





Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz State 5-62-22 NWSW Pad

Anschutz State 05-62-22-3225C2

OH

Design: OH

Standard Survey Report

16 August, 2015



Scientific Drilling

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Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Anschutz State 05-62-22-3225C2
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4690' & KB 16' @ 4706.00ft (Cade 24)
Site:	Anschutz State 5-62-22 NWSW Pad	MD Reference:	GL 4690' & KB 16' @ 4706.00ft (Cade 24)
Well:	Anschutz State 05-62-22-3225C2	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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	Anschutz State 5-62-22 NWSW Pad				
Site Position:		Northing:	1,384,806.64 usft	Latitude:	40° 23' 1.241 N
From:	Lat/Long	Easting:	3,329,099.95 usft	Longitude:	104° 19' 6.982 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.76 °

Well	Anschutz State 05-62-22-3225C2, 2120' FSL 250' FWL Sec 22 T5N R62W					
Well Position	+N/-S	0.00 ft	Northing:	1,384,866.33 usft	Latitude:	40° 23' 1.831 N
	+E/-W	0.00 ft	Easting:	3,329,099.99 usft	Longitude:	104° 19' 6.971 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,690.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	8/8/2015	8.19	66.95	52,600

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	88.97	

Survey Program	Date	8/16/2015			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	785.00	Survey #1 - Surface Gyro (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s	
883.00	6,665.00	Survey #2 - Vertical - Curve (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
6,789.00	16,431.00	Survey #3 - Lateral (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.45	109.58	100.00	-0.13	0.37	0.37	0.45	0.45	0.00	
First Gyro Survey										
200.00	0.07	232.65	200.00	-0.30	0.69	0.69	0.49	-0.38	123.07	
300.00	0.42	299.46	300.00	-0.16	0.32	0.32	0.40	0.35	66.81	
400.00	0.45	301.58	399.99	0.23	-0.33	-0.33	0.03	0.03	2.12	
500.00	0.55	310.06	499.99	0.74	-1.03	-1.02	0.12	0.10	8.48	
600.00	0.35	339.38	599.99	1.34	-1.51	-1.48	0.30	-0.20	29.32	
700.00	0.21	275.64	699.99	1.64	-1.80	-1.77	0.32	-0.14	-63.74	

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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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)	
785.00	0.19	304.44	784.99	1.74	-2.07	-2.04	0.12	-0.02	33.88	
Last Gyro Survey										
883.00	0.57	90.96	882.98	1.82	-1.71	-1.68	0.75	0.39	149.51	
First SDI MWD Survey										
975.00	2.92	357.71	974.94	4.16	-1.35	-1.28	3.27	2.55	-101.36	
1,066.00	5.21	331.93	1,065.72	10.12	-3.39	-3.21	3.16	2.52	-28.33	
1,158.00	7.69	331.31	1,157.13	19.20	-8.31	-7.96	2.70	2.70	-0.67	
1,249.00	9.75	333.35	1,247.07	31.43	-14.69	-14.12	2.29	2.26	2.24	
1,341.00	9.77	332.20	1,337.74	45.30	-21.82	-21.01	0.21	0.02	-1.25	
1,433.00	10.57	328.60	1,428.29	59.41	-29.86	-28.79	1.11	0.87	-3.91	
1,525.00	10.33	326.91	1,518.77	73.52	-38.76	-37.43	0.42	-0.26	-1.84	
1,617.00	9.94	333.96	1,609.33	87.57	-46.75	-45.17	1.41	-0.42	7.66	
1,708.00	9.54	333.68	1,699.02	101.38	-53.54	-51.71	0.44	-0.44	-0.31	
1,800.00	8.90	333.15	1,789.83	114.57	-60.14	-58.07	0.70	-0.70	-0.58	
1,891.00	8.04	336.75	1,879.84	126.70	-65.83	-63.54	1.11	-0.95	3.96	
1,983.00	7.48	338.76	1,971.00	138.19	-70.54	-68.04	0.68	-0.61	2.18	
2,074.00	8.48	336.85	2,061.12	149.88	-75.32	-72.61	1.14	1.10	-2.10	
2,166.00	8.66	335.26	2,152.09	162.41	-80.89	-77.95	0.32	0.20	-1.73	
2,257.00	10.51	338.17	2,241.82	176.33	-86.84	-83.66	2.10	2.03	3.20	
2,349.00	10.24	340.93	2,332.31	191.85	-92.63	-89.17	0.61	-0.29	3.00	
2,444.00	9.59	341.14	2,425.89	207.32	-97.95	-94.21	0.69	-0.68	0.22	
2,538.00	8.40	342.32	2,518.73	221.27	-102.57	-98.57	1.28	-1.27	1.26	
2,632.00	8.26	323.79	2,611.76	233.26	-108.64	-104.43	2.85	-0.15	-19.71	
2,727.00	10.17	314.51	2,705.53	244.65	-118.65	-114.24	2.54	2.01	-9.77	
2,822.00	10.83	324.85	2,798.95	257.83	-129.77	-125.12	2.10	0.69	10.88	
2,917.00	11.78	328.79	2,892.11	273.42	-139.94	-135.00	1.29	1.00	4.15	
3,012.00	10.25	329.62	2,985.36	289.01	-149.24	-144.02	1.62	-1.61	0.87	
3,106.00	9.72	342.68	3,077.94	303.80	-155.83	-150.35	2.47	-0.56	13.89	
3,201.00	8.59	340.66	3,171.73	318.15	-160.57	-154.82	1.24	-1.19	-2.13	
3,296.00	8.80	346.56	3,265.64	331.92	-164.61	-158.61	0.96	0.22	6.21	
3,390.00	8.70	348.53	3,358.55	345.88	-167.69	-161.45	0.34	-0.11	2.10	
3,485.00	8.93	348.95	3,452.43	360.15	-170.53	-164.03	0.25	0.24	0.44	
3,579.00	9.62	347.62	3,545.20	374.99	-173.62	-166.85	0.77	0.73	-1.41	
3,673.00	10.95	346.57	3,637.68	391.34	-177.37	-170.31	1.43	1.41	-1.12	
3,768.00	10.21	348.72	3,731.07	408.38	-181.12	-173.75	0.88	-0.78	2.26	
3,862.00	9.08	348.92	3,823.74	423.83	-184.17	-176.52	1.20	-1.20	0.21	
3,957.00	8.63	348.89	3,917.61	438.18	-186.99	-179.08	0.47	-0.47	-0.03	
4,051.00	8.50	348.24	4,010.56	451.90	-189.76	-181.61	0.17	-0.14	-0.69	
4,145.00	8.39	345.36	4,103.54	465.33	-192.91	-184.51	0.46	-0.12	-3.06	
4,241.00	7.64	342.87	4,198.60	478.21	-196.56	-187.93	0.86	-0.78	-2.59	
4,335.00	8.59	343.81	4,291.66	490.92	-200.36	-191.50	1.02	1.01	1.00	
4,429.00	8.27	346.71	4,384.64	504.24	-203.87	-194.77	0.57	-0.34	3.09	
4,524.00	7.34	351.64	4,478.76	516.90	-206.32	-197.00	1.21	-0.98	5.19	
4,619.00	6.82	346.66	4,573.04	528.39	-208.51	-198.97	0.85	-0.55	-5.24	

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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)
4,714.00	5.19	335.08	4,667.52	537.78	-211.62	-201.92	2.13	-1.72	-12.19
4,808.00	3.95	315.39	4,761.22	543.94	-215.68	-205.87	2.11	-1.32	-20.95
4,903.00	2.80	291.31	4,856.06	547.11	-220.14	-210.27	1.90	-1.21	-25.35
4,997.00	0.70	233.78	4,950.02	547.60	-222.75	-212.87	2.65	-2.23	-61.20
5,091.00	0.69	144.37	5,044.01	546.81	-222.88	-213.01	1.04	-0.01	-95.12
5,186.00	1.16	123.18	5,139.00	545.81	-221.74	-211.89	0.60	0.49	-22.31
5,281.00	0.89	160.86	5,233.99	544.59	-220.70	-210.87	0.75	-0.28	39.66
5,377.00	1.28	249.12	5,329.97	543.50	-221.45	-211.65	1.60	0.41	91.94
5,471.00	1.28	255.05	5,423.95	542.86	-223.45	-213.65	0.14	0.00	6.31
5,565.00	1.26	232.47	5,517.93	541.96	-225.28	-215.50	0.53	-0.02	-24.02
5,660.00	1.15	223.32	5,612.91	540.63	-226.76	-217.01	0.23	-0.12	-9.63
5,754.00	0.46	191.81	5,706.90	539.57	-227.49	-217.75	0.85	-0.73	-33.52
5,850.00	0.69	111.62	5,802.89	538.98	-227.03	-217.30	0.79	0.24	-83.53
5,944.00	3.87	109.86	5,896.81	537.70	-223.52	-213.82	3.38	3.38	-1.87
6,038.00	17.60	95.35	5,988.95	535.28	-206.30	-196.65	14.77	14.61	-15.44
6,132.00	28.09	95.85	6,075.46	531.69	-170.04	-160.45	11.16	11.16	0.53
6,227.00	38.20	92.96	6,154.90	527.88	-118.31	-108.81	10.77	10.64	-3.04
6,321.00	46.40	87.40	6,224.39	527.93	-55.16	-45.66	9.58	8.72	-5.91
6,416.00	58.04	86.09	6,282.49	532.25	19.67	29.24	12.30	12.25	-1.38
6,511.00	64.89	87.70	6,327.85	536.73	102.96	112.59	7.36	7.21	1.69
6,606.00	71.82	86.76	6,362.87	541.01	191.10	200.79	7.35	7.29	-0.99
6,665.00	80.82	89.48	6,376.81	542.87	248.33	258.05	15.90	15.25	4.61
Last SDI MWD Curve Survey									
6,789.00	89.76	88.83	6,386.98	544.69	371.77	381.50	7.23	7.21	-0.52
First SDI MWD Lateral Survey									
6,883.00	89.97	88.88	6,387.21	546.57	465.75	475.50	0.23	0.22	0.05
6,978.00	90.97	88.45	6,386.43	548.78	560.72	570.50	1.15	1.05	-0.45
7,072.00	90.00	88.15	6,385.63	551.57	654.68	664.49	1.08	-1.03	-0.32
7,167.00	90.77	88.37	6,384.99	554.46	749.63	759.48	0.84	0.81	0.23
7,261.00	90.84	89.13	6,383.67	556.51	843.60	853.47	0.81	0.07	0.81
7,355.00	88.86	88.08	6,383.92	558.79	937.56	947.46	2.38	-2.11	-1.12
7,449.00	89.43	87.28	6,385.32	562.60	1,031.48	1,041.42	1.04	0.61	-0.85
7,544.00	89.63	87.24	6,386.10	567.14	1,126.36	1,136.38	0.21	0.21	-0.04
7,639.00	89.93	87.05	6,386.46	571.87	1,221.24	1,231.33	0.37	0.32	-0.20
7,733.00	89.90	87.30	6,386.60	576.50	1,315.13	1,325.28	0.27	-0.03	0.27
7,827.00	90.77	87.47	6,386.05	580.79	1,409.03	1,419.24	0.94	0.93	0.18
7,921.00	90.37	89.01	6,385.12	583.68	1,502.98	1,513.23	1.69	-0.43	1.64
8,015.00	91.01	89.11	6,383.99	585.22	1,596.96	1,607.22	0.69	0.68	0.11
8,110.00	90.10	89.54	6,383.07	586.34	1,691.95	1,702.21	1.06	-0.96	0.45
8,205.00	90.97	90.23	6,382.18	586.53	1,786.94	1,797.19	1.17	0.92	0.73
8,300.00	89.63	89.37	6,381.68	586.86	1,881.94	1,892.18	1.68	-1.41	-0.91
8,394.00	90.61	89.77	6,381.49	587.57	1,975.93	1,986.17	1.13	1.04	0.43
8,489.00	89.46	89.40	6,381.43	588.26	2,070.93	2,081.17	1.27	-1.21	-0.39

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8,583.00	89.29	88.82	6,382.45	589.72	2,164.91	2,175.16	0.64	-0.18	-0.62	
8,678.00	92.01	87.56	6,381.38	592.72	2,259.85	2,270.13	3.16	2.86	-1.33	
8,772.00	91.88	89.23	6,378.18	595.35	2,353.75	2,364.07	1.78	-0.14	1.78	
8,867.00	90.84	89.19	6,375.93	596.66	2,448.71	2,459.04	1.10	-1.09	-0.04	
8,961.00	92.15	88.68	6,373.48	598.40	2,542.66	2,553.01	1.50	1.39	-0.54	
9,055.00	91.61	89.67	6,370.39	599.76	2,636.60	2,646.96	1.20	-0.57	1.05	
9,150.00	90.67	88.79	6,368.50	601.03	2,731.57	2,741.93	1.36	-0.99	-0.93	
9,244.00	90.81	89.17	6,367.29	602.71	2,825.55	2,835.93	0.43	0.15	0.40	
9,339.00	90.00	88.64	6,366.62	604.52	2,920.53	2,930.92	1.02	-0.85	-0.56	
9,433.00	91.01	87.98	6,365.79	607.29	3,014.48	3,024.91	1.28	1.07	-0.70	
9,528.00	89.76	89.48	6,365.15	609.40	3,109.45	3,119.90	2.06	-1.32	1.58	
9,622.00	90.34	89.61	6,365.07	610.15	3,203.45	3,213.90	0.63	0.62	0.14	
9,716.00	90.87	90.11	6,364.08	610.37	3,297.44	3,307.88	0.78	0.56	0.53	
9,811.00	90.81	89.20	6,362.68	610.95	3,392.43	3,402.86	0.96	-0.06	-0.96	
9,905.00	89.93	89.16	6,362.08	612.29	3,486.42	3,496.86	0.94	-0.94	-0.04	
10,000.00	90.54	88.64	6,361.69	614.12	3,581.40	3,591.86	0.84	0.64	-0.55	
10,095.00	90.20	90.42	6,361.07	614.89	3,676.39	3,686.85	1.91	-0.36	1.87	
10,190.00	91.01	90.43	6,360.07	614.19	3,771.38	3,781.81	0.85	0.85	0.01	
10,284.00	89.97	90.55	6,359.27	613.39	3,865.37	3,875.77	1.11	-1.11	0.13	
10,378.00	90.81	91.69	6,358.63	611.55	3,959.35	3,969.70	1.51	0.89	1.21	
10,469.00	90.07	92.24	6,357.93	608.43	4,050.29	4,060.57	1.01	-0.81	0.60	
10,561.00	89.53	90.56	6,358.25	606.18	4,142.26	4,152.49	1.92	-0.59	-1.83	
10,653.00	90.44	89.79	6,358.27	605.90	4,234.26	4,244.47	1.30	0.99	-0.84	
10,745.00	90.13	88.35	6,357.82	607.39	4,326.24	4,336.46	1.60	-0.34	-1.57	
10,836.00	89.60	87.49	6,358.03	610.70	4,417.18	4,427.45	1.11	-0.58	-0.95	
10,928.00	90.81	88.24	6,357.70	614.12	4,509.11	4,519.42	1.55	1.32	0.82	
11,019.00	89.97	88.24	6,357.08	616.92	4,600.07	4,610.41	0.92	-0.92	0.00	
11,111.00	90.07	87.62	6,357.05	620.24	4,692.01	4,702.40	0.68	0.11	-0.67	
11,203.00	90.67	89.46	6,356.46	622.59	4,783.97	4,794.39	2.10	0.65	2.00	
11,294.00	89.33	87.84	6,356.46	624.73	4,874.94	4,885.38	2.31	-1.47	-1.78	
11,386.00	89.80	87.12	6,357.15	628.77	4,966.85	4,977.35	0.93	0.51	-0.78	
11,477.00	91.31	88.15	6,356.27	632.53	5,057.76	5,068.32	2.01	1.66	1.13	
11,569.00	90.64	87.88	6,354.71	635.72	5,149.69	5,160.29	0.79	-0.73	-0.29	
11,661.00	89.76	88.98	6,354.39	638.24	5,241.66	5,252.28	1.53	-0.96	1.20	
11,753.00	89.73	88.69	6,354.80	640.11	5,333.64	5,344.28	0.32	-0.03	-0.32	
11,845.00	89.33	88.62	6,355.55	642.27	5,425.61	5,436.28	0.44	-0.43	-0.08	
11,936.00	90.60	88.18	6,355.61	644.81	5,516.57	5,527.27	1.48	1.40	-0.48	
12,028.00	89.56	88.21	6,355.48	647.70	5,608.52	5,619.26	1.13	-1.13	0.03	
12,119.00	89.93	88.65	6,355.88	650.20	5,699.49	5,710.25	0.63	0.41	0.48	
12,211.00	90.74	89.29	6,355.34	651.85	5,791.47	5,802.25	1.12	0.88	0.70	
12,302.00	89.23	88.98	6,355.37	653.22	5,882.46	5,893.25	1.69	-1.66	-0.34	
12,394.00	89.09	89.12	6,356.72	654.75	5,974.43	5,985.24	0.22	-0.15	0.15	
12,485.00	90.34	88.68	6,357.17	656.50	6,065.41	6,076.24	1.46	1.37	-0.48	
12,577.00	91.58	89.92	6,355.63	657.62	6,157.39	6,168.22	1.91	1.35	1.35	

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Anschutz State 05-62-22-3225C2
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4690' & KB 16' @ 4706.00ft (Cade 24)
Site:	Anschutz State 5-62-22 NWSW Pad	MD Reference:	GL 4690' & KB 16' @ 4706.00ft (Cade 24)
Well:	Anschutz State 05-62-22-3225C2	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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)
12,668.00	89.83	88.41	6,354.51	658.95	6,248.37	6,259.20	2.54	-1.92	-1.66
12,760.00	91.71	88.10	6,353.27	661.75	6,340.31	6,351.18	2.07	2.04	-0.34
12,852.00	91.07	89.25	6,351.04	663.87	6,432.26	6,443.15	1.43	-0.70	1.25
12,943.00	91.24	89.24	6,349.21	665.07	6,523.23	6,534.13	0.19	0.19	-0.01
13,035.00	89.87	89.42	6,348.31	666.15	6,615.22	6,626.13	1.50	-1.49	0.20
13,126.00	90.40	89.81	6,348.10	666.76	6,706.22	6,717.12	0.72	0.58	0.43
13,218.00	90.67	90.38	6,347.24	666.61	6,798.21	6,809.10	0.69	0.29	0.62
13,310.00	92.72	91.06	6,344.52	665.45	6,890.16	6,901.01	2.35	2.23	0.74
13,401.00	92.02	91.93	6,340.76	663.08	6,981.05	6,991.84	1.23	-0.77	0.96
13,493.00	91.81	90.20	6,337.68	661.37	7,072.98	7,083.72	1.89	-0.23	-1.88
13,585.00	89.60	87.97	6,336.55	662.84	7,164.95	7,175.71	3.41	-2.40	-2.42
13,677.00	89.87	88.43	6,336.98	665.73	7,256.90	7,267.70	0.58	0.29	0.50
13,768.00	90.71	88.35	6,336.52	668.29	7,347.86	7,358.69	0.93	0.92	-0.09
13,860.00	89.39	88.78	6,336.43	670.59	7,439.83	7,450.69	1.51	-1.43	0.47
13,952.00	89.93	89.14	6,336.98	672.26	7,531.82	7,542.68	0.71	0.59	0.39
14,043.00	90.50	89.18	6,336.64	673.60	7,622.80	7,633.68	0.63	0.63	0.04
14,134.00	89.90	87.76	6,336.32	676.03	7,713.77	7,724.67	1.69	-0.66	-1.56
14,226.00	90.27	88.74	6,336.19	678.83	7,805.72	7,816.67	1.14	0.40	1.07
14,318.00	90.60	89.62	6,335.49	680.15	7,897.71	7,908.66	1.02	0.36	0.96
14,409.00	89.87	90.15	6,335.11	680.33	7,988.71	7,999.65	0.99	-0.80	0.58
14,501.00	89.73	88.98	6,335.43	681.03	8,080.71	8,091.64	1.28	-0.15	-1.27
14,592.00	90.54	89.11	6,335.22	682.55	8,171.69	8,182.64	0.90	0.89	0.14
14,682.00	91.28	88.29	6,333.79	684.59	8,261.66	8,272.63	1.23	0.82	-0.91
14,773.00	89.46	88.04	6,333.20	687.50	8,352.60	8,363.61	2.02	-2.00	-0.27
14,865.00	89.46	87.50	6,334.07	691.08	8,444.53	8,455.59	0.59	0.00	-0.59
14,957.00	88.82	87.19	6,335.45	695.34	8,536.42	8,547.54	0.77	-0.70	-0.34
15,048.00	89.43	87.85	6,336.84	699.28	8,627.32	8,638.50	0.99	0.67	0.73
15,140.00	89.93	88.93	6,337.35	701.87	8,719.28	8,730.49	1.29	0.54	1.17
15,232.00	90.74	88.22	6,336.82	704.15	8,811.25	8,822.49	1.17	0.88	-0.77
15,323.00	90.91	89.52	6,335.51	705.95	8,902.22	8,913.47	1.44	0.19	1.43
15,415.00	90.77	89.63	6,334.16	706.63	8,994.21	9,005.46	0.19	-0.15	0.12
15,506.00	89.60	88.96	6,333.86	707.75	9,085.20	9,096.46	1.48	-1.29	-0.74
15,597.00	89.33	89.34	6,334.71	709.10	9,176.19	9,187.45	0.51	-0.30	0.42
15,691.00	88.32	90.10	6,336.64	709.56	9,270.16	9,281.42	1.34	-1.07	0.81
15,784.00	89.06	89.78	6,338.77	709.66	9,363.14	9,374.38	0.87	0.80	-0.34
15,879.00	89.53	89.63	6,339.94	710.15	9,458.13	9,469.37	0.52	0.49	-0.16
15,974.00	89.13	88.65	6,341.05	711.57	9,553.11	9,564.36	1.11	-0.42	-1.03
16,068.00	89.66	88.81	6,342.04	713.66	9,647.08	9,658.35	0.59	0.56	0.17
16,162.00	91.35	89.63	6,341.21	714.94	9,741.07	9,752.34	2.00	1.80	0.87
16,257.00	90.74	89.20	6,339.48	715.91	9,836.04	9,847.32	0.79	-0.64	-0.45
16,352.00	90.84	90.57	6,338.17	716.10	9,931.03	9,942.30	1.45	0.11	1.44
16,371.00	90.77	90.40	6,337.90	715.94	9,950.03	9,961.29	0.97	-0.37	-0.89
Last SDI MWD Survey									

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Anschutz State 05-62-22-3225C2
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4690' & KB 16' @ 4706.00ft (Cade 24)
Site:	Anschutz State 5-62-22 NWSW Pad	MD Reference:	GL 4690' & KB 16' @ 4706.00ft (Cade 24)
Well:	Anschutz State 05-62-22-3225C2	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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)
16,431.00	90.77	90.40	6,337.10	715.52	10,010.02	10,021.27	0.00	0.00	0.00
Projection to TD									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (in)	Hole Diameter (in)
14,865.00	6,334.07	Case15		7.000	7.875

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
100.00	100.00	-0.13	0.37	First Gyro Survey	
785.00	784.99	1.74	-2.07	Last Gyro Survey	
883.00	882.98	1.82	-1.71	First SDI MWD Survey	
6,665.00	6,376.81	542.87	248.33	Last SDI MWD Curve Survey	
6,789.00	6,386.98	544.69	371.77	First SDI MWD Lateral Survey	
16,371.00	6,337.90	715.94	9,950.03	Last SDI MWD Survey	
16,431.00	6,337.10	715.52	10,010.02	Projection to TD	

Checked By: _____ Approved By: _____ Date: _____