504.03	-510.41	404.76	396.07	0.00	0.00	0.00
3,700.00	0.00	0.000	3,604.03	-510.41	404.76	396.07	0.00	0.00	0.00
3,800.00	0.00	0.000	3,704.03	-510.41	404.76	396.07	0.00	0.00	0.00
3,900.00	0.00	0.000	3,804.03	-510.41	404.76	396.07	0.00	0.00	0.00
4,000.00	0.00	0.000	3,904.03	-510.41	404.76	396.07	0.00	0.00	0.00
4,100.00	0.00	0.000	4,004.03	-510.41	404.76	396.07	0.00	0.00	0.00
4,200.00	0.00	0.000	4,104.03	-510.41	404.76	396.07	0.00	0.00	0.00
4,300.00	0.00	0.000	4,204.03	-510.41	404.76	396.07	0.00	0.00	0.00
4,400.00	0.00	0.000	4,304.03	-510.41	404.76	396.07	0.00	0.00	0.00
4,500.00	0.00	0.000	4,404.03	-510.41	404.76	396.07	0.00	0.00	0.00
4,600.00	0.00	0.000	4,504.03	-510.41	404.76	396.07	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-62-11-0108C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4523' & KB 20' @ 4543.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4523' & KB 20' @ 4543.00ft
Site:	RSU Anschutz Fed 4-62-2_1 SE3 Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-62-11-0108C	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	4,604.03	-510.41	404.76	396.07	0.00	0.00	0.00
4,800.00	0.00	0.000	4,704.03	-510.41	404.76	396.07	0.00	0.00	0.00
4,900.00	0.00	0.000	4,804.03	-510.41	404.76	396.07	0.00	0.00	0.00
5,000.00	0.00	0.000	4,904.03	-510.41	404.76	396.07	0.00	0.00	0.00
5,100.00	0.00	0.000	5,004.03	-510.41	404.76	396.07	0.00	0.00	0.00
5,200.00	0.00	0.000	5,104.03	-510.41	404.76	396.07	0.00	0.00	0.00
5,300.00	0.00	0.000	5,204.03	-510.41	404.76	396.07	0.00	0.00	0.00
5,400.00	0.00	0.000	5,304.03	-510.41	404.76	396.07	0.00	0.00	0.00
5,500.00	0.00	0.000	5,404.03	-510.41	404.76	396.07	0.00	0.00	0.00
5,600.00	0.00	0.000	5,504.03	-510.41	404.76	396.07	0.00	0.00	0.00
5,700.00	0.00	0.000	5,604.03	-510.41	404.76	396.07	0.00	0.00	0.00
5,754.10	0.00	0.000	5,658.13	-510.41	404.76	396.07	0.00	0.00	0.00
Start DLS 11.00 TFO 89.03									
5,800.00	5.05	89.031	5,703.97	-510.38	406.78	398.09	11.00	11.00	0.00
5,900.00	16.05	89.031	5,802.13	-510.07	425.06	416.37	11.00	11.00	0.00
6,000.00	27.05	89.031	5,895.00	-509.45	461.73	453.04	11.00	11.00	0.00
6,100.00	38.05	89.031	5,979.16	-508.54	515.44	506.76	11.00	11.00	0.00
6,200.00	49.05	89.031	6,051.53	-507.37	584.22	575.56	11.00	11.00	0.00
6,300.00	60.05	89.031	6,109.44	-506.00	665.54	656.89	11.00	11.00	0.00
6,400.00	71.05	89.031	6,150.77	-504.46	756.42	747.78	11.00	11.00	0.00
6,500.00	82.05	89.031	6,173.99	-502.82	853.52	844.89	11.00	11.00	0.00
6,572.28	90.00	89.031	6,179.00	-501.60	925.56	916.94	11.00	11.00	0.00
Start 10246.70 hold at 6572.28 MD									
6,600.00	90.00	89.031	6,179.00	-501.13	953.27	944.66	0.00	0.00	0.00
6,700.00	90.00	89.031	6,179.00	-499.44	1,053.26	1,044.66	0.00	0.00	0.00
6,800.00	90.00	89.031	6,179.00	-497.74	1,153.24	1,144.66	0.00	0.00	0.00
6,900.00	90.00	89.031	6,179.00	-496.05	1,253.23	1,244.66	0.00	0.00	0.00
7,000.00	90.00	89.031	6,179.00	-494.36	1,353.21	1,344.66	0.00	0.00	0.00
7,100.00	90.00	89.031	6,179.00	-492.67	1,453.20	1,444.66	0.00	0.00	0.00
7,200.00	90.00	89.031	6,179.00	-490.98	1,553.19	1,544.66	0.00	0.00	0.00
7,300.00	90.00	89.031	6,179.00	-489.29	1,653.17	1,644.66	0.00	0.00	0.00
7,400.00	90.00	89.031	6,179.00	-487.59	1,753.16	1,744.66	0.00	0.00	0.00
7,500.00	90.00	89.031	6,179.00	-485.90	1,853.14	1,844.66	0.00	0.00	0.00
7,600.00	90.00	89.031	6,179.00	-484.21	1,953.13	1,944.66	0.00	0.00	0.00
7,700.00	90.00	89.031	6,179.00	-482.52	2,053.11	2,044.66	0.00	0.00	0.00
7,800.00	90.00	89.031	6,179.00	-480.83	2,153.10	2,144.66	0.00	0.00	0.00
7,900.00	90.00	89.031	6,179.00	-479.13	2,253.09	2,244.66	0.00	0.00	0.00
8,000.00	90.00	89.031	6,179.00	-477.44	2,353.07	2,344.66	0.00	0.00	0.00
8,100.00	90.00	89.031	6,179.00	-475.75	2,453.06	2,444.66	0.00	0.00	0.00
8,200.00	90.00	89.031	6,179.00	-474.06	2,553.04	2,544.66	0.00	0.00	0.00
8,300.00	90.00	89.031	6,179.00	-472.37	2,653.03	2,644.66	0.00	0.00	0.00
8,400.00	90.00	89.031	6,179.00	-470.68	2,753.01	2,744.66	0.00	0.00	0.00
8,500.00	90.00	89.031	6,179.00	-468.98	2,853.00	2,844.66	0.00	0.00	0.00
8,600.00	90.00	89.031	6,179.00	-467.29	2,952.98	2,944.66	0.00	0.00	0.00
8,700.00	90.00	89.031	6,179.00	-465.60	3,052.97	3,044.66	0.00	0.00	0.00
8,800.00	90.00	89.031	6,179.00	-463.91	3,152.96	3,144.66	0.00	0.00	0.00
8,900.00	90.00	89.031	6,179.00	-462.22	3,252.94	3,244.66	0.00	0.00	0.00
9,000.00	90.00	89.031	6,179.00	-460.52	3,352.93	3,344.66	0.00	0.00	0.00
9,100.00	90.00	89.031	6,179.00	-458.83	3,452.91	3,444.66	0.00	0.00	0.00
9,200.00	90.00	89.031	6,179.00	-457.14	3,552.90	3,544.66	0.00	0.00	0.00
9,300.00	90.00	89.031	6,179.00	-455.45	3,652.88	3,644.66	0.00	0.00	0.00
9,400.00	90.00	89.031	6,179.00	-453.76	3,752.87	3,744.66	0.00	0.00	0.00
9,500.00	90.00	89.031	6,179.00	-452.06	3,852.86	3,844.66	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-62-11-0108C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4523' & KB 20' @ 4543.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4523' & KB 20' @ 4543.00ft
Site:	RSU Anschutz Fed 4-62-2_1 SE3 Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-62-11-0108C	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	90.00	89.031	6,179.00	-450.37	3,952.84	3,944.66	0.00	0.00	0.00
9,700.00	90.00	89.031	6,179.00	-448.68	4,052.83	4,044.66	0.00	0.00	0.00
9,800.00	90.00	89.031	6,179.00	-446.99	4,152.81	4,144.66	0.00	0.00	0.00
9,900.00	90.00	89.031	6,179.00	-445.30	4,252.80	4,244.66	0.00	0.00	0.00
10,000.00	90.00	89.031	6,179.00	-443.61	4,352.78	4,344.66	0.00	0.00	0.00
10,100.00	90.00	89.031	6,179.00	-441.91	4,452.77	4,444.66	0.00	0.00	0.00
10,200.00	90.00	89.031	6,179.00	-440.22	4,552.76	4,544.66	0.00	0.00	0.00
10,300.00	90.00	89.031	6,179.00	-438.53	4,652.74	4,644.66	0.00	0.00	0.00
10,400.00	90.00	89.031	6,179.00	-436.84	4,752.73	4,744.66	0.00	0.00	0.00
10,500.00	90.00	89.031	6,179.00	-435.15	4,852.71	4,844.66	0.00	0.00	0.00
10,600.00	90.00	89.031	6,179.00	-433.45	4,952.70	4,944.66	0.00	0.00	0.00
10,700.00	90.00	89.031	6,179.00	-431.76	5,052.68	5,044.66	0.00	0.00	0.00
10,800.00	90.00	89.031	6,179.00	-430.07	5,152.67	5,144.66	0.00	0.00	0.00
10,900.00	90.00	89.031	6,179.00	-428.38	5,252.66	5,244.66	0.00	0.00	0.00
11,000.00	90.00	89.031	6,179.00	-426.69	5,352.64	5,344.66	0.00	0.00	0.00
11,100.00	90.00	89.031	6,179.00	-424.99	5,452.63	5,444.66	0.00	0.00	0.00
11,200.00	90.00	89.031	6,179.00	-423.30	5,552.61	5,544.66	0.00	0.00	0.00
11,300.00	90.00	89.031	6,179.00	-421.61	5,652.60	5,644.66	0.00	0.00	0.00
11,400.00	90.00	89.031	6,179.00	-419.92	5,752.58	5,744.66	0.00	0.00	0.00
11,500.00	90.00	89.031	6,179.00	-418.23	5,852.57	5,844.66	0.00	0.00	0.00
11,600.00	90.00	89.031	6,179.00	-416.54	5,952.56	5,944.66	0.00	0.00	0.00
11,700.00	90.00	89.031	6,179.00	-414.84	6,052.54	6,044.66	0.00	0.00	0.00
11,800.00	90.00	89.031	6,179.00	-413.15	6,152.53	6,144.66	0.00	0.00	0.00
11,900.00	90.00	89.031	6,179.00	-411.46	6,252.51	6,244.66	0.00	0.00	0.00
12,000.00	90.00	89.031	6,179.00	-409.77	6,352.50	6,344.66	0.00	0.00	0.00
12,100.00	90.00	89.031	6,179.00	-408.08	6,452.48	6,444.66	0.00	0.00	0.00
12,200.00	90.00	89.031	6,179.00	-406.38	6,552.47	6,544.66	0.00	0.00	0.00
12,300.00	90.00	89.031	6,179.00	-404.69	6,652.46	6,644.66	0.00	0.00	0.00
12,400.00	90.00	89.031	6,179.00	-403.00	6,752.44	6,744.66	0.00	0.00	0.00
12,500.00	90.00	89.031	6,179.00	-401.31	6,852.43	6,844.66	0.00	0.00	0.00
12,600.00	90.00	89.031	6,179.00	-399.62	6,952.41	6,944.66	0.00	0.00	0.00
12,700.00	90.00	89.031	6,179.00	-397.92	7,052.40	7,044.66	0.00	0.00	0.00
12,800.00	90.00	89.031	6,179.00	-396.23	7,152.38	7,144.66	0.00	0.00	0.00
12,900.00	90.00	89.031	6,179.00	-394.54	7,252.37	7,244.66	0.00	0.00	0.00
13,000.00	90.00	89.031	6,179.00	-392.85	7,352.36	7,344.66	0.00	0.00	0.00
13,100.00	90.00	89.031	6,179.00	-391.16	7,452.34	7,444.66	0.00	0.00	0.00
13,200.00	90.00	89.031	6,179.00	-389.47	7,552.33	7,544.66	0.00	0.00	0.00
13,300.00	90.00	89.031	6,179.00	-387.77	7,652.31	7,644.66	0.00	0.00	0.00
13,400.00	90.00	89.031	6,179.00	-386.08	7,752.30	7,744.66	0.00	0.00	0.00
13,500.00	90.00	89.031	6,179.00	-384.39	7,852.28	7,844.66	0.00	0.00	0.00
13,600.00	90.00	89.031	6,179.00	-382.70	7,952.27	7,944.66	0.00	0.00	0.00
13,700.00	90.00	89.031	6,179.00	-381.01	8,052.26	8,044.66	0.00	0.00	0.00
13,800.00	90.00	89.031	6,179.00	-379.31	8,152.24	8,144.66	0.00	0.00	0.00
13,900.00	90.00	89.031	6,179.00	-377.62	8,252.23	8,244.66	0.00	0.00	0.00
14,000.00	90.00	89.031	6,179.00	-375.93	8,352.21	8,344.66	0.00	0.00	0.00
14,100.00	90.00	89.031	6,179.00	-374.24	8,452.20	8,444.66	0.00	0.00	0.00
14,200.00	90.00	89.031	6,179.00	-372.55	8,552.18	8,544.66	0.00	0.00	0.00
14,300.00	90.00	89.031	6,179.00	-370.86	8,652.17	8,644.66	0.00	0.00	0.00
14,400.00	90.00	89.031	6,179.00	-369.16	8,752.15	8,744.66	0.00	0.00	0.00
14,500.00	90.00	89.031	6,179.00	-367.47	8,852.14	8,844.66	0.00	0.00	0.00
14,600.00	90.00	89.031	6,179.00	-365.78	8,952.13	8,944.66	0.00	0.00	0.00
14,700.00	90.00	89.031	6,179.00	-364.09	9,052.11	9,044.66	0.00	0.00	0.00
14,800.00	90.00	89.031	6,179.00	-362.40	9,152.10	9,144.66	0.00	0.00	0.00
14,900.00	90.00	89.031	6,179.00	-360.70	9,252.08	9,244.66	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-62-11-0108C
Company:	Bill Barrett Corp.	TVD Reference:	GL 4523' & KB 20' @ 4543.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4523' & KB 20' @ 4543.00ft
Site:	RSU Anschutz Fed 4-62-2_1 SE3 Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-62-11-0108C	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	90.00	89.031	6,179.00	-359.01	9,352.07	9,344.66	0.00	0.00	0.00
15,100.00	90.00	89.031	6,179.00	-357.32	9,452.05	9,444.66	0.00	0.00	0.00
15,200.00	90.00	89.031	6,179.00	-355.63	9,552.04	9,544.66	0.00	0.00	0.00
15,300.00	90.00	89.031	6,179.00	-353.94	9,652.03	9,644.66	0.00	0.00	0.00
15,400.00	90.00	89.031	6,179.00	-352.24	9,752.01	9,744.66	0.00	0.00	0.00
15,500.00	90.00	89.031	6,179.00	-350.55	9,852.00	9,844.66	0.00	0.00	0.00
15,600.00	90.00	89.031	6,179.00	-348.86	9,951.98	9,944.66	0.00	0.00	0.00
15,700.00	90.00	89.031	6,179.00	-347.17	10,051.97	10,044.66	0.00	0.00	0.00
15,800.00	90.00	89.031	6,179.00	-345.48	10,151.95	10,144.66	0.00	0.00	0.00
15,900.00	90.00	89.031	6,179.00	-343.79	10,251.94	10,244.66	0.00	0.00	0.00
16,000.00	90.00	89.031	6,179.00	-342.09	10,351.93	10,344.66	0.00	0.00	0.00
16,100.00	90.00	89.031	6,179.00	-340.40	10,451.91	10,444.66	0.00	0.00	0.00
16,200.00	90.00	89.031	6,179.00	-338.71	10,551.90	10,544.66	0.00	0.00	0.00
16,300.00	90.00	89.031	6,179.00	-337.02	10,651.88	10,644.66	0.00	0.00	0.00
16,400.00	90.00	89.031	6,179.00	-335.33	10,751.87	10,744.66	0.00	0.00	0.00
16,500.00	90.00	89.031	6,179.00	-333.63	10,851.85	10,844.66	0.00	0.00	0.00
16,600.00	90.00	89.031	6,179.00	-331.94	10,951.84	10,944.66	0.00	0.00	0.00
16,700.00	90.00	89.031	6,179.00	-330.25	11,051.83	11,044.66	0.00	0.00	0.00
16,800.00	90.00	89.031	6,179.00	-328.56	11,151.81	11,144.66	0.00	0.00	0.00
16,818.98	90.00	89.031	6,179.00	-328.24	11,170.79	11,163.64	0.00	0.00	0.00
TD at 16818.98									

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									
4-62-11-0108C LP	0.00	0.000	6,179.00	-501.60	925.56	1,366,622.86	3,334,158.07	40° 20' 0.892 N	104° 18' 4.799 W
- plan hits target center									
- Point									
4-62-11-0108C PBHL	0.00	0.000	6,179.00	-328.24	11,170.79	1,366,934.31	3,344,400.01	40° 20' 2.580 N	104° 15' 52.499 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.00	200.00	0.00	0.00	Start Build 2.00
1,352.77	1,321.91	-179.29	142.18	Start 300.06 hold at 1352.77 MD
1,652.83	1,598.00	-271.36	215.19	Start Drop -1.50
3,189.85	3,093.88	-510.41	404.76	Start 2564.25 hold at 3189.85 MD
5,754.10	5,658.13	-510.41	404.76	Start DLS 11.00 TFO 89.03
6,572.28	6,179.00	-501.60	925.56	Start 10246.70 hold at 6572.28 MD
16,818.98	6,179.00	-328.24	11,170.79	TD at 16818.98