



Bill Barrett Corporation

Bill Barrett Corp.

Weld Co., CO

Sec.22-T5N-R62W

Anschutz State 5-62-22-0164B2B

Wellbore #1

Plan: Design #1

Standard Planning Report

27 April, 2015

Archer

Bill Barrett Corp.

Plan: Design #1 (Anschutz State 5-62-22-0164B2B/Wellbore #1)

Created By: Ricky Osburn Date: 9:10, April 27 2015

Bill Barrett Corp.
Project: Weld Co., CO
Site: Sec.22-T5N-R62W
Well: Anschutz State 5-62-22-0164B2B
Wellbore: Wellbore #1
Design: Design #1
Lat: 40° 23' 27.398 N
Long: 104° 19' 4.850 W
Pad GL: 4730.00
KB: Well @ 4746.00usft

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	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
1381.07	9.62	328.44	1378.81	34.34	-21.09	2.00	328.44	-33.98	Start 3592.45 hold at 1381.07 MD
4973.52	9.62	328.44	4920.73	545.94	-335.37	0.00	0.00	-540.25	Start Drop -2.00
5454.59	0.00	0.00	5399.54	580.28	-356.46	2.00	180.00	-574.23	Start 500.00 hold at 5454.59 MD
5954.59	0.00	0.00	5899.54	580.28	-356.46	0.00	0.00	-574.23	Start Build 12.00
6704.59	90.00	180.96	6377.00	102.88	-364.44	12.00	180.96	-96.76	Start 4312.91 hold at 6704.59 MD
11017.50	90.00	180.96	6377.00	-4209.43	-436.56	0.00	0.00	4216.15	TD at 11017.50

WELL DETAILS: Anschutz State 5-62-22-0164B2B

+N/-S	+E/-W	Northing	Ground Level:	4730.00	Latitude	Longitude	Slot
0.00	0.00	1387455.574	Easting	3329229.567	40° 23' 27.398 N	104° 19' 4.850 W	

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Anschutz State 5-62-22-0164B2B tgt	6377.00	-4209.43	-436.56	40° 22' 45.800 N	104° 19' 10.492 W	

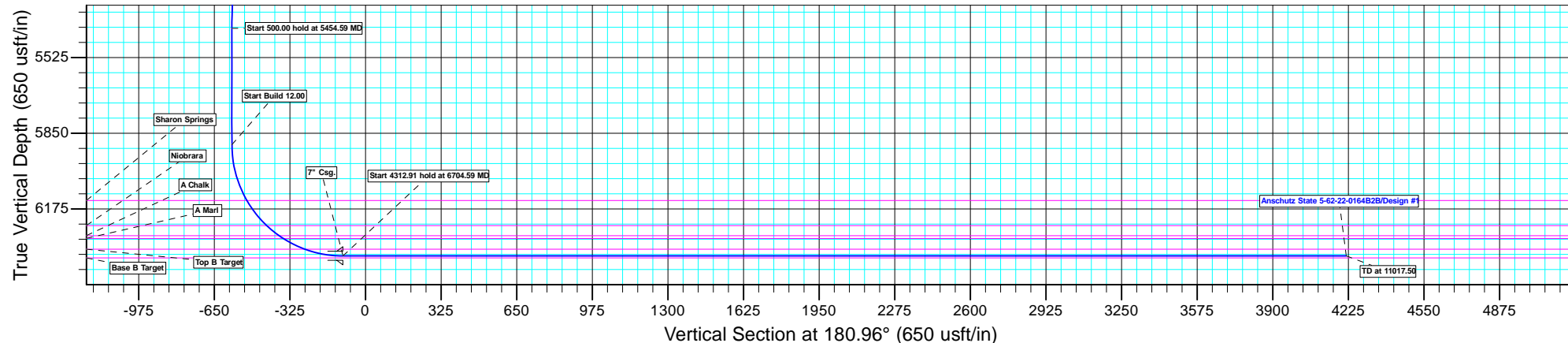
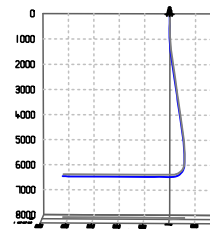
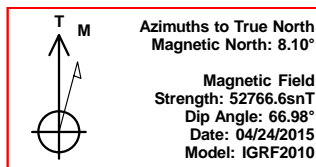
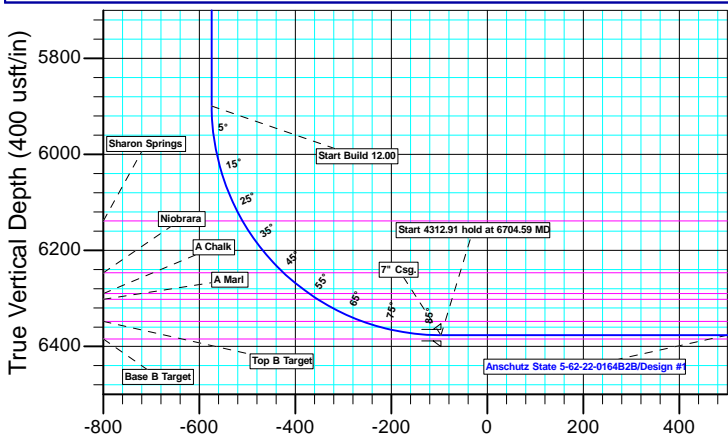
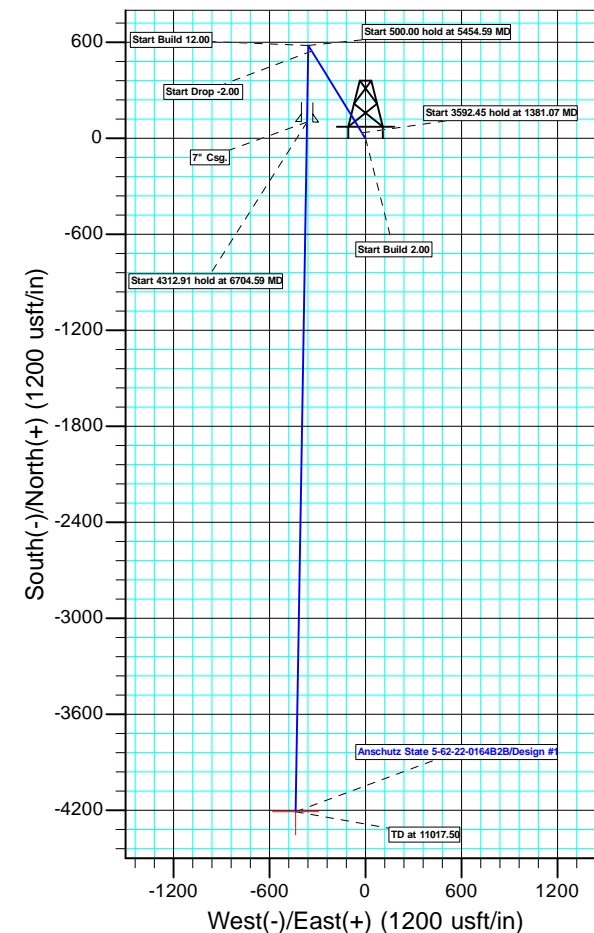
PROJECT DETAILS: Weld Co., CO

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
6377.00	6704.59	7" Csg.

Archer



Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-0164B2B
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4746.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4746.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-0164B2B	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 5-62-22-0164B2B					
Well Position	+N/-S	60.47 usft	Northing:	1,387,455.574 usft	Latitude:	40° 23' 27.398 N
	+E/-W	0.84 usft	Easting:	3,329,229.567 usft	Longitude:	104° 19' 4.850 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,730.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2015/04/24	8.10	66.98	52,767

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	180.96

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	
1,381.07	9.62	328.44	1,378.81	34.34	-21.09	2.00	2.00	0.00	328.44	
4,973.52	9.62	328.44	4,920.73	545.94	-335.37	0.00	0.00	0.00	0.00	
5,454.59	0.00	0.00	5,399.54	580.28	-356.46	2.00	-2.00	0.00	180.00	
5,954.59	0.00	0.00	5,899.54	580.28	-356.46	0.00	0.00	0.00	0.00	
6,704.59	90.00	180.96	6,377.00	102.88	-364.44	12.00	12.00	0.00	180.96	Anschutz State 5-62-2
11,017.50	90.00	180.96	6,377.00	-4,209.43	-436.56	0.00	0.00	0.00	0.00	Anschutz State 5-62-2

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-0164B2B
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4746.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4746.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-0164B2B	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	328.44	999.98	1.49	-0.91	-1.47	2.00	2.00	0.00
1,100.00	4.00	328.44	1,099.84	5.95	-3.65	-5.88	2.00	2.00	0.00
1,200.00	6.00	328.44	1,199.45	13.37	-8.21	-13.23	2.00	2.00	0.00
1,300.00	8.00	328.44	1,298.70	23.76	-14.59	-23.51	2.00	2.00	0.00
Start 3592.45 hold at 1381.07 MD									
1,381.07	9.62	328.44	1,378.81	34.34	-21.09	-33.98	2.00	2.00	0.00
1,400.00	9.62	328.44	1,397.48	37.03	-22.75	-36.65	0.00	0.00	0.00
1,500.00	9.62	328.44	1,496.07	51.27	-31.50	-50.74	0.00	0.00	0.00
1,600.00	9.62	328.44	1,594.66	65.51	-40.24	-64.83	0.00	0.00	0.00
1,700.00	9.62	328.44	1,693.26	79.76	-48.99	-78.92	0.00	0.00	0.00
1,800.00	9.62	328.44	1,791.85	94.00	-57.74	-93.02	0.00	0.00	0.00
1,900.00	9.62	328.44	1,890.44	108.24	-66.49	-107.11	0.00	0.00	0.00
2,000.00	9.62	328.44	1,989.04	122.48	-75.24	-121.20	0.00	0.00	0.00
2,100.00	9.62	328.44	2,087.63	136.72	-83.99	-135.29	0.00	0.00	0.00
2,200.00	9.62	328.44	2,186.22	150.96	-92.73	-149.39	0.00	0.00	0.00
2,300.00	9.62	328.44	2,284.82	165.20	-101.48	-163.48	0.00	0.00	0.00
2,400.00	9.62	328.44	2,383.41	179.44	-110.23	-177.57	0.00	0.00	0.00
2,500.00	9.62	328.44	2,482.00	193.69	-118.98	-191.66	0.00	0.00	0.00
2,600.00	9.62	328.44	2,580.60	207.93	-127.73	-205.76	0.00	0.00	0.00
2,700.00	9.62	328.44	2,679.19	222.17	-136.48	-219.85	0.00	0.00	0.00
2,800.00	9.62	328.44	2,777.78	236.41	-145.22	-233.94	0.00	0.00	0.00
2,900.00	9.62	328.44	2,876.38	250.65	-153.97	-248.04	0.00	0.00	0.00
3,000.00	9.62	328.44	2,974.97	264.89	-162.72	-262.13	0.00	0.00	0.00
3,100.00	9.62	328.44	3,073.56	279.13	-171.47	-276.22	0.00	0.00	0.00
3,200.00	9.62	328.44	3,172.16	293.37	-180.22	-290.31	0.00	0.00	0.00
3,300.00	9.62	328.44	3,270.75	307.61	-188.96	-304.41	0.00	0.00	0.00
3,400.00	9.62	328.44	3,369.34	321.86	-197.71	-318.50	0.00	0.00	0.00
3,500.00	9.62	328.44	3,467.94	336.10	-206.46	-332.59	0.00	0.00	0.00
3,600.00	9.62	328.44	3,566.53	350.34	-215.21	-346.68	0.00	0.00	0.00
3,700.00	9.62	328.44	3,665.12	364.58	-223.96	-360.78	0.00	0.00	0.00
3,800.00	9.62	328.44	3,763.72	378.82	-232.71	-374.87	0.00	0.00	0.00
3,900.00	9.62	328.44	3,862.31	393.06	-241.45	-388.96	0.00	0.00	0.00
4,000.00	9.62	328.44	3,960.90	407.30	-250.20	-403.05	0.00	0.00	0.00
4,100.00	9.62	328.44	4,059.50	421.54	-258.95	-417.15	0.00	0.00	0.00
4,200.00	9.62	328.44	4,158.09	435.79	-267.70	-431.24	0.00	0.00	0.00
Sussex									
4,243.52	9.62	328.44	4,201.00	441.98	-271.51	-437.37	0.00	0.00	0.00
4,300.00	9.62	328.44	4,256.68	450.03	-276.45	-445.33	0.00	0.00	0.00
4,400.00	9.62	328.44	4,355.28	464.27	-285.20	-459.42	0.00	0.00	0.00
4,500.00	9.62	328.44	4,453.87	478.51	-293.94	-473.52	0.00	0.00	0.00
4,600.00	9.62	328.44	4,552.46	492.75	-302.69	-487.61	0.00	0.00	0.00
4,700.00	9.62	328.44	4,651.06	506.99	-311.44	-501.70	0.00	0.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-0164B2B
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4746.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4746.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-0164B2B	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	9.62	328.44	4,749.65	521.23	-320.19	-515.80	0.00	0.00	0.00
4,900.00	9.62	328.44	4,848.24	535.47	-328.94	-529.89	0.00	0.00	0.00
Start Drop -2.00									
4,973.52	9.62	328.44	4,920.73	545.94	-335.37	-540.25	0.00	0.00	0.00
5,000.00	9.09	328.44	4,946.86	549.61	-337.62	-543.88	2.00	-2.00	0.00
Shannon									
5,062.83	7.84	328.44	5,009.00	557.49	-342.46	-551.68	2.00	-2.00	0.00
5,100.00	7.09	328.44	5,045.86	561.61	-344.99	-555.75	2.00	-2.00	0.00
5,200.00	5.09	328.44	5,145.29	570.65	-350.54	-564.69	2.00	-2.00	0.00
5,300.00	3.09	328.44	5,245.03	576.73	-354.28	-570.71	2.00	-2.00	0.00
5,400.00	1.09	328.44	5,344.96	579.84	-356.19	-573.79	2.00	-2.00	0.00
Start 500.00 hold at 5454.59 MD									
5,454.59	0.00	0.00	5,399.54	580.28	-356.46	-574.23	2.00	-2.00	57.82
5,500.00	0.00	0.00	5,444.95	580.28	-356.46	-574.23	0.00	0.00	0.00
5,600.00	0.00	0.00	5,544.95	580.28	-356.46	-574.23	0.00	0.00	0.00
5,700.00	0.00	0.00	5,644.95	580.28	-356.46	-574.23	0.00	0.00	0.00
5,800.00	0.00	0.00	5,744.95	580.28	-356.46	-574.23	0.00	0.00	0.00
5,900.00	0.00	0.00	5,844.95	580.28	-356.46	-574.23	0.00	0.00	0.00
Start Build 12.00									
5,954.59	0.00	0.00	5,899.54	580.28	-356.46	-574.23	0.00	0.00	0.00
5,975.00	2.45	180.96	5,919.95	579.84	-356.47	-573.79	12.00	12.00	0.00
6,000.00	5.45	180.96	5,944.88	578.12	-356.50	-572.07	12.00	12.00	0.00
6,025.00	8.45	180.96	5,969.70	575.10	-356.55	-569.04	12.00	12.00	0.00
6,050.00	11.45	180.96	5,994.32	570.78	-356.62	-564.72	12.00	12.00	0.00
6,075.00	14.45	180.96	6,018.68	565.18	-356.71	-559.12	12.00	12.00	0.00
6,100.00	17.45	180.96	6,042.72	558.31	-356.83	-552.25	12.00	12.00	0.00
6,125.00	20.45	180.96	6,066.36	550.19	-356.96	-544.14	12.00	12.00	0.00
6,150.00	23.45	180.96	6,089.54	540.85	-357.12	-534.79	12.00	12.00	0.00
6,175.00	26.45	180.96	6,112.21	530.31	-357.30	-524.25	12.00	12.00	0.00
6,200.00	29.45	180.96	6,134.29	518.59	-357.49	-512.53	12.00	12.00	0.00
Sharon Springs									
6,205.43	30.10	180.96	6,139.00	515.90	-357.54	-509.84	12.00	12.00	0.00
6,225.00	32.45	180.96	6,155.73	505.74	-357.71	-499.68	12.00	12.00	0.00
6,250.00	35.45	180.96	6,176.46	491.78	-357.94	-485.72	12.00	12.00	0.00
6,275.00	38.45	180.96	6,196.44	476.76	-358.19	-470.69	12.00	12.00	0.00
6,300.00	41.45	180.96	6,215.60	460.71	-358.46	-454.64	12.00	12.00	0.00
6,325.00	44.45	180.96	6,233.90	443.68	-358.74	-437.61	12.00	12.00	0.00
Niobrara									
6,343.72	46.70	180.96	6,247.00	430.32	-358.97	-424.24	12.00	12.00	0.00
6,350.00	47.45	180.96	6,251.28	425.72	-359.04	-419.64	12.00	12.00	0.00
6,375.00	50.45	180.96	6,267.70	406.87	-359.36	-400.79	12.00	12.00	0.00
6,400.00	53.45	180.96	6,283.10	387.19	-359.69	-381.11	12.00	12.00	0.00
A Chalk									
6,411.78	54.86	180.96	6,290.00	377.64	-359.85	-371.56	12.00	12.00	0.00
6,425.00	56.45	180.96	6,297.46	366.73	-360.03	-360.64	12.00	12.00	0.00
A Marl									
6,433.33	57.45	180.96	6,302.00	359.75	-360.15	-353.66	12.00	12.00	0.00
6,450.00	59.45	180.96	6,310.72	345.54	-360.39	-339.46	12.00	12.00	0.00
6,475.00	62.45	180.96	6,322.86	323.69	-360.75	-317.60	12.00	12.00	0.00
6,500.00	65.45	180.96	6,333.84	301.24	-361.13	-295.15	12.00	12.00	0.00
6,525.00	68.45	180.96	6,343.63	278.24	-361.51	-272.14	12.00	12.00	0.00
Top B Target									
6,537.31	69.93	180.96	6,348.00	266.74	-361.70	-260.64	12.00	12.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-0164B2B
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4746.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4746.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-0164B2B	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)	
6,550.00	71.45	180.96	6,352.20	254.76	-361.90	-248.66	12.00	12.00	0.00	
6,575.00	74.45	180.96	6,359.53	230.87	-362.30	-224.76	12.00	12.00	0.00	
6,600.00	77.45	180.96	6,365.60	206.62	-362.71	-200.51	12.00	12.00	0.00	
6,625.00	80.45	180.96	6,370.39	182.09	-363.12	-175.98	12.00	12.00	0.00	
6,650.00	83.45	180.96	6,373.89	157.34	-363.53	-151.23	12.00	12.00	0.00	
6,675.00	86.45	180.96	6,376.09	132.45	-363.95	-126.33	12.00	12.00	0.00	
6,700.00	89.45	180.96	6,376.98	107.47	-364.37	-101.35	12.00	12.00	0.00	
Start 4312.91 hold at 6704.59 MD - 7" Csg.										
6,704.59	90.00	180.96	6,377.00	102.88	-364.44	-96.76	11.99	11.99	0.00	
6,800.00	90.00	180.96	6,377.00	7.48	-366.04	-1.35	0.00	0.00	0.00	
6,900.00	90.00	180.96	6,377.00	-92.50	-367.71	98.65	0.00	0.00	0.00	
7,000.00	90.00	180.96	6,377.00	-192.49	-369.38	198.65	0.00	0.00	0.00	
7,100.00	90.00	180.96	6,377.00	-292.48	-371.06	298.65	0.00	0.00	0.00	
7,200.00	90.00	180.96	6,377.00	-392.46	-372.73	398.65	0.00	0.00	0.00	
7,300.00	90.00	180.96	6,377.00	-492.45	-374.40	498.65	0.00	0.00	0.00	
7,400.00	90.00	180.96	6,377.00	-592.43	-376.07	598.65	0.00	0.00	0.00	
7,500.00	90.00	180.96	6,377.00	-692.42	-377.74	698.65	0.00	0.00	0.00	
7,600.00	90.00	180.96	6,377.00	-792.41	-379.42	798.65	0.00	0.00	0.00	
7,700.00	90.00	180.96	6,377.00	-892.39	-381.09	898.65	0.00	0.00	0.00	
7,800.00	90.00	180.96	6,377.00	-992.38	-382.76	998.65	0.00	0.00	0.00	
7,900.00	90.00	180.96	6,377.00	-1,092.36	-384.43	1,098.65	0.00	0.00	0.00	
8,000.00	90.00	180.96	6,377.00	-1,192.35	-386.10	1,198.65	0.00	0.00	0.00	
8,100.00	90.00	180.96	6,377.00	-1,292.34	-387.78	1,298.65	0.00	0.00	0.00	
8,200.00	90.00	180.96	6,377.00	-1,392.32	-389.45	1,398.65	0.00	0.00	0.00	
8,300.00	90.00	180.96	6,377.00	-1,492.31	-391.12	1,498.65	0.00	0.00	0.00	
8,400.00	90.00	180.96	6,377.00	-1,592.29	-392.79	1,598.65	0.00	0.00	0.00	
8,500.00	90.00	180.96	6,377.00	-1,692.28	-394.46	1,698.65	0.00	0.00	0.00	
8,600.00	90.00	180.96	6,377.00	-1,792.27	-396.14	1,798.65	0.00	0.00	0.00	
8,700.00	90.00	180.96	6,377.00	-1,892.25	-397.81	1,898.65	0.00	0.00	0.00	
8,800.00	90.00	180.96	6,377.00	-1,992.24	-399.48	1,998.65	0.00	0.00	0.00	
8,900.00	90.00	180.96	6,377.00	-2,092.22	-401.15	2,098.65	0.00	0.00	0.00	
9,000.00	90.00	180.96	6,377.00	-2,192.21	-402.82	2,198.65	0.00	0.00	0.00	
9,100.00	90.00	180.96	6,377.00	-2,292.20	-404.50	2,298.65	0.00	0.00	0.00	
9,200.00	90.00	180.96	6,377.00	-2,392.18	-406.17	2,398.65	0.00	0.00	0.00	
9,300.00	90.00	180.96	6,377.00	-2,492.17	-407.84	2,498.65	0.00	0.00	0.00	
9,400.00	90.00	180.96	6,377.00	-2,592.15	-409.51	2,598.65	0.00	0.00	0.00	
9,500.00	90.00	180.96	6,377.00	-2,692.14	-411.18	2,698.65	0.00	0.00	0.00	
9,600.00	90.00	180.96	6,377.00	-2,792.13	-412.86	2,798.65	0.00	0.00	0.00	
9,700.00	90.00	180.96	6,377.00	-2,892.11	-414.53	2,898.65	0.00	0.00	0.00	
9,800.00	90.00	180.96	6,377.00	-2,992.10	-416.20	2,998.65	0.00	0.00	0.00	
9,900.00	90.00	180.96	6,377.00	-3,092.08	-417.87	3,098.65	0.00	0.00	0.00	
10,000.00	90.00	180.96	6,377.00	-3,192.07	-419.55	3,198.65	0.00	0.00	0.00	
10,100.00	90.00	180.96	6,377.00	-3,292.06	-421.22	3,298.65	0.00	0.00	0.00	
10,200.00	90.00	180.96	6,377.00	-3,392.04	-422.89	3,398.65	0.00	0.00	0.00	
10,300.00	90.00	180.96	6,377.00	-3,492.03	-424.56	3,498.65	0.00	0.00	0.00	
10,400.00	90.00	180.96	6,377.00	-3,592.01	-426.23	3,598.65	0.00	0.00	0.00	
10,500.00	90.00	180.96	6,377.00	-3,692.00	-427.91	3,698.65	0.00	0.00	0.00	
10,600.00	90.00	180.96	6,377.00	-3,791.99	-429.58	3,798.65	0.00	0.00	0.00	
10,700.00	90.00	180.96	6,377.00	-3,891.97	-431.25	3,898.65	0.00	0.00	0.00	
10,800.00	90.00	180.96	6,377.00	-3,991.96	-432.92	3,998.65	0.00	0.00	0.00	
10,900.00	90.00	180.96	6,377.00	-4,091.94	-434.59	4,098.65	0.00	0.00	0.00	
11,000.00	90.00	180.96	6,377.00	-4,191.93	-436.27	4,198.65	0.00	0.00	0.00	
TD at 11017.50										

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Anschutz State 5-62-22-0164B2B
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4746.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4746.00usft
Site:	Sec.22-T5N-R62W	North Reference:	True
Well:	Anschutz State 5-62-22-0164B2B	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)
11,017.50	90.00	180.96	6,377.00	-4,209.43	-436.56	4,216.15	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	6,377.00	-4,209.43	-436.56	1,383,240.700	3,328,849.156	40° 22' 45.800 N	104° 19' 10.492 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
6,704.59	6,377.00	7" Csg.	7	8-3/4	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,243.52	4,201.00	Sussex		0.00	180.96
5,062.83	5,009.00	Shannon		0.00	180.96
6,205.43	6,139.00	Sharon Springs		0.00	180.96
6,343.72	6,247.00	Niobrara		0.00	180.96
6,411.78	6,290.00	A Chalk		0.00	180.96
6,433.33	6,302.00	A Marl		0.00	180.96
6,537.31	6,348.00	Top B Target		0.00	180.96

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
1,381.07	1,378.81	34.34	-21.09	Start 3592.45 hold at 1381.07 MD
4,973.52	4,920.73	545.94	-335.37	Start Drop -2.00
5,454.59	5,399.54	580.28	-356.46	Start 500.00 hold at 5454.59 MD
5,954.59	5,899.54	580.28	-356.46	Start Build 12.00
6,704.59	6,377.00	102.88	-364.44	Start 4312.91 hold at 6704.59 MD
11,017.50	6,377.00	-4,209.43	-436.56	TD at 11017.50