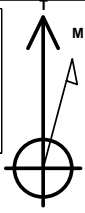


PROJECT DETAILS: Weld County, CO NAD 83

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: RSU Anschutz Fed 4-62-2_1 SE3 Pad
Well: RSU Anschutz Fed 4-62-11-1609CS
Wellbore: OH
Design: Plan 1



Azimuths to True North
Magnetic North: 8.20°
Magnetic Field
Strength: 52288.8nT
Dip Angle: 66.97°
Date: 1/3/2018
Model: HDGM



Plan: Plan 1 (RSU Anschutz Fed 4-62-11-1609CS/OH)

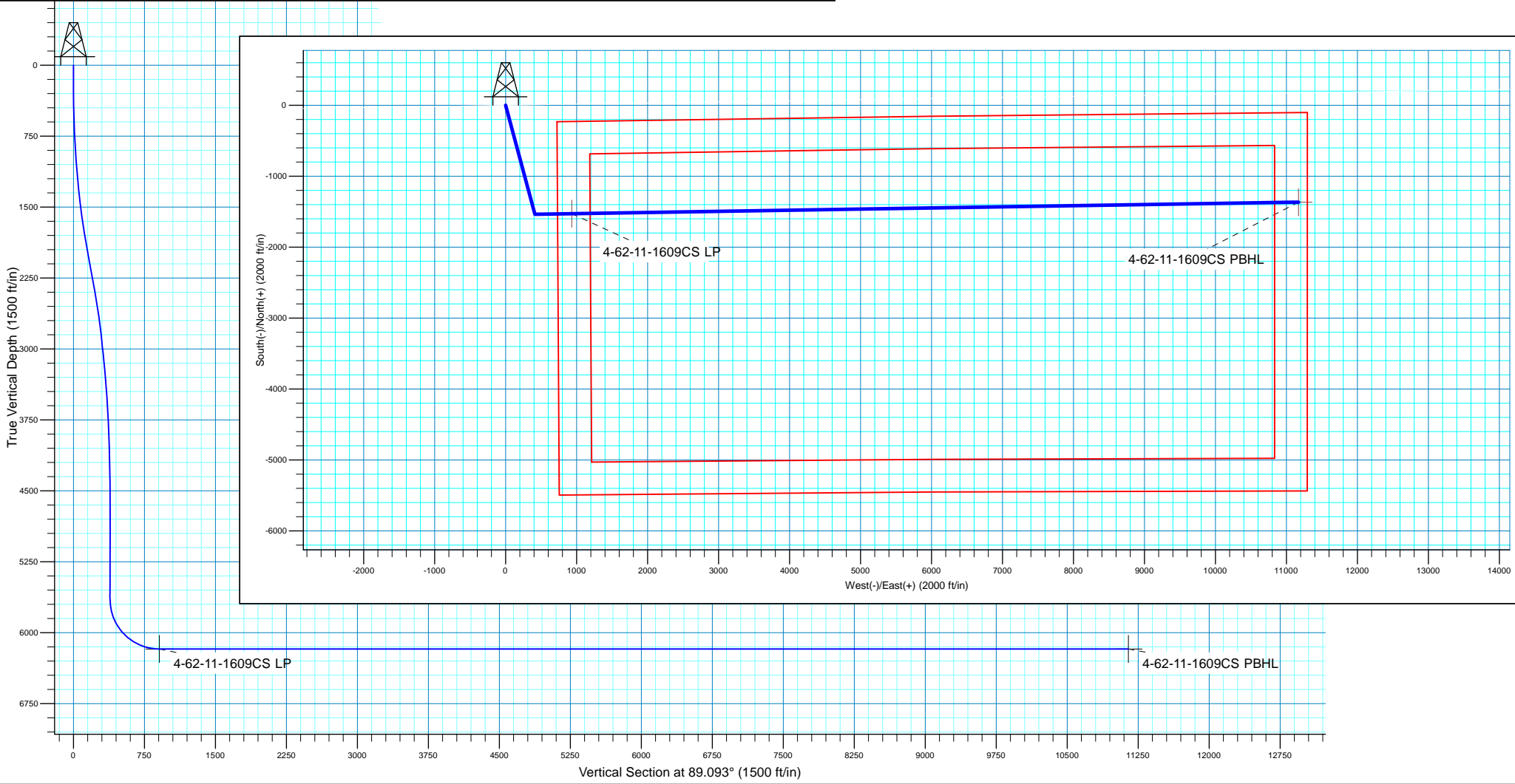
Created By: Seth Burstad

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
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00
2092.43	37.85	164.994	1957.77	-582.10	156.04	2.00	164.99	146.81
2392.48	37.85	164.994	2194.70	-759.92	203.71	0.00	0.00	191.65
4915.72	0.00	0.000	4538.39	-1536.06	411.76	1.50	180.00	387.39
6029.46	0.00	0.000	5652.13	-1536.06	411.76	0.00	0.00	387.39
6847.64	90.00	89.093	6173.00	-1527.81	932.57	11.00	89.09	908.26
17085.96	90.00	89.093	6173.00	-1365.75	11169.60	0.00	0.00	11146.58

WELL DETAILS: RSU Anschutz Fed 4-62-11-1609CS

		GL 4523' & KB 20' @ 4543.00ft		4523.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1367081.71	3333226.24	40° 20' 5.550 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 4-62-11-1609CS

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 4-62-11-1609CS
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 4-62-11-1609CS	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 4-62-11-1609CS, 238' FSL 714' FEL Sec 3 T4N R62W			
Well Position	+N/-S	-30.25 ft	Northing:	1,367,081.71 usft
	+E/-W	0.00 ft	Easting:	3,333,226.24 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	89.093

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	
2,092.43	37.85	164.994	1,957.77	-582.10	156.04	2.00	2.00	0.00	164.99	
2,392.48	37.85	164.994	2,194.70	-759.92	203.71	0.00	0.00	0.00	0.00	
4,915.72	0.00	0.000	4,538.39	-1,536.06	411.76	1.50	-1.50	0.00	180.00	
6,029.46	0.00	0.000	5,652.13	-1,536.06	411.76	0.00	0.00	0.00	0.00	
6,847.64	90.00	89.093	6,173.00	-1,527.81	932.57	11.00	11.00	10.89	89.09	
17,085.96	90.00	89.093	6,173.00	-1,365.75	11,169.60	0.00	0.00	0.00	0.00	4-62-11-1609CS PBH

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-62-11-1609CS
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 4-62-11-1609CS	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	164.994	299.98	-1.69	0.45	0.43	2.00	2.00	0.00
400.00	4.00	164.994	399.84	-6.74	1.81	1.70	2.00	2.00	0.00
500.00	6.00	164.994	499.45	-15.16	4.06	3.82	2.00	2.00	0.00
600.00	8.00	164.994	598.70	-26.93	7.22	6.79	2.00	2.00	0.00
700.00	10.00	164.994	697.47	-42.04	11.27	10.60	2.00	2.00	0.00
800.00	12.00	164.994	795.62	-60.47	16.21	15.25	2.00	2.00	0.00
900.00	14.00	164.994	893.06	-82.19	22.03	20.73	2.00	2.00	0.00
1,000.00	16.00	164.994	989.64	-107.19	28.73	27.03	2.00	2.00	0.00
1,100.00	18.00	164.994	1,085.27	-135.43	36.30	34.16	2.00	2.00	0.00
1,200.00	20.00	164.994	1,179.82	-166.88	44.73	42.09	2.00	2.00	0.00
1,300.00	22.00	164.994	1,273.17	-201.49	54.01	50.82	2.00	2.00	0.00
1,400.00	24.00	164.994	1,365.21	-239.23	64.13	60.33	2.00	2.00	0.00
1,500.00	26.00	164.994	1,455.84	-280.05	75.07	70.63	2.00	2.00	0.00
1,600.00	28.00	164.994	1,544.94	-323.90	86.82	81.69	2.00	2.00	0.00
1,700.00	30.00	164.994	1,632.39	-370.72	99.38	93.50	2.00	2.00	0.00
1,800.00	32.00	164.994	1,718.11	-420.47	112.71	106.04	2.00	2.00	0.00
1,900.00	34.00	164.994	1,801.97	-473.07	126.81	119.31	2.00	2.00	0.00
2,000.00	36.00	164.994	1,883.88	-528.47	141.66	133.28	2.00	2.00	0.00
2,092.43	37.85	164.994	1,957.77	-582.10	156.04	146.81	2.00	2.00	0.00
Start 300.04 hold at 2092.43 MD									
2,100.00	37.85	164.994	1,963.75	-586.59	157.24	147.94	0.00	0.00	0.00
2,200.00	37.85	164.994	2,042.71	-645.85	173.13	162.88	0.00	0.00	0.00
2,300.00	37.85	164.994	2,121.67	-705.12	189.02	177.83	0.00	0.00	0.00
2,392.48	37.85	164.994	2,194.70	-759.92	203.71	191.65	0.00	0.00	0.00
Start Drop -1.50									
2,400.00	37.74	164.994	2,200.64	-764.38	204.90	192.78	1.50	-1.50	0.00
2,500.00	36.24	164.994	2,280.52	-822.49	220.48	207.43	1.50	-1.50	0.00
2,600.00	34.74	164.994	2,361.94	-878.55	235.51	221.57	1.50	-1.50	0.00
2,700.00	33.24	164.994	2,444.86	-932.55	249.98	235.19	1.50	-1.50	0.00
2,800.00	31.74	164.994	2,529.21	-984.42	263.89	248.27	1.50	-1.50	0.00
2,900.00	30.24	164.994	2,614.93	-1,034.15	277.22	260.81	1.50	-1.50	0.00
3,000.00	28.74	164.994	2,701.98	-1,081.69	289.96	272.80	1.50	-1.50	0.00
3,100.00	27.24	164.994	2,790.28	-1,127.01	302.11	284.23	1.50	-1.50	0.00
3,200.00	25.74	164.994	2,879.78	-1,170.09	313.66	295.10	1.50	-1.50	0.00
3,300.00	24.24	164.994	2,970.42	-1,210.89	324.59	305.38	1.50	-1.50	0.00
3,400.00	22.74	164.994	3,062.14	-1,249.38	334.91	315.09	1.50	-1.50	0.00
3,500.00	21.24	164.994	3,154.86	-1,285.54	344.60	324.21	1.50	-1.50	0.00
3,600.00	19.74	164.994	3,248.53	-1,319.34	353.67	332.74	1.50	-1.50	0.00
3,700.00	18.24	164.994	3,343.09	-1,350.76	362.09	340.66	1.50	-1.50	0.00
3,800.00	16.74	164.994	3,438.47	-1,379.78	369.87	347.98	1.50	-1.50	0.00
3,900.00	15.24	164.994	3,534.60	-1,406.38	377.00	354.69	1.50	-1.50	0.00
4,000.00	13.74	164.994	3,631.42	-1,430.55	383.48	360.78	1.50	-1.50	0.00
4,100.00	12.24	164.994	3,728.86	-1,452.25	389.29	366.26	1.50	-1.50	0.00
4,200.00	10.74	164.994	3,826.85	-1,471.48	394.45	371.11	1.50	-1.50	0.00
4,300.00	9.24	164.994	3,925.33	-1,488.23	398.94	375.33	1.50	-1.50	0.00
4,400.00	7.74	164.994	4,024.24	-1,502.48	402.76	378.93	1.50	-1.50	0.00
4,500.00	6.24	164.994	4,123.49	-1,514.23	405.91	381.89	1.50	-1.50	0.00
4,600.00	4.74	164.994	4,223.03	-1,523.46	408.38	384.22	1.50	-1.50	0.00
4,700.00	3.24	164.994	4,322.79	-1,530.18	410.18	385.91	1.50	-1.50	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-62-11-1609CS
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 4-62-11-1609CS	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)
4,800.00	1.74	164.994	4,422.69	-1,534.37	411.31	386.97	1.50	-1.50	0.00
4,900.00	0.24	164.994	4,522.67	-1,536.03	411.75	387.39	1.50	-1.50	0.00
4,915.72	0.00	0.000	4,538.39	-1,536.06	411.76	387.39	1.50	-1.50	0.00
Start 1113.74 hold at 4915.72 MD									
5,000.00	0.00	0.000	4,622.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
5,100.00	0.00	0.000	4,722.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
5,200.00	0.00	0.000	4,822.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
5,300.00	0.00	0.000	4,922.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
5,400.00	0.00	0.000	5,022.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
5,500.00	0.00	0.000	5,122.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
5,600.00	0.00	0.000	5,222.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
5,700.00	0.00	0.000	5,322.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
5,800.00	0.00	0.000	5,422.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
5,900.00	0.00	0.000	5,522.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
6,000.00	0.00	0.000	5,622.67	-1,536.06	411.76	387.39	0.00	0.00	0.00
6,029.46	0.00	0.000	5,652.13	-1,536.06	411.76	387.39	0.00	0.00	0.00
Start DLS 11.00 TFO 89.09									
6,100.00	7.76	89.093	5,722.45	-1,535.98	416.53	392.16	11.00	11.00	0.00
6,200.00	18.76	89.093	5,819.64	-1,535.62	439.43	415.06	11.00	11.00	0.00
6,300.00	29.76	89.093	5,910.67	-1,534.97	480.45	456.09	11.00	11.00	0.00
6,400.00	40.76	89.093	5,992.20	-1,534.06	538.08	513.73	11.00	11.00	0.00
6,500.00	51.76	89.093	6,061.23	-1,532.92	610.21	585.86	11.00	11.00	0.00
6,600.00	62.76	89.093	6,115.23	-1,531.59	694.18	669.85	11.00	11.00	0.00
6,700.00	73.76	89.093	6,152.22	-1,530.12	786.91	762.59	11.00	11.00	0.00
6,800.00	84.76	89.093	6,170.82	-1,528.57	885.00	860.69	11.00	11.00	0.00
6,847.64	90.00	89.093	6,173.00	-1,527.81	932.57	908.26	11.00	11.00	0.00
Start 10238.32 hold at 6847.64 MD									
6,900.00	90.00	89.093	6,173.00	-1,526.99	984.92	960.62	0.00	0.00	0.00
7,000.00	90.00	89.093	6,173.00	-1,525.40	1,084.90	1,060.62	0.00	0.00	0.00
7,100.00	90.00	89.093	6,173.00	-1,523.82	1,184.89	1,160.62	0.00	0.00	0.00
7,200.00	90.00	89.093	6,173.00	-1,522.24	1,284.88	1,260.62	0.00	0.00	0.00
7,300.00	90.00	89.093	6,173.00	-1,520.65	1,384.87	1,360.62	0.00	0.00	0.00
7,400.00	90.00	89.093	6,173.00	-1,519.07	1,484.85	1,460.62	0.00	0.00	0.00
7,500.00	90.00	89.093	6,173.00	-1,517.49	1,584.84	1,560.62	0.00	0.00	0.00
7,600.00	90.00	89.093	6,173.00	-1,515.91	1,684.83	1,660.62	0.00	0.00	0.00
7,700.00	90.00	89.093	6,173.00	-1,514.32	1,784.82	1,760.62	0.00	0.00	0.00
7,800.00	90.00	89.093	6,173.00	-1,512.74	1,884.80	1,860.62	0.00	0.00	0.00
7,900.00	90.00	89.093	6,173.00	-1,511.16	1,984.79	1,960.62	0.00	0.00	0.00
8,000.00	90.00	89.093	6,173.00	-1,509.57	2,084.78	2,060.62	0.00	0.00	0.00
8,100.00	90.00	89.093	6,173.00	-1,507.99	2,184.77	2,160.62	0.00	0.00	0.00
8,200.00	90.00	89.093	6,173.00	-1,506.41	2,284.75	2,260.62	0.00	0.00	0.00
8,300.00	90.00	89.093	6,173.00	-1,504.82	2,384.74	2,360.62	0.00	0.00	0.00
8,400.00	90.00	89.093	6,173.00	-1,503.24	2,484.73	2,460.62	0.00	0.00	0.00
8,500.00	90.00	89.093	6,173.00	-1,501.66	2,584.72	2,560.62	0.00	0.00	0.00
8,600.00	90.00	89.093	6,173.00	-1,500.08	2,684.70	2,660.62	0.00	0.00	0.00
8,700.00	90.00	89.093	6,173.00	-1,498.49	2,784.69	2,760.62	0.00	0.00	0.00
8,800.00	90.00	89.093	6,173.00	-1,496.91	2,884.68	2,860.62	0.00	0.00	0.00
8,900.00	90.00	89.093	6,173.00	-1,495.33	2,984.67	2,960.62	0.00	0.00	0.00
9,000.00	90.00	89.093	6,173.00	-1,493.74	3,084.65	3,060.62	0.00	0.00	0.00
9,100.00	90.00	89.093	6,173.00	-1,492.16	3,184.64	3,160.62	0.00	0.00	0.00
9,200.00	90.00	89.093	6,173.00	-1,490.58	3,284.63	3,260.62	0.00	0.00	0.00
9,300.00	90.00	89.093	6,173.00	-1,489.00	3,384.62	3,360.62	0.00	0.00	0.00
9,400.00	90.00	89.093	6,173.00	-1,487.41	3,484.60	3,460.62	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-62-11-1609CS
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 4-62-11-1609CS	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)	
9,500.00	90.00	89.093	6,173.00	-1,485.83	3,584.59	3,560.62	0.00	0.00	0.00	
9,600.00	90.00	89.093	6,173.00	-1,484.25	3,684.58	3,660.62	0.00	0.00	0.00	
9,700.00	90.00	89.093	6,173.00	-1,482.66	3,784.57	3,760.62	0.00	0.00	0.00	
9,800.00	90.00	89.093	6,173.00	-1,481.08	3,884.55	3,860.62	0.00	0.00	0.00	
9,900.00	90.00	89.093	6,173.00	-1,479.50	3,984.54	3,960.62	0.00	0.00	0.00	
10,000.00	90.00	89.093	6,173.00	-1,477.91	4,084.53	4,060.62	0.00	0.00	0.00	
10,100.00	90.00	89.093	6,173.00	-1,476.33	4,184.52	4,160.62	0.00	0.00	0.00	
10,200.00	90.00	89.093	6,173.00	-1,474.75	4,284.50	4,260.62	0.00	0.00	0.00	
10,300.00	90.00	89.093	6,173.00	-1,473.17	4,384.49	4,360.62	0.00	0.00	0.00	
10,400.00	90.00	89.093	6,173.00	-1,471.58	4,484.48	4,460.62	0.00	0.00	0.00	
10,500.00	90.00	89.093	6,173.00	-1,470.00	4,584.47	4,560.62	0.00	0.00	0.00	
10,600.00	90.00	89.093	6,173.00	-1,468.42	4,684.45	4,660.62	0.00	0.00	0.00	
10,700.00	90.00	89.093	6,173.00	-1,466.83	4,784.44	4,760.62	0.00	0.00	0.00	
10,800.00	90.00	89.093	6,173.00	-1,465.25	4,884.43	4,860.62	0.00	0.00	0.00	
10,900.00	90.00	89.093	6,173.00	-1,463.67	4,984.42	4,960.62	0.00	0.00	0.00	
11,000.00	90.00	89.093	6,173.00	-1,462.09	5,084.40	5,060.62	0.00	0.00	0.00	
11,100.00	90.00	89.093	6,173.00	-1,460.50	5,184.39	5,160.62	0.00	0.00	0.00	
11,200.00	90.00	89.093	6,173.00	-1,458.92	5,284.38	5,260.62	0.00	0.00	0.00	
11,300.00	90.00	89.093	6,173.00	-1,457.34	5,384.37	5,360.62	0.00	0.00	0.00	
11,400.00	90.00	89.093	6,173.00	-1,455.75	5,484.35	5,460.62	0.00	0.00	0.00	
11,500.00	90.00	89.093	6,173.00	-1,454.17	5,584.34	5,560.62	0.00	0.00	0.00	
11,600.00	90.00	89.093	6,173.00	-1,452.59	5,684.33	5,660.62	0.00	0.00	0.00	
11,700.00	90.00	89.093	6,173.00	-1,451.00	5,784.32	5,760.62	0.00	0.00	0.00	
11,800.00	90.00	89.093	6,173.00	-1,449.42	5,884.30	5,860.62	0.00	0.00	0.00	
11,900.00	90.00	89.093	6,173.00	-1,447.84	5,984.29	5,960.62	0.00	0.00	0.00	
12,000.00	90.00	89.093	6,173.00	-1,446.26	6,084.28	6,060.62	0.00	0.00	0.00	
12,100.00	90.00	89.093	6,173.00	-1,444.67	6,184.27	6,160.62	0.00	0.00	0.00	
12,200.00	90.00	89.093	6,173.00	-1,443.09	6,284.25	6,260.62	0.00	0.00	0.00	
12,300.00	90.00	89.093	6,173.00	-1,441.51	6,384.24	6,360.62	0.00	0.00	0.00	
12,400.00	90.00	89.093	6,173.00	-1,439.92	6,484.23	6,460.62	0.00	0.00	0.00	
12,500.00	90.00	89.093	6,173.00	-1,438.34	6,584.22	6,560.62	0.00	0.00	0.00	
12,600.00	90.00	89.093	6,173.00	-1,436.76	6,684.20	6,660.62	0.00	0.00	0.00	
12,700.00	90.00	89.093	6,173.00	-1,435.17	6,784.19	6,760.62	0.00	0.00	0.00	
12,800.00	90.00	89.093	6,173.00	-1,433.59	6,884.18	6,860.62	0.00	0.00	0.00	
12,900.00	90.00	89.093	6,173.00	-1,432.01	6,984.17	6,960.62	0.00	0.00	0.00	
13,000.00	90.00	89.093	6,173.00	-1,430.43	7,084.15	7,060.62	0.00	0.00	0.00	
13,100.00	90.00	89.093	6,173.00	-1,428.84	7,184.14	7,160.62	0.00	0.00	0.00	
13,200.00	90.00	89.093	6,173.00	-1,427.26	7,284.13	7,260.62	0.00	0.00	0.00	
13,300.00	90.00	89.093	6,173.00	-1,425.68	7,384.12	7,360.62	0.00	0.00	0.00	
13,400.00	90.00	89.093	6,173.00	-1,424.09	7,484.10	7,460.62	0.00	0.00	0.00	
13,500.00	90.00	89.093	6,173.00	-1,422.51	7,584.09	7,560.62	0.00	0.00	0.00	
13,600.00	90.00	89.093	6,173.00	-1,420.93	7,684.08	7,660.62	0.00	0.00	0.00	
13,700.00	90.00	89.093	6,173.00	-1,419.35	7,784.07	7,760.62	0.00	0.00	0.00	
13,800.00	90.00	89.093	6,173.00	-1,417.76	7,884.05	7,860.62	0.00	0.00	0.00	
13,900.00	90.00	89.093	6,173.00	-1,416.18	7,984.04	7,960.62	0.00	0.00	0.00	
14,000.00	90.00	89.093	6,173.00	-1,414.60	8,084.03	8,060.62	0.00	0.00	0.00	
14,100.00	90.00	89.093	6,173.00	-1,413.01	8,184.02	8,160.62	0.00	0.00	0.00	
14,200.00	90.00	89.093	6,173.00	-1,411.43	8,284.00	8,260.62	0.00	0.00	0.00	
14,300.00	90.00	89.093	6,173.00	-1,409.85	8,383.99	8,360.62	0.00	0.00	0.00	
14,400.00	90.00	89.093	6,173.00	-1,408.26	8,483.98	8,460.62	0.00	0.00	0.00	
14,500.00	90.00	89.093	6,173.00	-1,406.68	8,583.97	8,560.62	0.00	0.00	0.00	
14,600.00	90.00	89.093	6,173.00	-1,405.10	8,683.95	8,660.62	0.00	0.00	0.00	
14,700.00	90.00	89.093	6,173.00	-1,403.52	8,783.94	8,760.62	0.00	0.00	0.00	
14,800.00	90.00	89.093	6,173.00	-1,401.93	8,883.93	8,860.62	0.00	0.00	0.00	

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-62-11-1609CS
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 4-62-11-1609CS	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)
14,900.00	90.00	89.093	6,173.00	-1,400.35	8,983.92	8,960.62	0.00	0.00	0.00
15,000.00	90.00	89.093	6,173.00	-1,398.77	9,083.90	9,060.62	0.00	0.00	0.00
15,100.00	90.00	89.093	6,173.00	-1,397.18	9,183.89	9,160.62	0.00	0.00	0.00
15,200.00	90.00	89.093	6,173.00	-1,395.60	9,283.88	9,260.62	0.00	0.00	0.00
15,300.00	90.00	89.093	6,173.00	-1,394.02	9,383.87	9,360.62	0.00	0.00	0.00
15,400.00	90.00	89.093	6,173.00	-1,392.44	9,483.85	9,460.62	0.00	0.00	0.00
15,500.00	90.00	89.093	6,173.00	-1,390.85	9,583.84	9,560.62	0.00	0.00	0.00
15,600.00	90.00	89.093	6,173.00	-1,389.27	9,683.83	9,660.62	0.00	0.00	0.00
15,700.00	90.00	89.093	6,173.00	-1,387.69	9,783.81	9,760.62	0.00	0.00	0.00
15,800.00	90.00	89.093	6,173.00	-1,386.10	9,883.80	9,860.62	0.00	0.00	0.00
15,900.00	90.00	89.093	6,173.00	-1,384.52	9,983.79	9,960.62	0.00	0.00	0.00
16,000.00	90.00	89.093	6,173.00	-1,382.94	10,083.78	10,060.62	0.00	0.00	0.00
16,100.00	90.00	89.093	6,173.00	-1,381.35	10,183.76	10,160.62	0.00	0.00	0.00
16,200.00	90.00	89.093	6,173.00	-1,379.77	10,283.75	10,260.62	0.00	0.00	0.00
16,300.00	90.00	89.093	6,173.00	-1,378.19	10,383.74	10,360.62	0.00	0.00	0.00
16,400.00	90.00	89.093	6,173.00	-1,376.61	10,483.73	10,460.62	0.00	0.00	0.00
16,500.00	90.00	89.093	6,173.00	-1,375.02	10,583.71	10,560.62	0.00	0.00	0.00
16,600.00	90.00	89.093	6,173.00	-1,373.44	10,683.70	10,660.62	0.00	0.00	0.00
16,700.00	90.00	89.093	6,173.00	-1,371.86	10,783.69	10,760.62	0.00	0.00	0.00
16,800.00	90.00	89.093	6,173.00	-1,370.27	10,883.68	10,860.62	0.00	0.00	0.00
16,900.00	90.00	89.093	6,173.00	-1,368.69	10,983.66	10,960.62	0.00	0.00	0.00
17,000.00	90.00	89.093	6,173.00	-1,367.11	11,083.65	11,060.62	0.00	0.00	0.00
17,085.96	90.00	89.093	6,173.00	-1,365.75	11,169.60	11,146.58	0.00	0.00	0.00
TD at 17085.96									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
4-62-11-1609CS PBHL - hit/miss target - Shape - Point	0.00	0.000	6,173.00	-1,365.75	11,169.60	1,365,866.65	3,344,413.21	40° 19' 52.028 N	104° 15' 52.520 W
4-62-11-1609CS LP - plan hits target center - Point	0.00	0.000	6,173.00	-1,527.81	932.57	1,365,566.61	3,334,179.32	40° 19' 50.452 N	104° 18' 4.709 W

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
2,092.43	1,957.77	-582.10	156.04	Start 300.04 hold at 2092.43 MD
2,392.48	2,194.70	-759.92	203.71	Start Drop -1.50
4,915.72	4,538.39	-1,536.06	411.76	Start 1113.74 hold at 4915.72 MD
6,029.46	5,652.13	-1,536.06	411.76	Start DLS 11.00 TFO 89.09
6,847.64	6,173.00	-1,527.81	932.57	Start 10238.32 hold at 6847.64 MD
17,085.96	6,173.00	-1,365.75	11,169.60	TD at 17085.96