



Bill Barrett Corporation

Bill Barrett Corp.

Weld Co., CO

Sec.35-T5N-R62W

Anschutz State 5-62-35-1609BH2

Wellbore #1

Plan: Design #1

Standard Planning Report

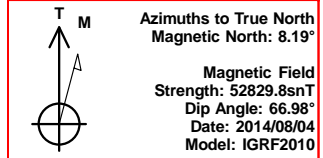
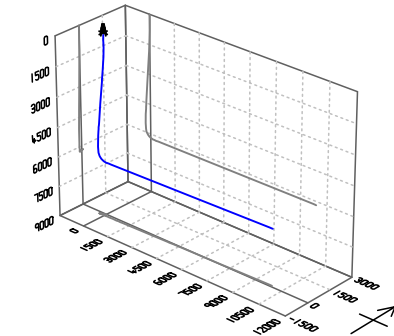
04 August, 2014

Archer



Bill Barrett Corp.
Project: Weld Co., CO
Site: Sec.35-T5N-R62W
Well: Anschutz State 5-62-35-1609BH2
Wellbore: Wellbore #1
Design: Design #1
Lat: 40° 21' 39.661 N
Long: 104° 17' 55.730 W
Pad GL: 4640.00
KB: WELL @ 4663.00usft (Original Well Elev)

Archer



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1138.02	4.76	244.87	1137.74	-4.20	-8.95	2.00	244.87	-9.04	Start 3898.50 hold at 1138.02 MD
5036.52	4.76	244.87	5022.80	-141.61	-301.84	0.00	0.00	-305.03	Start Drop -2.00
5274.54	0.00	0.00	5260.54	-145.81	-310.79	2.00	180.00	-314.07	Start 500.00 hold at 5274.54 MD
5774.54	0.00	0.00	5760.54	-145.81	-310.79	0.00	0.00	-314.07	Start Build 12.00
6527.33	90.34	88.68	6238.00	-134.72	169.34	12.00	88.68	166.20	Start 9726.18 hold at 6527.33 MD
16253.51	90.34	88.68	6181.00	89.78	9892.77	0.00	0.00	9892.21	TD at 16253.51

WELL DETAILS: Anschutz State 5-62-35-1609BH2

+N/-S	+E/-W	Northing	Ground Level: Easting	Latitude	Longitude	Slot
0.00	0.00	1376626.177	4640.00	40° 21' 39.661 N	104° 17' 55.730 W	

PROJECT DETAILS: Weld Co., CO

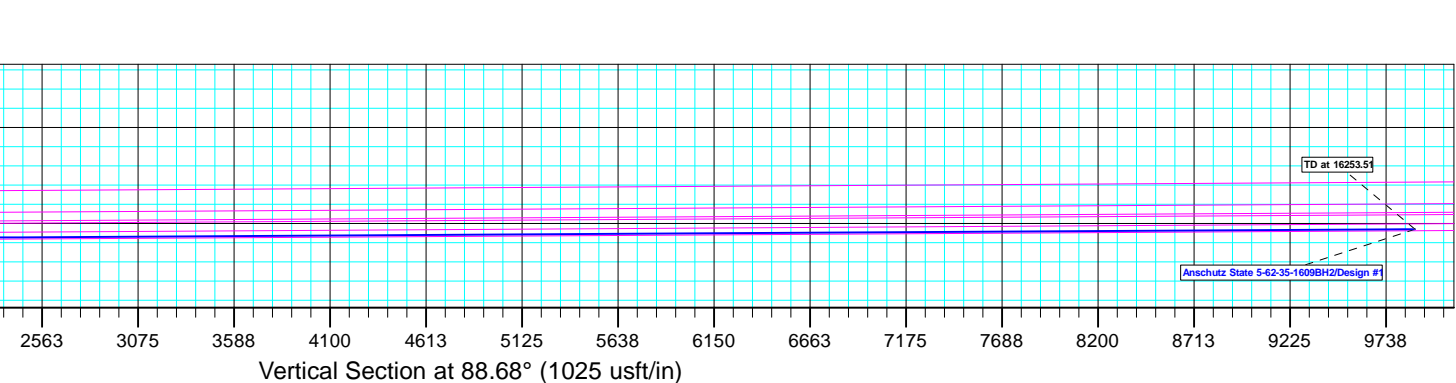
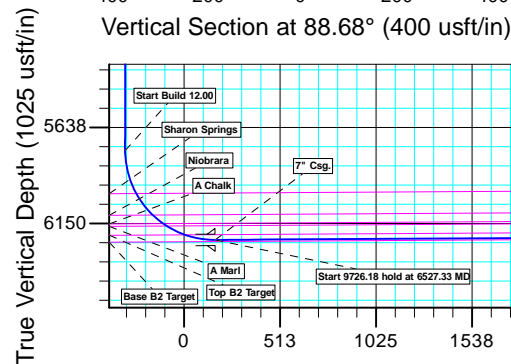
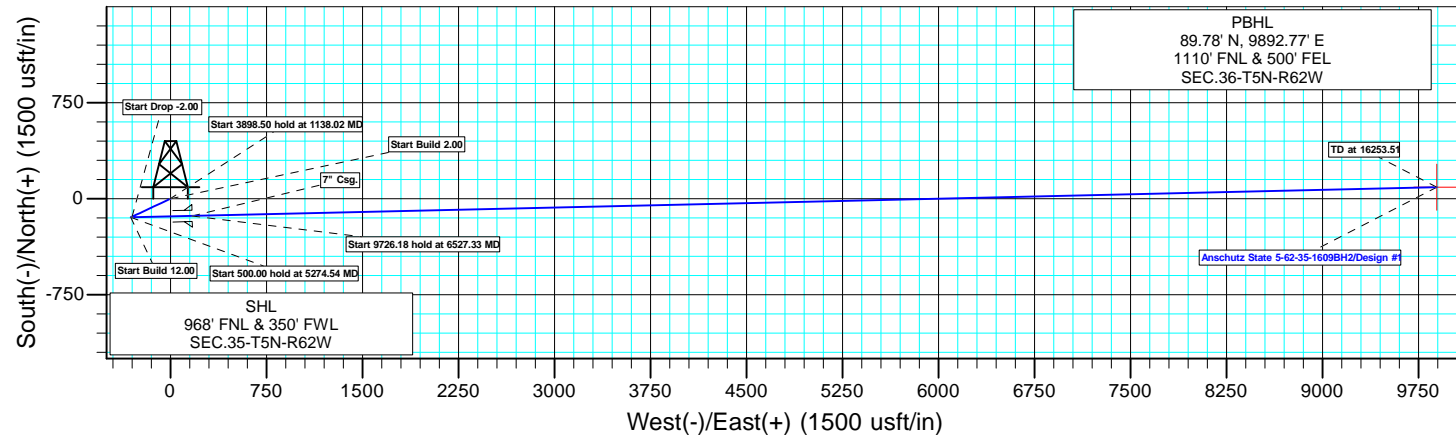
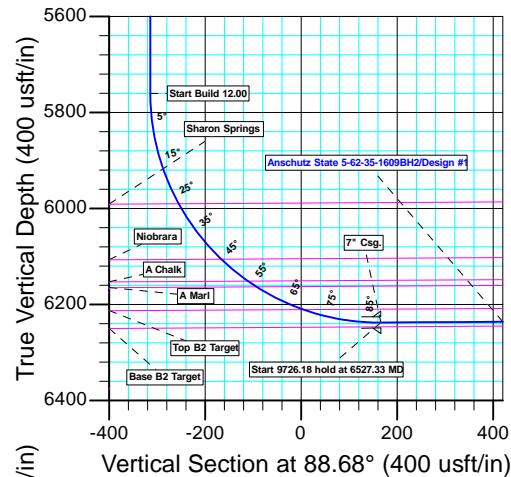
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

CASING DETAILS

TVD	MD	Name
6238.00	6527.33	7" Csg.

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
Anschutz State 5-62-35-1609BH2 tgt	6181.00	89.78	9892.77	40° 21' 40.529 N	104° 15' 47.930 W	



Plan: Design #1 (Anschutz State 5-62-35-1609BH2/Wellbore #1)

Created By: Ricky Osburn Date: 14:38, August 04 2014

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-35-1609BH2
Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4663.00usft (Original Well Elev)
Project:	Weld Co., CO	MD Reference:	WELL @ 4663.00usft (Original Well Elev)
Site:	Sec.35-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-35-1609BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Weld Co., CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Sec.35-T5N-R62W			
Site Position:		Northing:	1,375,286.395 usft	Latitude:	40° 21' 26.420 N
From:	Lat/Long	Easting:	3,334,739.959 usft	Longitude:	104° 17' 55.770 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.78 °

Well	Anschutz State 5-62-35-1609BH2					
Well Position	+N/-S	1,339.86 usft	Northing:	1,376,626.177 usft	Latitude:	40° 21' 39.661 N
	+E/-W	3.07 usft	Easting:	3,334,724.875 usft	Longitude:	104° 17' 55.730 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,640.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2014/08/04	8.19	66.98	52,830

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	88.68

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,138.02	4.76	244.87	1,137.74	-4.20	-8.95	2.00	2.00	0.00	244.87	
5,036.52	4.76	244.87	5,022.80	-141.61	-301.84	0.00	0.00	0.00	0.00	
5,274.54	0.00	0.00	5,260.54	-145.81	-310.79	2.00	-2.00	0.00	180.00	
5,774.54	0.00	0.00	5,760.54	-145.81	-310.79	0.00	0.00	0.00	0.00	
6,527.33	90.34	88.68	6,238.00	-134.72	169.34	12.00	12.00	0.00	88.68	Anschutz State 5-62-35-1609BH2
16,253.51	90.34	88.68	6,181.00	89.78	9,892.77	0.00	0.00	0.00	0.00	Anschutz State 5-62-35-1609BH2

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-35-1609BH2
Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4663.00usft (Original Well Elev)
Project:	Weld Co., CO	MD Reference:	WELL @ 4663.00usft (Original Well Elev)
Site:	Sec.35-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-35-1609BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	2.00	244.87	999.98	-0.74	-1.58	-1.60	2.00	2.00	0.00
1,100.00	4.00	244.87	1,099.84	-2.96	-6.32	-6.38	2.00	2.00	0.00
Start 3898.50 hold at 1138.02 MD									
1,138.02	4.76	244.87	1,137.74	-4.20	-8.95	-9.04	2.00	2.00	0.00
1,200.00	4.76	244.87	1,199.51	-6.38	-13.60	-13.75	0.00	0.00	0.00
1,300.00	4.76	244.87	1,299.17	-9.91	-21.12	-21.34	0.00	0.00	0.00
1,400.00	4.76	244.87	1,398.82	-13.43	-28.63	-28.93	0.00	0.00	0.00
1,500.00	4.76	244.87	1,498.48	-16.96	-36.14	-36.52	0.00	0.00	0.00
1,600.00	4.76	244.87	1,598.13	-20.48	-43.66	-44.12	0.00	0.00	0.00
1,700.00	4.76	244.87	1,697.79	-24.01	-51.17	-51.71	0.00	0.00	0.00
1,800.00	4.76	244.87	1,797.44	-27.53	-58.68	-59.30	0.00	0.00	0.00
1,900.00	4.76	244.87	1,897.10	-31.06	-66.19	-66.89	0.00	0.00	0.00
2,000.00	4.76	244.87	1,996.75	-34.58	-73.71	-74.48	0.00	0.00	0.00
2,100.00	4.76	244.87	2,096.41	-38.11	-81.22	-82.08	0.00	0.00	0.00
2,200.00	4.76	244.87	2,196.06	-41.63	-88.73	-89.67	0.00	0.00	0.00
2,300.00	4.76	244.87	2,295.72	-45.16	-96.25	-97.26	0.00	0.00	0.00
2,400.00	4.76	244.87	2,395.37	-48.68	-103.76	-104.85	0.00	0.00	0.00
2,500.00	4.76	244.87	2,495.03	-52.20	-111.27	-112.45	0.00	0.00	0.00
2,600.00	4.76	244.87	2,594.68	-55.73	-118.79	-120.04	0.00	0.00	0.00
2,700.00	4.76	244.87	2,694.34	-59.25	-126.30	-127.63	0.00	0.00	0.00
2,800.00	4.76	244.87	2,793.99	-62.78	-133.81	-135.22	0.00	0.00	0.00
2,900.00	4.76	244.87	2,893.65	-66.30	-141.33	-142.82	0.00	0.00	0.00
3,000.00	4.76	244.87	2,993.30	-69.83	-148.84	-150.41	0.00	0.00	0.00
3,100.00	4.76	244.87	3,092.96	-73.35	-156.35	-158.00	0.00	0.00	0.00
3,200.00	4.76	244.87	3,192.61	-76.88	-163.86	-165.59	0.00	0.00	0.00
3,300.00	4.76	244.87	3,292.27	-80.40	-171.38	-173.18	0.00	0.00	0.00
3,400.00	4.76	244.87	3,391.92	-83.93	-178.89	-180.78	0.00	0.00	0.00
3,500.00	4.76	244.87	3,491.58	-87.45	-186.40	-188.37	0.00	0.00	0.00
3,600.00	4.76	244.87	3,591.23	-90.98	-193.92	-195.96	0.00	0.00	0.00
3,700.00	4.76	244.87	3,690.89	-94.50	-201.43	-203.55	0.00	0.00	0.00
3,800.00	4.76	244.87	3,790.54	-98.03	-208.94	-211.15	0.00	0.00	0.00
3,900.00	4.76	244.87	3,890.20	-101.55	-216.46	-218.74	0.00	0.00	0.00
4,000.00	4.76	244.87	3,989.85	-105.08	-223.97	-226.33	0.00	0.00	0.00
4,100.00	4.76	244.87	4,089.51	-108.60	-231.48	-233.92	0.00	0.00	0.00
Sussex									
4,170.15	4.76	244.87	4,159.42	-111.07	-236.75	-239.25	0.00	0.00	0.00
4,200.00	4.76	244.87	4,189.16	-112.13	-239.00	-241.51	0.00	0.00	0.00
4,300.00	4.76	244.87	4,288.82	-115.65	-246.51	-249.11	0.00	0.00	0.00
4,400.00	4.76	244.87	4,388.47	-119.18	-254.02	-256.70	0.00	0.00	0.00
4,500.00	4.76	244.87	4,488.13	-122.70	-261.53	-264.29	0.00	0.00	0.00
4,600.00	4.76	244.87	4,587.78	-126.23	-269.05	-271.88	0.00	0.00	0.00
4,700.00	4.76	244.87	4,687.44	-129.75	-276.56	-279.48	0.00	0.00	0.00

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Project:	Weld Co., CO	MD Reference:	WELL @ 4663.00usft (Original Well Elev)
Site:	Sec.35-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-35-1609BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Shannon									
4,706.24	4.76	244.87	4,693.66	-129.97	-277.03	-279.95	0.00	0.00	0.00
4,800.00	4.76	244.87	4,787.09	-133.28	-284.07	-287.07	0.00	0.00	0.00
4,900.00	4.76	244.87	4,886.75	-136.80	-291.59	-294.66	0.00	0.00	0.00
5,000.00	4.76	244.87	4,986.40	-140.33	-299.10	-302.25	0.00	0.00	0.00
Start Drop -2.00									
5,036.52	4.76	244.87	5,022.80	-141.61	-301.84	-305.03	0.00	0.00	0.00
5,100.00	3.49	244.87	5,086.11	-143.55	-305.98	-309.20	2.00	-2.00	0.00
5,200.00	1.49	244.87	5,186.01	-145.40	-309.91	-313.18	2.00	-2.00	0.00
Start 500.00 hold at 5274.54 MD									
5,274.54	0.00	0.00	5,260.54	-145.81	-310.79	-314.07	2.00	-2.00	0.00
5,300.00	0.00	0.00	5,286.00	-145.81	-310.79	-314.07	0.00	0.00	0.00
5,400.00	0.00	0.00	5,386.00	-145.81	-310.79	-314.07	0.00	0.00	0.00
5,500.00	0.00	0.00	5,486.00	-145.81	-310.79	-314.07	0.00	0.00	0.00
5,600.00	0.00	0.00	5,586.00	-145.81	-310.79	-314.07	0.00	0.00	0.00
5,700.00	0.00	0.00	5,686.00	-145.81	-310.79	-314.07	0.00	0.00	0.00
Start Build 12.00									
5,774.54	0.00	0.00	5,760.54	-145.81	-310.79	-314.07	0.00	0.00	0.00
5,800.00	3.06	88.68	5,785.99	-145.79	-310.11	-313.39	12.00	12.00	0.00
5,825.00	6.06	88.68	5,810.91	-145.75	-308.13	-311.40	12.00	12.00	0.00
5,850.00	9.06	88.68	5,835.69	-145.67	-304.84	-308.12	12.00	12.00	0.00
5,875.00	12.06	88.68	5,860.27	-145.57	-300.26	-303.54	12.00	12.00	0.00
5,900.00	15.06	88.68	5,884.57	-145.43	-294.40	-297.68	12.00	12.00	0.00
5,925.00	18.06	88.68	5,908.53	-145.27	-287.28	-290.55	12.00	12.00	0.00
5,950.00	21.06	88.68	5,932.08	-145.07	-278.92	-282.19	12.00	12.00	0.00
5,975.00	24.06	88.68	5,955.17	-144.85	-269.33	-272.60	12.00	12.00	0.00
6,000.00	27.06	88.68	5,977.72	-144.60	-258.55	-261.81	12.00	12.00	0.00
Sharon Springs									
6,014.48	28.79	88.68	5,990.51	-144.45	-251.77	-255.03	12.00	12.00	0.00
6,025.00	30.06	88.68	5,999.67	-144.33	-246.61	-249.87	12.00	12.00	0.00
6,050.00	33.06	88.68	6,020.98	-144.03	-233.53	-236.78	12.00	12.00	0.00
6,075.00	36.06	88.68	6,041.56	-143.70	-219.35	-222.61	12.00	12.00	0.00
6,100.00	39.06	88.68	6,061.38	-143.35	-204.12	-207.37	12.00	12.00	0.00
6,125.00	42.06	88.68	6,080.37	-142.97	-187.87	-191.12	12.00	12.00	0.00
6,150.00	45.06	88.68	6,098.49	-142.57	-170.65	-173.89	12.00	12.00	0.00
Niobrara									
6,160.74	46.34	88.68	6,105.99	-142.40	-162.97	-166.21	12.00	12.00	0.00
6,175.00	48.06	88.68	6,115.68	-142.16	-152.51	-155.74	12.00	12.00	0.00
6,200.00	51.06	88.68	6,131.89	-141.72	-133.49	-136.72	12.00	12.00	0.00
6,225.00	54.06	88.68	6,147.09	-141.26	-113.65	-116.87	12.00	12.00	0.00
A Chalk									
6,232.87	55.00	88.68	6,151.66	-141.11	-107.24	-110.47	12.00	12.00	0.00
6,250.00	57.06	88.68	6,161.23	-140.78	-93.04	-96.26	12.00	12.00	0.00
A Marl									
6,254.30	57.57	88.68	6,163.55	-140.70	-89.42	-92.64	12.00	12.00	0.00
6,275.00	60.06	88.68	6,174.27	-140.29	-71.72	-74.93	12.00	12.00	0.00
6,300.00	63.06	88.68	6,186.18	-139.78	-49.75	-52.95	12.00	12.00	0.00
6,325.00	66.06	88.68	6,196.91	-139.26	-27.18	-30.38	12.00	12.00	0.00
6,350.00	69.06	88.68	6,206.46	-138.73	-4.08	-7.28	12.00	12.00	0.00
Top B2 Target									
6,363.09	70.63	88.68	6,210.97	-138.44	8.21	5.02	12.00	12.00	0.00
6,375.00	72.06	88.68	6,214.78	-138.18	19.48	16.30	12.00	12.00	0.00
6,400.00	75.06	88.68	6,221.86	-137.63	43.45	40.27	12.00	12.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-35-1609BH2
Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4663.00usft (Original Well Elev)
Project:	Weld Co., CO	MD Reference:	WELL @ 4663.00usft (Original Well Elev)
Site:	Sec.35-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-35-1609BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,425.00	78.06	88.68	6,227.67	-137.07	67.76	64.58	12.00	12.00	0.00
6,450.00	81.06	88.68	6,232.20	-136.50	92.33	89.17	12.00	12.00	0.00
6,475.00	84.06	88.68	6,235.44	-135.93	117.11	113.95	12.00	12.00	0.00
6,500.00	87.06	88.68	6,237.37	-135.35	142.03	138.87	12.00	12.00	0.00
Start 9726.18 hold at 6527.33 MD - 7" Csg.									
6,527.33	90.34	88.68	6,238.00	-134.72	169.34	166.19	12.00	12.00	0.00
6,600.00	90.34	88.68	6,237.57	-133.05	241.99	238.86	0.00	0.00	0.00
6,700.00	90.34	88.68	6,236.98	-130.74	341.96	338.86	0.00	0.00	0.00
6,800.00	90.34	88.68	6,236.40	-128.43	441.93	438.86	0.00	0.00	0.00
6,900.00	90.34	88.68	6,235.81	-126.12	541.91	538.86	0.00	0.00	0.00
7,000.00	90.34	88.68	6,235.23	-123.81	641.88	638.85	0.00	0.00	0.00
7,100.00	90.34	88.68	6,234.64	-121.51	741.85	738.85	0.00	0.00	0.00
7,200.00	90.34	88.68	6,234.05	-119.20	841.82	838.85	0.00	0.00	0.00
7,300.00	90.34	88.68	6,233.47	-116.89	941.79	938.85	0.00	0.00	0.00
7,400.00	90.34	88.68	6,232.88	-114.58	1,041.76	1,038.85	0.00	0.00	0.00
7,500.00	90.34	88.68	6,232.30	-112.27	1,141.74	1,138.85	0.00	0.00	0.00
7,600.00	90.34	88.68	6,231.71	-109.96	1,241.71	1,238.84	0.00	0.00	0.00
7,700.00	90.34	88.68	6,231.12	-107.66	1,341.68	1,338.84	0.00	0.00	0.00
7,800.00	90.34	88.68	6,230.54	-105.35	1,441.65	1,438.84	0.00	0.00	0.00
7,900.00	90.34	88.68	6,229.95	-103.04	1,541.62	1,538.84	0.00	0.00	0.00
8,000.00	90.34	88.68	6,229.37	-100.73	1,641.59	1,638.84	0.00	0.00	0.00
8,100.00	90.34	88.68	6,228.78	-98.42	1,741.57	1,738.84	0.00	0.00	0.00
8,200.00	90.34	88.68	6,228.19	-96.11	1,841.54	1,838.83	0.00	0.00	0.00
8,300.00	90.34	88.68	6,227.61	-93.81	1,941.51	1,938.83	0.00	0.00	0.00
8,400.00	90.34	88.68	6,227.02	-91.50	2,041.48	2,038.83	0.00	0.00	0.00
8,500.00	90.34	88.68	6,226.44	-89.19	2,141.45	2,138.83	0.00	0.00	0.00
8,600.00	90.34	88.68	6,225.85	-86.88	2,241.42	2,238.83	0.00	0.00	0.00
8,700.00	90.34	88.68	6,225.27	-84.57	2,341.40	2,338.83	0.00	0.00	0.00
8,800.00	90.34	88.68	6,224.68	-82.26	2,441.37	2,438.82	0.00	0.00	0.00
8,900.00	90.34	88.68	6,224.09	-79.96	2,541.34	2,538.82	0.00	0.00	0.00
9,000.00	90.34	88.68	6,223.51	-77.65	2,641.31	2,638.82	0.00	0.00	0.00
9,100.00	90.34	88.68	6,222.92	-75.34	2,741.28	2,738.82	0.00	0.00	0.00
9,200.00	90.34	88.68	6,222.34	-73.03	2,841.25	2,838.82	0.00	0.00	0.00
9,300.00	90.34	88.68	6,221.75	-70.72	2,941.23	2,938.82	0.00	0.00	0.00
9,400.00	90.34	88.68	6,221.16	-68.41	3,041.20	3,038.81	0.00	0.00	0.00
9,500.00	90.34	88.68	6,220.58	-66.11	3,141.17	3,138.81	0.00	0.00	0.00
9,600.00	90.34	88.68	6,219.99	-63.80	3,241.14	3,238.81	0.00	0.00	0.00
9,700.00	90.34	88.68	6,219.41	-61.49	3,341.11	3,338.81	0.00	0.00	0.00
9,800.00	90.34	88.68	6,218.82	-59.18	3,441.08	3,438.81	0.00	0.00	0.00
9,900.00	90.34	88.68	6,218.23	-56.87	3,541.05	3,538.81	0.00	0.00	0.00
10,000.00	90.34	88.68	6,217.65	-54.57	3,641.03	3,638.80	0.00	0.00	0.00
10,100.00	90.34	88.68	6,217.06	-52.26	3,741.00	3,738.80	0.00	0.00	0.00
10,200.00	90.34	88.68	6,216.48	-49.95	3,840.97	3,838.80	0.00	0.00	0.00
10,300.00	90.34	88.68	6,215.89	-47.64	3,940.94	3,938.80	0.00	0.00	0.00
10,400.00	90.34	88.68	6,215.30	-45.33	4,040.91	4,038.80	0.00	0.00	0.00
10,500.00	90.34	88.68	6,214.72	-43.02	4,140.88	4,138.79	0.00	0.00	0.00
10,600.00	90.34	88.68	6,214.13	-40.72	4,240.86	4,238.79	0.00	0.00	0.00
10,700.00	90.34	88.68	6,213.55	-38.41	4,340.83	4,338.79	0.00	0.00	0.00
10,800.00	90.34	88.68	6,212.96	-36.10	4,440.80	4,438.79	0.00	0.00	0.00
10,900.00	90.34	88.68	6,212.37	-33.79	4,540.77	4,538.79	0.00	0.00	0.00
11,000.00	90.34	88.68	6,211.79	-31.48	4,640.74	4,638.79	0.00	0.00	0.00
11,100.00	90.34	88.68	6,211.20	-29.17	4,740.71	4,738.78	0.00	0.00	0.00
11,200.00	90.34	88.68	6,210.62	-26.87	4,840.69	4,838.78	0.00	0.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-35-1609BH2
Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4663.00usft (Original Well Elev)
Project:	Weld Co., CO	MD Reference:	WELL @ 4663.00usft (Original Well Elev)
Site:	Sec.35-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-35-1609BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,300.00	90.34	88.68	6,210.03	-24.56	4,940.66	4,938.78	0.00	0.00	0.00
11,400.00	90.34	88.68	6,209.44	-22.25	5,040.63	5,038.78	0.00	0.00	0.00
11,500.00	90.34	88.68	6,208.86	-19.94	5,140.60	5,138.78	0.00	0.00	0.00
11,600.00	90.34	88.68	6,208.27	-17.63	5,240.57	5,238.78	0.00	0.00	0.00
11,700.00	90.34	88.68	6,207.69	-15.32	5,340.54	5,338.77	0.00	0.00	0.00
11,800.00	90.34	88.68	6,207.10	-13.02	5,440.52	5,438.77	0.00	0.00	0.00
11,900.00	90.34	88.68	6,206.51	-10.71	5,540.49	5,538.77	0.00	0.00	0.00
12,000.00	90.34	88.68	6,205.93	-8.40	5,640.46	5,638.77	0.00	0.00	0.00
12,100.00	90.34	88.68	6,205.34	-6.09	5,740.43	5,738.77	0.00	0.00	0.00
12,200.00	90.34	88.68	6,204.76	-3.78	5,840.40	5,838.77	0.00	0.00	0.00
12,300.00	90.34	88.68	6,204.17	-1.47	5,940.37	5,938.76	0.00	0.00	0.00
12,400.00	90.34	88.68	6,203.58	0.83	6,040.35	6,038.76	0.00	0.00	0.00
12,500.00	90.34	88.68	6,203.00	3.14	6,140.32	6,138.76	0.00	0.00	0.00
12,600.00	90.34	88.68	6,202.41	5.45	6,240.29	6,238.76	0.00	0.00	0.00
12,700.00	90.34	88.68	6,201.83	7.76	6,340.26	6,338.76	0.00	0.00	0.00
12,800.00	90.34	88.68	6,201.24	10.07	6,440.23	6,438.76	0.00	0.00	0.00
12,900.00	90.34	88.68	6,200.65	12.37	6,540.20	6,538.75	0.00	0.00	0.00
13,000.00	90.34	88.68	6,200.07	14.68	6,640.18	6,638.75	0.00	0.00	0.00
13,100.00	90.34	88.68	6,199.48	16.99	6,740.15	6,738.75	0.00	0.00	0.00
13,200.00	90.34	88.68	6,198.90	19.30	6,840.12	6,838.75	0.00	0.00	0.00
13,300.00	90.34	88.68	6,198.31	21.61	6,940.09	6,938.75	0.00	0.00	0.00
13,400.00	90.34	88.68	6,197.72	23.92	7,040.06	7,038.75	0.00	0.00	0.00
13,500.00	90.34	88.68	6,197.14	26.22	7,140.03	7,138.74	0.00	0.00	0.00
13,600.00	90.34	88.68	6,196.55	28.53	7,240.01	7,238.74	0.00	0.00	0.00
13,700.00	90.34	88.68	6,195.97	30.84	7,339.98	7,338.74	0.00	0.00	0.00
13,800.00	90.34	88.68	6,195.38	33.15	7,439.95	7,438.74	0.00	0.00	0.00
13,900.00	90.34	88.68	6,194.79	35.46	7,539.92	7,538.74	0.00	0.00	0.00
14,000.00	90.34	88.68	6,194.21	37.77	7,639.89	7,638.73	0.00	0.00	0.00
14,100.00	90.34	88.68	6,193.62	40.07	7,739.86	7,738.73	0.00	0.00	0.00
14,200.00	90.34	88.68	6,193.04	42.38	7,839.84	7,838.73	0.00	0.00	0.00
14,300.00	90.34	88.68	6,192.45	44.69	7,939.81	7,938.73	0.00	0.00	0.00
14,400.00	90.34	88.68	6,191.86	47.00	8,039.78	8,038.73	0.00	0.00	0.00
14,500.00	90.34	88.68	6,191.28	49.31	8,139.75	8,138.73	0.00	0.00	0.00
14,600.00	90.34	88.68	6,190.69	51.62	8,239.72	8,238.72	0.00	0.00	0.00
14,700.00	90.34	88.68	6,190.11	53.92	8,339.69	8,338.72	0.00	0.00	0.00
14,800.00	90.34	88.68	6,189.52	56.23	8,439.67	8,438.72	0.00	0.00	0.00
14,900.00	90.34	88.68	6,188.93	58.54	8,539.64	8,538.72	0.00	0.00	0.00
15,000.00	90.34	88.68	6,188.35	60.85	8,639.61	8,638.72	0.00	0.00	0.00
15,100.00	90.34	88.68	6,187.76	63.16	8,739.58	8,738.72	0.00	0.00	0.00
15,200.00	90.34	88.68	6,187.18	65.47	8,839.55	8,838.71	0.00	0.00	0.00
15,300.00	90.34	88.68	6,186.59	67.77	8,939.52	8,938.71	0.00	0.00	0.00
15,400.00	90.34	88.68	6,186.00	70.08	9,039.50	9,038.71	0.00	0.00	0.00
15,500.00	90.34	88.68	6,185.42	72.39	9,139.47	9,138.71	0.00	0.00	0.00
15,600.00	90.34	88.68	6,184.83	74.70	9,239.44	9,238.71	0.00	0.00	0.00
15,700.00	90.34	88.68	6,184.25	77.01	9,339.41	9,338.71	0.00	0.00	0.00
15,800.00	90.34	88.68	6,183.66	79.31	9,439.38	9,438.70	0.00	0.00	0.00
15,900.00	90.34	88.68	6,183.07	81.62	9,539.35	9,538.70	0.00	0.00	0.00
16,000.00	90.34	88.68	6,182.49	83.93	9,639.32	9,638.70	0.00	0.00	0.00
16,100.00	90.34	88.68	6,181.90	86.24	9,739.30	9,738.70	0.00	0.00	0.00
16,200.00	90.34	88.68	6,181.32	88.55	9,839.27	9,838.70	0.00	0.00	0.00
TD at 16253.51									
16,253.51	90.34	88.68	6,181.00	89.78	9,892.77	9,892.21	0.00	0.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-35-1609BH2
Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4663.00usft (Original Well Elev)
Project:	Weld Co., CO	MD Reference:	WELL @ 4663.00usft (Original Well Elev)
Site:	Sec.35-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-35-1609BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Anschutz State 5-62-35- - plan hits target center - Point	0.00	0.00	6,181.00	89.78	9,892.77	1,376,849.955	3,344,615.519	40° 21' 40.529 N	104° 15' 47.930 W

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(usft)	(usft)			(")	(")
6,527.33	6,238.00	7" Csg.		7	8-3/4

Formations						
Measured Depth	Vertical Depth	Name		Lithology	Dip	Dip Direction
(usft)	(usft)				(°)	(°)
4,170.15	4,158.00	Sussex			-0.34	88.68
4,706.24	4,692.00	Shannon			-0.34	88.68
6,014.48	5,989.00	Sharon Springs			-0.34	88.64
6,160.74	6,105.00	Niobrara			-0.34	88.68
6,232.87	6,151.00	A Chalk			-0.34	88.68
6,254.30	6,163.00	A Marl			-0.34	88.68
6,363.09	6,211.00	Top B2 Target			-0.34	88.68

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)		
900.00	900.00	0.00	0.00	Start Build 2.00	
1,138.02	1,137.74	-4.20	-8.95	Start 3898.50 hold at 1138.02 MD	
5,036.52	5,022.80	-141.61	-301.84	Start Drop -2.00	
5,274.54	5,260.54	-145.81	-310.79	Start 500.00 hold at 5274.54 MD	
5,774.54	5,760.54	-145.81	-310.79	Start Build 12.00	
6,527.33	6,238.00	-134.72	169.34	Start 9726.18 hold at 6527.33 MD	
16,253.51	6,181.00	89.78	9,892.77	TD at 16253.51	