



Bill Barrett Corporation

Bill Barrett Corp.

Weld Co., CO

Sec.22-T5N-R62W

Anschutz State 5-62-22-4956C2

Wellbore #1

Plan: Design #1

Standard Planning Report

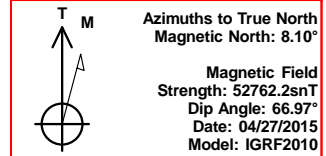
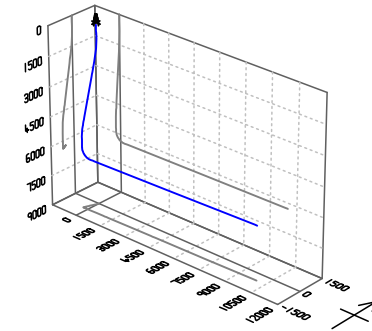
27 April, 2015

Archer



Bill Barrett Corp.
Project: Weld Co., CO
Site: Sec.22-T5N-R62W
Well: Anschutz State 5-62-22-4956C2
Wellbore: Wellbore #1
Design: Design #1
Lat: 40° 23' 1.241 N
Long: 104° 19' 6.982 W
Pad GL: 4690.00
KB: Well @ 4706.00usft

Archer



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	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
1470.45	11.41	200.97	1466.69	-52.86	-20.26	2.00	200.97	-21.23	Start 3446.26 hold at 1470.45 MD
4916.71	11.41	200.97	4844.85	-689.42	-264.23	0.00	0.00	-276.94	Start Drop -2.00
5487.16	0.00	0.00	5411.54	-742.28	-284.49	2.00	180.00	-298.17	Start 500.03 hold at 5487.16 MD
5987.19	0.00	0.00	5911.57	-742.28	-284.49	0.00	0.00	-298.17	Start Build 12.00
6742.55	90.64	88.94	6389.00	-733.37	198.25	12.00	88.94	184.65	Start 9803.80 hold at 6742.55 MD
16546.35	90.64	88.94	6279.00	-552.43	9999.76	0.00	0.00	9987.83	TD at 16546.35

WELL DETAILS: Anschutz State 5-62-22-4956C2

+N/-S	+E/-W	Northing	Ground Level:	4690.00	Latitude	Longitude	Slot
0.00	0.00	1384806.633	Easting	3329099.946	40° 23' 1.241 N	104° 19' 6.982 W	

PROJECT DETAILS: Weld Co., CO

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

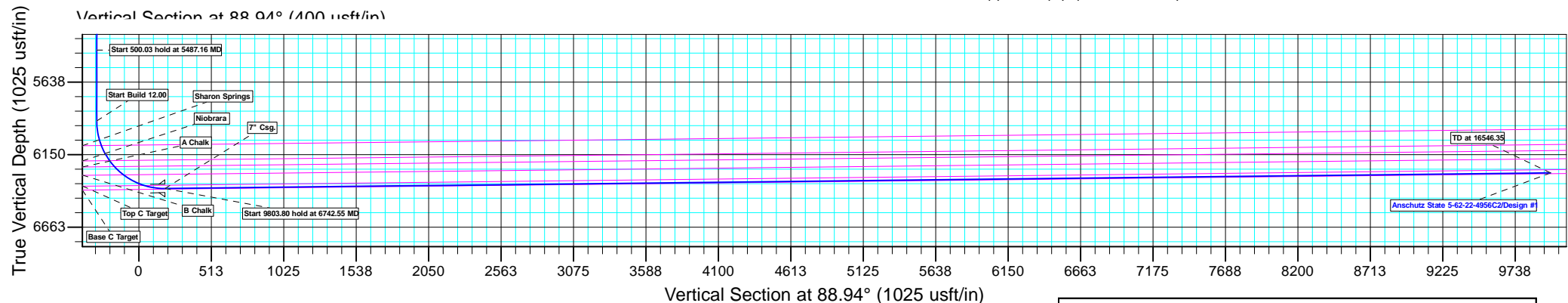
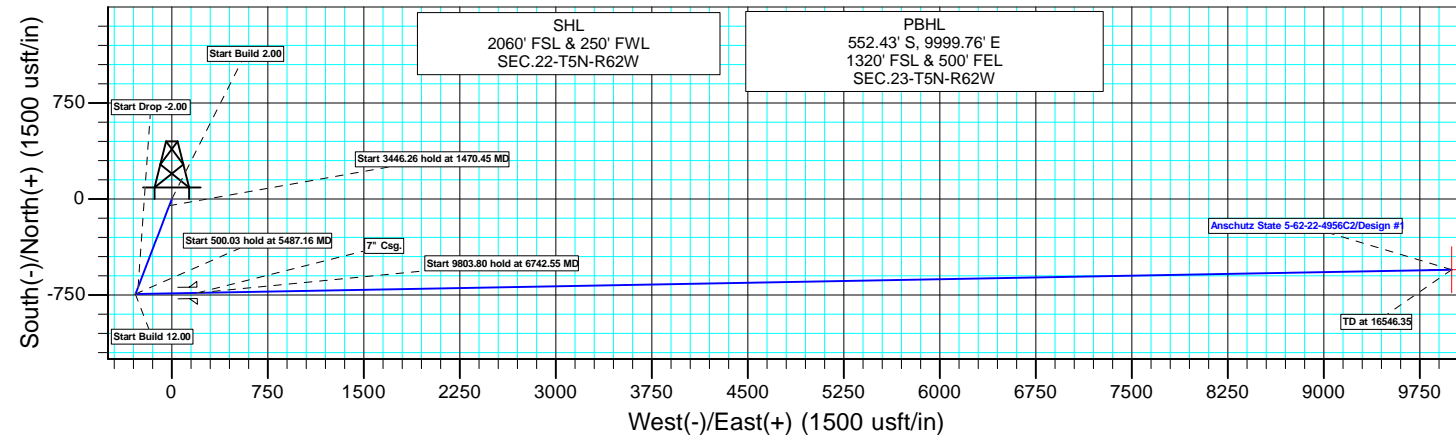
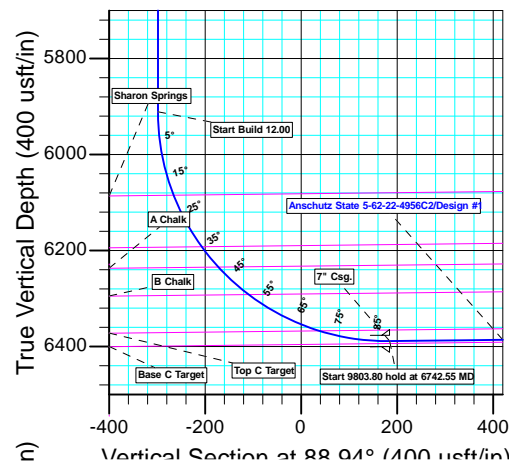
System Datum: Mean Sea Level

CASING DETAILS

TVD	MD	Name
6389.00	6742.55	7" Csg.

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Anschutz State 5-62-22-4956C2 tgt	6279.00	-552.43	9999.76	40° 22' 55.762 N	104° 16' 57.760 W	Point



Plan: Design #1 (Anschutz State 5-62-22-4956C2/Wellbore #1)

Created By: Ricky Osburn Date: 10:47, April 27 2015

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-4956C2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4706.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4706.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-4956C2	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.22-T5N-R62W				
Site Position:		Northing:	1,387,395.099 usft	Latitude:	40° 23' 26.801 N
From:	Lat/Long	Easting:	3,329,229.538 usft	Longitude:	104° 19' 4.861 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.76 °

Well	Anschutz State 5-62-22-4956C2					
Well Position	+N/-S	-2,586.51 usft	Northing:	1,384,806.633 usft	Latitude:	40° 23' 1.241 N
	+E/-W	-164.08 usft	Easting:	3,329,099.946 usft	Longitude:	104° 19' 6.982 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,690.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2015/04/27	8.10	66.97	52,762

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	88.94

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	
1,470.45	11.41	200.97	1,466.69	-52.86	-20.26	2.00	2.00	0.00	200.97	
4,916.71	11.41	200.97	4,844.85	-689.42	-264.23	0.00	0.00	0.00	0.00	
5,487.16	0.00	0.00	5,411.54	-742.28	-284.49	2.00	-2.00	0.00	180.00	
5,987.19	0.00	0.00	5,911.57	-742.28	-284.49	0.00	0.00	0.00	0.00	
6,742.55	90.64	88.94	6,389.00	-733.37	198.25	12.00	12.00	0.00	88.94	Anschutz State 5-62-2
16,546.35	90.64	88.94	6,279.00	-552.43	9,999.76	0.00	0.00	0.00	0.00	Anschutz State 5-62-2

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-4956C2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4706.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4706.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-4956C2	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	200.97	999.98	-1.63	-0.62	-0.65	2.00	2.00	0.00
1,100.00	4.00	200.97	1,099.84	-6.52	-2.50	-2.62	2.00	2.00	0.00
1,200.00	6.00	200.97	1,199.45	-14.65	-5.62	-5.89	2.00	2.00	0.00
1,300.00	8.00	200.97	1,298.70	-26.03	-9.98	-10.46	2.00	2.00	0.00
1,400.00	10.00	200.97	1,397.47	-40.64	-15.58	-16.33	2.00	2.00	0.00
Start 3446.26 hold at 1470.45 MD									
1,470.45	11.41	200.97	1,466.69	-52.86	-20.26	-21.23	2.00	2.00	0.00
1,500.00	11.41	200.97	1,495.65	-58.32	-22.35	-23.43	0.00	0.00	0.00
1,600.00	11.41	200.97	1,593.68	-76.79	-29.43	-30.85	0.00	0.00	0.00
1,700.00	11.41	200.97	1,691.70	-95.26	-36.51	-38.27	0.00	0.00	0.00
1,800.00	11.41	200.97	1,789.73	-113.73	-43.59	-45.69	0.00	0.00	0.00
1,900.00	11.41	200.97	1,887.75	-132.20	-50.67	-53.11	0.00	0.00	0.00
2,000.00	11.41	200.97	1,985.77	-150.67	-57.75	-60.52	0.00	0.00	0.00
2,100.00	11.41	200.97	2,083.80	-169.14	-64.83	-67.94	0.00	0.00	0.00
2,200.00	11.41	200.97	2,181.82	-187.61	-71.91	-75.36	0.00	0.00	0.00
2,300.00	11.41	200.97	2,279.85	-206.09	-78.99	-82.78	0.00	0.00	0.00
2,400.00	11.41	200.97	2,377.87	-224.56	-86.06	-90.20	0.00	0.00	0.00
2,500.00	11.41	200.97	2,475.89	-243.03	-93.14	-97.62	0.00	0.00	0.00
2,600.00	11.41	200.97	2,573.92	-261.50	-100.22	-105.04	0.00	0.00	0.00
2,700.00	11.41	200.97	2,671.94	-279.97	-107.30	-112.46	0.00	0.00	0.00
2,800.00	11.41	200.97	2,769.97	-298.44	-114.38	-119.88	0.00	0.00	0.00
2,900.00	11.41	200.97	2,867.99	-316.91	-121.46	-127.30	0.00	0.00	0.00
3,000.00	11.41	200.97	2,966.01	-335.38	-128.54	-134.72	0.00	0.00	0.00
3,100.00	11.41	200.97	3,064.04	-353.85	-135.62	-142.14	0.00	0.00	0.00
3,200.00	11.41	200.97	3,162.06	-372.33	-142.70	-149.56	0.00	0.00	0.00
3,300.00	11.41	200.97	3,260.09	-390.80	-149.78	-156.98	0.00	0.00	0.00
3,400.00	11.41	200.97	3,358.11	-409.27	-156.86	-164.40	0.00	0.00	0.00
3,500.00	11.41	200.97	3,456.13	-427.74	-163.94	-171.82	0.00	0.00	0.00
3,600.00	11.41	200.97	3,554.16	-446.21	-171.02	-179.24	0.00	0.00	0.00
3,700.00	11.41	200.97	3,652.18	-464.68	-178.10	-186.66	0.00	0.00	0.00
3,800.00	11.41	200.97	3,750.21	-483.15	-185.18	-194.08	0.00	0.00	0.00
3,900.00	11.41	200.97	3,848.23	-501.62	-192.25	-201.50	0.00	0.00	0.00
4,000.00	11.41	200.97	3,946.25	-520.09	-199.33	-208.92	0.00	0.00	0.00
4,100.00	11.41	200.97	4,044.28	-538.57	-206.41	-216.34	0.00	0.00	0.00
4,200.00	11.41	200.97	4,142.30	-557.04	-213.49	-223.76	0.00	0.00	0.00
sussex									
4,204.29	11.41	200.97	4,146.50	-557.83	-213.80	-224.08	0.00	0.00	0.00
4,300.00	11.41	200.97	4,240.33	-575.51	-220.57	-231.18	0.00	0.00	0.00
4,400.00	11.41	200.97	4,338.35	-593.98	-227.65	-238.60	0.00	0.00	0.00
4,500.00	11.41	200.97	4,436.37	-612.45	-234.73	-246.02	0.00	0.00	0.00
4,600.00	11.41	200.97	4,534.40	-630.92	-241.81	-253.44	0.00	0.00	0.00
4,700.00	11.41	200.97	4,632.42	-649.39	-248.89	-260.86	0.00	0.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-4956C2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4706.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4706.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-4956C2	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)
4,800.00	11.41	200.97	4,730.45	-667.86	-255.97	-268.28	0.00	0.00	0.00
4,900.00	11.41	200.97	4,828.47	-686.33	-263.05	-275.70	0.00	0.00	0.00
Start Drop -2.00									
4,916.71	11.41	200.97	4,844.85	-689.42	-264.23	-276.94	0.00	0.00	0.00
5,000.00	9.74	200.97	4,926.72	-703.69	-269.70	-282.67	2.00	-2.00	0.00
Shannon									
5,028.85	9.17	200.97	4,955.18	-708.12	-271.40	-284.45	2.00	-2.00	0.00
5,100.00	7.74	200.97	5,025.55	-717.89	-275.14	-288.37	2.00	-2.00	0.00
5,200.00	5.74	200.97	5,124.86	-728.85	-279.34	-292.78	2.00	-2.00	0.00
5,300.00	3.74	200.97	5,224.51	-736.57	-282.30	-295.88	2.00	-2.00	0.00
5,400.00	1.74	200.97	5,324.39	-741.04	-284.02	-297.68	2.00	-2.00	0.00
Start 500.03 hold at 5487.16 MD									
5,487.16	0.00	0.00	5,411.54	-742.28	-284.49	-298.17	2.00	-2.00	0.00
5,500.00	0.00	0.00	5,424.38	-742.28	-284.49	-298.17	0.00	0.00	0.00
5,600.00	0.00	0.00	5,524.38	-742.28	-284.49	-298.17	0.00	0.00	0.00
5,700.00	0.00	0.00	5,624.38	-742.28	-284.49	-298.17	0.00	0.00	0.00
5,800.00	0.00	0.00	5,724.38	-742.28	-284.49	-298.17	0.00	0.00	0.00
5,900.00	0.00	0.00	5,824.38	-742.28	-284.49	-298.17	0.00	0.00	0.00
Start Build 12.00									
5,987.19	0.00	0.00	5,911.57	-742.28	-284.49	-298.17	0.00	0.00	0.00
6,000.00	1.54	88.94	5,924.38	-742.28	-284.32	-298.00	12.00	12.00	0.00
6,025.00	4.54	88.94	5,949.34	-742.25	-282.99	-296.68	12.00	12.00	0.00
6,050.00	7.54	88.94	5,974.20	-742.20	-280.37	-294.05	12.00	12.00	0.00
6,075.00	10.54	88.94	5,998.88	-742.13	-276.44	-290.12	12.00	12.00	0.00
6,100.00	13.54	88.94	6,023.33	-742.04	-271.23	-284.91	12.00	12.00	0.00
6,125.00	16.54	88.94	6,047.47	-741.92	-264.74	-278.42	12.00	12.00	0.00
6,150.00	19.54	88.94	6,071.24	-741.77	-257.01	-270.68	12.00	12.00	0.00
Sharon Springs									
6,164.65	21.29	88.94	6,084.97	-741.68	-251.90	-265.57	12.00	12.00	0.00
6,175.00	22.54	88.94	6,094.57	-741.61	-248.03	-261.71	12.00	12.00	0.00
6,200.00	25.54	88.94	6,117.40	-741.42	-237.85	-251.53	12.00	12.00	0.00
6,225.00	28.54	88.94	6,139.67	-741.21	-226.49	-240.17	12.00	12.00	0.00
6,250.00	31.54	88.94	6,161.31	-740.98	-213.98	-227.65	12.00	12.00	0.00
6,275.00	34.54	88.94	6,182.26	-740.73	-200.36	-214.03	12.00	12.00	0.00
Niobrara									
6,287.31	36.01	88.94	6,192.31	-740.60	-193.25	-206.92	12.00	12.00	0.00
6,300.00	37.54	88.94	6,202.48	-740.46	-185.65	-199.32	12.00	12.00	0.00
6,325.00	40.54	88.94	6,221.89	-740.16	-169.91	-183.58	12.00	12.00	0.00
A Chalk									
6,342.42	42.63	88.94	6,234.92	-739.95	-158.35	-172.02	12.00	12.00	0.00
6,350.00	43.54	88.94	6,240.46	-739.86	-153.18	-166.84	12.00	12.00	0.00
6,375.00	46.54	88.94	6,258.12	-739.53	-135.49	-149.15	12.00	12.00	0.00
6,400.00	49.54	88.94	6,274.84	-739.19	-116.91	-130.56	12.00	12.00	0.00
6,425.00	52.54	88.94	6,290.55	-738.83	-97.48	-111.13	12.00	12.00	0.00
B Chalk									
6,427.74	52.87	88.94	6,292.22	-738.79	-95.29	-108.95	12.00	12.00	0.00
6,450.00	55.54	88.94	6,305.23	-738.45	-77.25	-90.89	12.00	12.00	0.00
6,475.00	58.54	88.94	6,318.84	-738.07	-56.28	-69.92	12.00	12.00	0.00
6,500.00	61.54	88.94	6,331.32	-737.67	-34.62	-48.27	12.00	12.00	0.00
6,525.00	64.54	88.94	6,342.65	-737.26	-12.35	-25.99	12.00	12.00	0.00
6,550.00	67.54	88.94	6,352.81	-736.83	10.49	-3.14	12.00	12.00	0.00
6,575.00	70.54	88.94	6,361.75	-736.40	33.83	20.20	12.00	12.00	0.00
Top C Target									

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-4956C2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4706.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4706.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-4956C2	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)
6,593.51	72.76	88.94	6,367.58	-736.08	51.39	37.77	12.00	12.00	0.00
6,600.00	73.54	88.94	6,369.46	-735.96	57.60	43.98	12.00	12.00	0.00
6,625.00	76.54	88.94	6,375.91	-735.52	81.75	68.13	12.00	12.00	0.00
6,650.00	79.54	88.94	6,381.10	-735.07	106.20	92.58	12.00	12.00	0.00
6,675.00	82.54	88.94	6,384.99	-734.61	130.89	117.27	12.00	12.00	0.00
6,700.00	85.54	88.94	6,387.59	-734.15	155.74	142.14	12.00	12.00	0.00
6,725.00	88.54	88.94	6,388.88	-733.69	180.70	167.10	12.00	12.00	0.00
Start 9803.80 hold at 6742.55 MD - 7" Csg.									
6,742.55	90.64	88.94	6,389.00	-733.37	198.25	184.65	12.00	12.00	0.00
6,800.00	90.64	88.94	6,388.36	-732.31	255.69	242.09	0.00	0.00	0.00
6,900.00	90.64	88.94	6,387.24	-730.46	355.66	342.09	0.00	0.00	0.00
7,000.00	90.64	88.94	6,386.12	-728.62	455.64	442.08	0.00	0.00	0.00
7,100.00	90.64	88.94	6,384.99	-726.77	555.62	542.08	0.00	0.00	0.00
7,200.00	90.64	88.94	6,383.87	-724.93	655.59	642.07	0.00	0.00	0.00
7,300.00	90.64	88.94	6,382.75	-723.08	755.57	742.06	0.00	0.00	0.00
7,400.00	90.64	88.94	6,381.63	-721.23	855.55	842.06	0.00	0.00	0.00
7,500.00	90.64	88.94	6,380.51	-719.39	955.52	942.05	0.00	0.00	0.00
7,600.00	90.64	88.94	6,379.38	-717.54	1,055.50	1,042.04	0.00	0.00	0.00
7,700.00	90.64	88.94	6,378.26	-715.70	1,155.48	1,142.04	0.00	0.00	0.00
7,800.00	90.64	88.94	6,377.14	-713.85	1,255.45	1,242.03	0.00	0.00	0.00
7,900.00	90.64	88.94	6,376.02	-712.01	1,355.43	1,342.03	0.00	0.00	0.00
8,000.00	90.64	88.94	6,374.90	-710.16	1,455.41	1,442.02	0.00	0.00	0.00
8,100.00	90.64	88.94	6,373.77	-708.31	1,555.38	1,542.01	0.00	0.00	0.00
8,200.00	90.64	88.94	6,372.65	-706.47	1,655.36	1,642.01	0.00	0.00	0.00
8,300.00	90.64	88.94	6,371.53	-704.62	1,755.34	1,742.00	0.00	0.00	0.00
8,400.00	90.64	88.94	6,370.41	-702.78	1,855.31	1,841.99	0.00	0.00	0.00
8,500.00	90.64	88.94	6,369.29	-700.93	1,955.29	1,941.99	0.00	0.00	0.00
8,600.00	90.64	88.94	6,368.16	-699.09	2,055.27	2,041.98	0.00	0.00	0.00
8,700.00	90.64	88.94	6,367.04	-697.24	2,155.24	2,141.98	0.00	0.00	0.00
8,800.00	90.64	88.94	6,365.92	-695.40	2,255.22	2,241.97	0.00	0.00	0.00
8,900.00	90.64	88.94	6,364.80	-693.55	2,355.20	2,341.96	0.00	0.00	0.00
9,000.00	90.64	88.94	6,363.68	-691.70	2,455.17	2,441.96	0.00	0.00	0.00
9,100.00	90.64	88.94	6,362.55	-689.86	2,555.15	2,541.95	0.00	0.00	0.00
9,200.00	90.64	88.94	6,361.43	-688.01	2,655.13	2,641.94	0.00	0.00	0.00
9,300.00	90.64	88.94	6,360.31	-686.17	2,755.10	2,741.94	0.00	0.00	0.00
9,400.00	90.64	88.94	6,359.19	-684.32	2,855.08	2,841.93	0.00	0.00	0.00
9,500.00	90.64	88.94	6,358.06	-682.48	2,955.06	2,941.92	0.00	0.00	0.00
9,600.00	90.64	88.94	6,356.94	-680.63	3,055.03	3,041.92	0.00	0.00	0.00
9,700.00	90.64	88.94	6,355.82	-678.78	3,155.01	3,141.91	0.00	0.00	0.00
9,800.00	90.64	88.94	6,354.70	-676.94	3,254.99	3,241.91	0.00	0.00	0.00
9,900.00	90.64	88.94	6,353.58	-675.09	3,354.96	3,341.90	0.00	0.00	0.00
10,000.00	90.64	88.94	6,352.45	-673.25	3,454.94	3,441.89	0.00	0.00	0.00
10,100.00	90.64	88.94	6,351.33	-671.40	3,554.92	3,541.89	0.00	0.00	0.00
10,200.00	90.64	88.94	6,350.21	-669.56	3,654.89	3,641.88	0.00	0.00	0.00
10,300.00	90.64	88.94	6,349.09	-667.71	3,754.87	3,741.87	0.00	0.00	0.00
10,400.00	90.64	88.94	6,347.97	-665.87	3,854.85	3,841.87	0.00	0.00	0.00
10,500.00	90.64	88.94	6,346.84	-664.02	3,954.82	3,941.86	0.00	0.00	0.00
10,600.00	90.64	88.94	6,345.72	-662.17	4,054.80	4,041.86	0.00	0.00	0.00
10,700.00	90.64	88.94	6,344.60	-660.33	4,154.78	4,141.85	0.00	0.00	0.00
10,800.00	90.64	88.94	6,343.48	-658.48	4,254.75	4,241.84	0.00	0.00	0.00
10,900.00	90.64	88.94	6,342.36	-656.64	4,354.73	4,341.84	0.00	0.00	0.00
11,000.00	90.64	88.94	6,341.23	-654.79	4,454.71	4,441.83	0.00	0.00	0.00
11,100.00	90.64	88.94	6,340.11	-652.95	4,554.68	4,541.82	0.00	0.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-4956C2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4706.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4706.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-4956C2	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)
11,200.00	90.64	88.94	6,338.99	-651.10	4,654.66	4,641.82	0.00	0.00	0.00
11,300.00	90.64	88.94	6,337.87	-649.25	4,754.64	4,741.81	0.00	0.00	0.00
11,400.00	90.64	88.94	6,336.75	-647.41	4,854.61	4,841.81	0.00	0.00	0.00
11,500.00	90.64	88.94	6,335.62	-645.56	4,954.59	4,941.80	0.00	0.00	0.00
11,600.00	90.64	88.94	6,334.50	-643.72	5,054.57	5,041.79	0.00	0.00	0.00
11,700.00	90.64	88.94	6,333.38	-641.87	5,154.54	5,141.79	0.00	0.00	0.00
11,800.00	90.64	88.94	6,332.26	-640.03	5,254.52	5,241.78	0.00	0.00	0.00
11,900.00	90.64	88.94	6,331.14	-638.18	5,354.50	5,341.77	0.00	0.00	0.00
12,000.00	90.64	88.94	6,330.01	-636.33	5,454.47	5,441.77	0.00	0.00	0.00
12,100.00	90.64	88.94	6,328.89	-634.49	5,554.45	5,541.76	0.00	0.00	0.00
12,200.00	90.64	88.94	6,327.77	-632.64	5,654.43	5,641.75	0.00	0.00	0.00
12,300.00	90.64	88.94	6,326.65	-630.80	5,754.40	5,741.75	0.00	0.00	0.00
12,400.00	90.64	88.94	6,325.53	-628.95	5,854.38	5,841.74	0.00	0.00	0.00
12,500.00	90.64	88.94	6,324.40	-627.11	5,954.36	5,941.74	0.00	0.00	0.00
12,600.00	90.64	88.94	6,323.28	-625.26	6,054.33	6,041.73	0.00	0.00	0.00
12,700.00	90.64	88.94	6,322.16	-623.42	6,154.31	6,141.72	0.00	0.00	0.00
12,800.00	90.64	88.94	6,321.04	-621.57	6,254.29	6,241.72	0.00	0.00	0.00
12,900.00	90.64	88.94	6,319.92	-619.72	6,354.26	6,341.71	0.00	0.00	0.00
13,000.00	90.64	88.94	6,318.79	-617.88	6,454.24	6,441.70	0.00	0.00	0.00
13,100.00	90.64	88.94	6,317.67	-616.03	6,554.22	6,541.70	0.00	0.00	0.00
13,200.00	90.64	88.94	6,316.55	-614.19	6,654.19	6,641.69	0.00	0.00	0.00
13,300.00	90.64	88.94	6,315.43	-612.34	6,754.17	6,741.69	0.00	0.00	0.00
13,400.00	90.64	88.94	6,314.30	-610.50	6,854.15	6,841.68	0.00	0.00	0.00
13,500.00	90.64	88.94	6,313.18	-608.65	6,954.12	6,941.67	0.00	0.00	0.00
13,600.00	90.64	88.94	6,312.06	-606.80	7,054.10	7,041.67	0.00	0.00	0.00
13,700.00	90.64	88.94	6,310.94	-604.96	7,154.08	7,141.66	0.00	0.00	0.00
13,800.00	90.64	88.94	6,309.82	-603.11	7,254.05	7,241.65	0.00	0.00	0.00
13,900.00	90.64	88.94	6,308.69	-601.27	7,354.03	7,341.65	0.00	0.00	0.00
14,000.00	90.64	88.94	6,307.57	-599.42	7,454.01	7,441.64	0.00	0.00	0.00
14,100.00	90.64	88.94	6,306.45	-597.58	7,553.98	7,541.64	0.00	0.00	0.00
14,200.00	90.64	88.94	6,305.33	-595.73	7,653.96	7,641.63	0.00	0.00	0.00
14,300.00	90.64	88.94	6,304.21	-593.89	7,753.94	7,741.62	0.00	0.00	0.00
14,400.00	90.64	88.94	6,303.08	-592.04	7,853.91	7,841.62	0.00	0.00	0.00
14,500.00	90.64	88.94	6,301.96	-590.19	7,953.89	7,941.61	0.00	0.00	0.00
14,600.00	90.64	88.94	6,300.84	-588.35	8,053.87	8,041.60	0.00	0.00	0.00
14,700.00	90.64	88.94	6,299.72	-586.50	8,153.84	8,141.60	0.00	0.00	0.00
14,800.00	90.64	88.94	6,298.60	-584.66	8,253.82	8,241.59	0.00	0.00	0.00
14,900.00	90.64	88.94	6,297.47	-582.81	8,353.80	8,341.58	0.00	0.00	0.00
15,000.00	90.64	88.94	6,296.35	-580.97	8,453.77	8,441.58	0.00	0.00	0.00
15,100.00	90.64	88.94	6,295.23	-579.12	8,553.75	8,541.57	0.00	0.00	0.00
15,200.00	90.64	88.94	6,294.11	-577.27	8,653.73	8,641.57	0.00	0.00	0.00
15,300.00	90.64	88.94	6,292.99	-575.43	8,753.70	8,741.56	0.00	0.00	0.00
15,400.00	90.64	88.94	6,291.86	-573.58	8,853.68	8,841.55	0.00	0.00	0.00
15,500.00	90.64	88.94	6,290.74	-571.74	8,953.66	8,941.55	0.00	0.00	0.00
15,600.00	90.64	88.94	6,289.62	-569.89	9,053.63	9,041.54	0.00	0.00	0.00
15,700.00	90.64	88.94	6,288.50	-568.05	9,153.61	9,141.53	0.00	0.00	0.00
15,800.00	90.64	88.94	6,287.38	-566.20	9,253.59	9,241.53	0.00	0.00	0.00
15,900.00	90.64	88.94	6,286.25	-564.35	9,353.56	9,341.52	0.00	0.00	0.00
16,000.00	90.64	88.94	6,285.13	-562.51	9,453.54	9,441.52	0.00	0.00	0.00
16,100.00	90.64	88.94	6,284.01	-560.66	9,553.52	9,541.51	0.00	0.00	0.00
16,200.00	90.64	88.94	6,282.89	-558.82	9,653.49	9,641.50	0.00	0.00	0.00
16,300.00	90.64	88.94	6,281.77	-556.97	9,753.47	9,741.50	0.00	0.00	0.00
16,400.00	90.64	88.94	6,280.64	-555.13	9,853.45	9,841.49	0.00	0.00	0.00
16,500.00	90.64	88.94	6,279.52	-553.28	9,953.42	9,941.48	0.00	0.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-4956C2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4706.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4706.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-4956C2	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)
TD at 16546.35									
16,546.35	90.64	88.94	6,279.00	-552.43	9,999.76	9,987.83	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Anschutz State 5-62-22-	0.00	0.00	6,279.00	-552.43	9,999.76	1,384,387.477	3,339,106.178	40° 22' 55.762 N	104° 16' 57.760 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
6,742.55	6,389.00	7" Csg.	7	8-3/4	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,204.29	4,144.00	sussex		-0.64	88.94
5,028.85	4,952.00	Shannon		-0.64	88.94
6,164.65	6,082.00	Sharon Springs		-0.64	88.94
6,287.31	6,190.00	Niobrara		-0.64	88.94
6,342.42	6,233.00	A Chalk		-0.64	88.94
6,427.74	6,291.00	B Chalk		-0.64	88.94
6,593.51	6,368.00	Top C Target		-0.64	88.94

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
900.00	900.00	0.00	0.00	Start Build 2.00
1,470.45	1,466.69	-52.86	-20.26	Start 3446.26 hold at 1470.45 MD
4,916.71	4,844.85	-689.42	-264.23	Start Drop -2.00
5,487.16	5,411.54	-742.28	-284.49	Start 500.03 hold at 5487.16 MD
5,987.19	5,911.57	-742.28	-284.49	Start Build 12.00
6,742.55	6,389.00	-733.37	198.25	Start 9803.80 hold at 6742.55 MD
16,546.35	6,279.00	-552.43	9,999.76	TD at 16546.35