

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: Anschutz State 5-62-27_34 SWSE 22 Pad
 Well: Anschutz State Fed 5-62-27-0560B2
 Wellbore: OH
 Design: Plan 1



Azimuths to True North
 Magnetic North: 8.25°

Magnetic Field
 Strength: 52635.0nT
 Dip Angle: 67.02°
 Date: 11/11/2015
 Model: BGGM2015

Plan: Plan 1 (Anschutz State Fed 5-62-27-0560B2/OH)

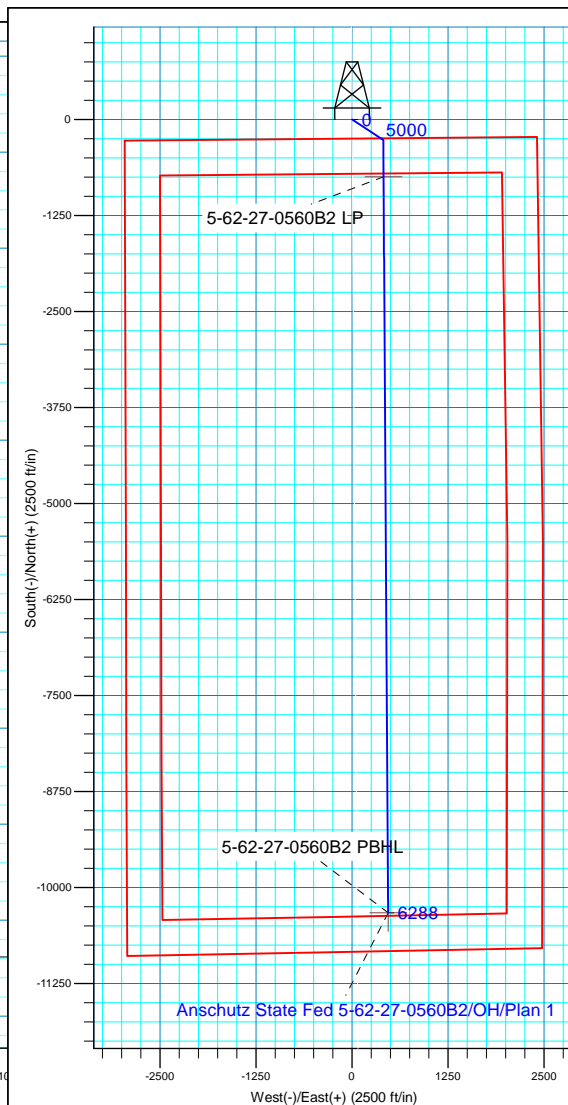
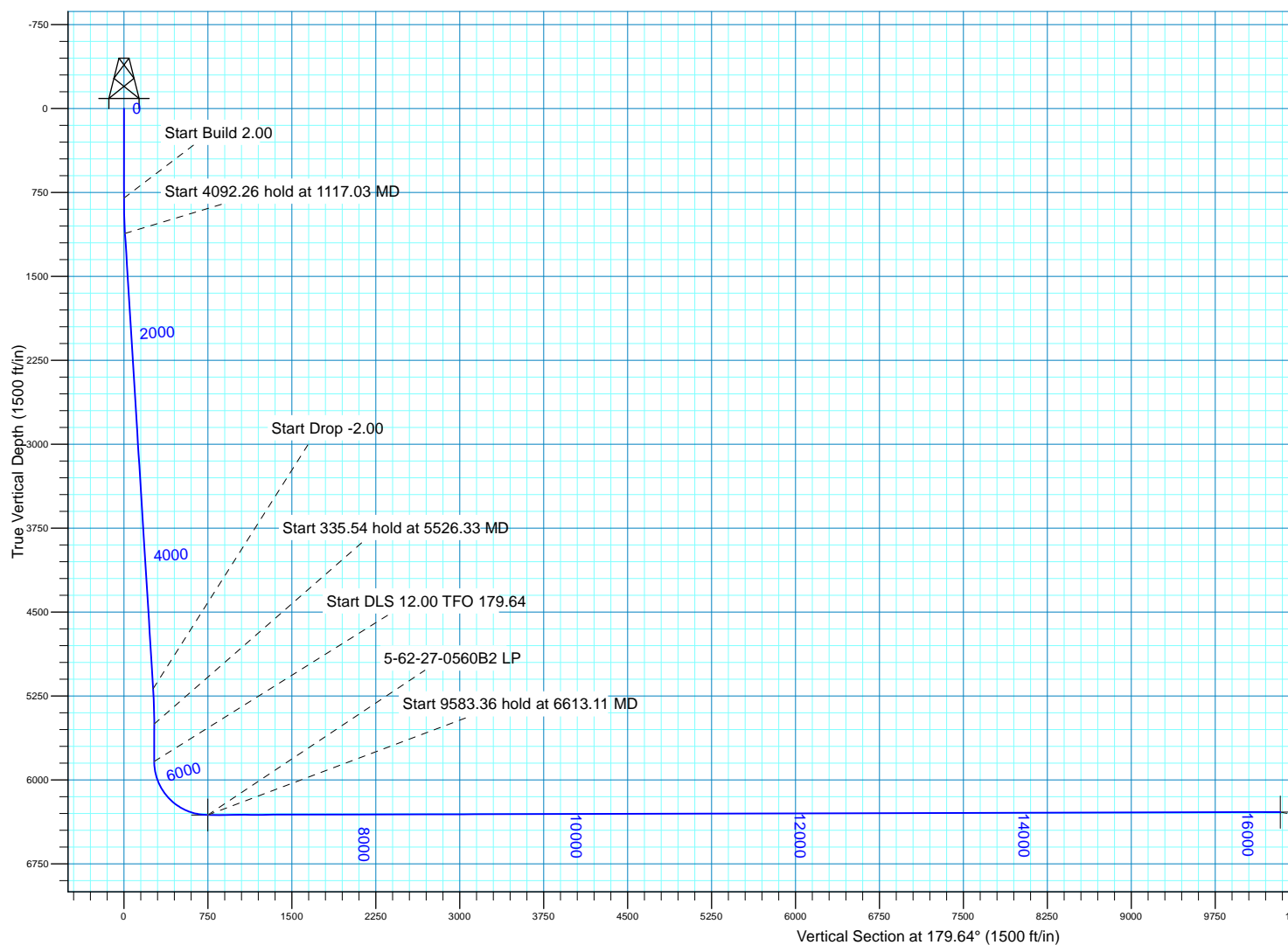
Created By: Seth Burstad Date: 11-11-2015

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.00	0.00	0.00	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
1117.03	6.34	123.40	1116.38	-9.65	14.63	2.00	123.40	9.74
5209.29	6.34	123.40	5183.62	-258.44	391.93	0.00	0.00	260.90
5526.33	0.00	0.00	5500.00	-268.09	406.56	2.00	180.00	270.64
5861.87	0.00	0.00	5835.54	-268.09	406.56	0.00	0.00	270.64
6613.11	90.15	179.64	6313.00	-746.79	409.55	12.00	179.64	749.35
16196.46	90.15	179.64	6288.00	-10329.92	469.36	0.00	0.00	10332.67

WELL DETAILS: Anschutz State Fed 5-62-27-0560B2

		GL 4701' & KB 16' @ 4717.00ft		4701.00	Longitude
+N/-S	+E/-W	Northing	Easting	Latitude	
0.00	0.00	1383057.61	3331804.99	40° 22' 43.601 N	104° 18' 32.332 W





Bill Barrett Corp.

Weld County, CO NAD 83
Anschutz State 5-62-27_34 SWSE 22 Pad
Anschutz State Fed 5-62-27-0560B2

OH

Plan: Plan 1

Standard Planning Report

11 November, 2015



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560B2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4701' & KB 16' @ 4717.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4701' & KB 16' @ 4717.00ft
Site:	Anshutz State 5-62-27_34 SWSE 22 Pad	North Reference:	True
Well:	Anschutz State Fed 5-62-27-0560B2	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	Anshutz State 5-62-27_34 SWSE 22 Pad, Site Center : 5-62-27-0659C2			
Site Position:		Northing:	1,383,057.83 usft	Latitude: 40° 22' 43.601 N
From:	Lat/Long	Easting:	3,331,820.59 usft	Longitude: 104° 18' 32.130 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence: 0.77 °

Well	Anschutz State Fed 5-62-27-0560B2, 250' fSL 2415' FEL Sec 22 T5N R62W			
Well Position	+N/-S	-0.02 ft	Northing:	1,383,057.60 usft
	+E/-W	-15.60 ft	Easting:	3,331,804.99 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft
			Ground Level:	4,701.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2015	11/11/2015	8.25	67.02	52,635

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	179.64

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	0.00	0.00	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	
1,117.03	6.34	123.40	1,116.38	-9.65	14.63	2.00	2.00	0.00	123.40	
5,209.30	6.34	123.40	5,183.62	-258.44	391.93	0.00	0.00	0.00	0.00	
5,526.33	0.00	0.00	5,500.00	-268.09	406.56	2.00	-2.00	0.00	180.00	
5,861.87	0.00	0.00	5,835.54	-268.09	406.56	0.00	0.00	0.00	0.00	
6,613.11	90.15	179.64	6,313.00	-746.79	409.55	12.00	12.00	23.91	179.64	
16,196.46	90.15	179.64	6,288.00	-10,329.92	469.36	0.00	0.00	0.00	0.00	5-62-27-0560B2 PBH

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560B2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4701' & KB 16' @ 4717.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4701' & KB 16' @ 4717.00ft
Site:	Anschutz State 5-62-27_34 SWSE 22 Pad	North Reference:	True
Well:	Anschutz State Fed 5-62-27-0560B2	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	0.00	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	2.00	123.40	899.98	-0.96	1.46	0.97	2.00	2.00	0.00
1,000.00	4.00	123.40	999.84	-3.84	5.83	3.88	2.00	2.00	0.00
1,100.00	6.00	123.40	1,099.45	-8.64	13.10	8.72	2.00	2.00	0.00
1,117.03	6.34	123.40	1,116.38	-9.65	14.63	9.74	2.00	2.00	0.00
Start 4092.26 hold at 1117.03 MD									
1,200.00	6.34	123.40	1,198.85	-14.69	22.28	14.83	0.00	0.00	0.00
1,300.00	6.34	123.40	1,298.23	-20.77	31.50	20.97	0.00	0.00	0.00
1,400.00	6.34	123.40	1,397.62	-26.85	40.72	27.11	0.00	0.00	0.00
1,500.00	6.34	123.40	1,497.01	-32.93	49.94	33.24	0.00	0.00	0.00
1,600.00	6.34	123.40	1,596.40	-39.01	59.16	39.38	0.00	0.00	0.00
1,700.00	6.34	123.40	1,695.79	-45.09	68.38	45.52	0.00	0.00	0.00
1,800.00	6.34	123.40	1,795.18	-51.17	77.60	51.66	0.00	0.00	0.00
1,900.00	6.34	123.40	1,894.56	-57.25	86.82	57.79	0.00	0.00	0.00
2,000.00	6.34	123.40	1,993.95	-63.33	96.04	63.93	0.00	0.00	0.00
2,100.00	6.34	123.40	2,093.34	-69.41	105.26	70.07	0.00	0.00	0.00
2,200.00	6.34	123.40	2,192.73	-75.49	114.48	76.21	0.00	0.00	0.00
2,300.00	6.34	123.40	2,292.12	-81.57	123.70	82.34	0.00	0.00	0.00
2,400.00	6.34	123.40	2,391.51	-87.65	132.92	88.48	0.00	0.00	0.00
2,500.00	6.34	123.40	2,490.89	-93.73	142.14	94.62	0.00	0.00	0.00
2,600.00	6.34	123.40	2,590.28	-99.81	151.36	100.76	0.00	0.00	0.00
2,700.00	6.34	123.40	2,689.67	-105.89	160.58	106.89	0.00	0.00	0.00
2,800.00	6.34	123.40	2,789.06	-111.97	169.80	113.03	0.00	0.00	0.00
2,900.00	6.34	123.40	2,888.45	-118.05	179.02	119.17	0.00	0.00	0.00
3,000.00	6.34	123.40	2,987.84	-124.13	188.24	125.31	0.00	0.00	0.00
3,100.00	6.34	123.40	3,087.22	-130.20	197.46	131.44	0.00	0.00	0.00
3,200.00	6.34	123.40	3,186.61	-136.28	206.68	137.58	0.00	0.00	0.00
3,300.00	6.34	123.40	3,286.00	-142.36	215.90	143.72	0.00	0.00	0.00
3,400.00	6.34	123.40	3,385.39	-148.44	225.12	149.86	0.00	0.00	0.00
3,500.00	6.34	123.40	3,484.78	-154.52	234.34	155.99	0.00	0.00	0.00
3,600.00	6.34	123.40	3,584.16	-160.60	243.56	162.13	0.00	0.00	0.00
3,700.00	6.34	123.40	3,683.55	-166.68	252.78	168.27	0.00	0.00	0.00
3,800.00	6.34	123.40	3,782.94	-172.76	262.00	174.41	0.00	0.00	0.00
3,900.00	6.34	123.40	3,882.33	-178.84	271.22	180.54	0.00	0.00	0.00
4,000.00	6.34	123.40	3,981.72	-184.92	280.44	186.68	0.00	0.00	0.00
4,100.00	6.34	123.40	4,081.11	-191.00	289.65	192.82	0.00	0.00	0.00
4,200.00	6.34	123.40	4,180.49	-197.08	298.87	198.96	0.00	0.00	0.00
4,300.00	6.34	123.40	4,279.88	-203.16	308.09	205.09	0.00	0.00	0.00
4,400.00	6.34	123.40	4,379.27	-209.24	317.31	211.23	0.00	0.00	0.00
4,500.00	6.34	123.40	4,478.66	-215.32	326.53	217.37	0.00	0.00	0.00
4,600.00	6.34	123.40	4,578.05	-221.40	335.75	223.51	0.00	0.00	0.00
4,700.00	6.34	123.40	4,677.44	-227.48	344.97	229.64	0.00	0.00	0.00
4,739.81	6.34	123.40	4,717.00	-229.90	348.64	232.09	0.00	0.00	0.00
BASE OF FOX HILLS									

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560B2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4701' & KB 16' @ 4717.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4701' & KB 16' @ 4717.00ft
Site:	Anschutz State 5-62-27_34 SWSE 22 Pad	North Reference:	True
Well:	Anschutz State Fed 5-62-27-0560B2	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	6.34	123.40	4,776.82	-233.56	354.19	235.78	0.00	0.00	0.00
4,900.00	6.34	123.40	4,876.21	-239.64	363.41	241.92	0.00	0.00	0.00
5,000.00	6.34	123.40	4,975.60	-245.72	372.63	248.05	0.00	0.00	0.00
5,100.00	6.34	123.40	5,074.99	-251.80	381.85	254.19	0.00	0.00	0.00
5,200.00	6.34	123.40	5,174.38	-257.88	391.07	260.33	0.00	0.00	0.00
5,209.30	6.34	123.40	5,183.62	-258.44	391.93	260.90	0.00	0.00	0.00
Start Drop -2.00									
5,227.79	5.97	123.40	5,202.00	-259.53	393.59	262.00	2.00	-2.00	0.00
SHANNON									
5,300.00	4.53	123.40	5,273.91	-263.17	399.10	265.67	2.00	-2.00	0.00
5,400.00	2.53	123.40	5,373.71	-266.56	404.24	269.09	2.00	-2.00	0.00
5,500.00	0.53	123.40	5,473.67	-268.02	406.46	270.57	2.00	-2.00	0.00
5,526.33	0.00	0.00	5,500.00	-268.09	406.56	270.64	2.00	-2.00	0.00
Start 335.54 hold at 5526.33 MD									
5,600.00	0.00	0.00	5,573.67	-268.09	406.56	270.64	0.00	0.00	0.00
5,700.00	0.00	0.00	5,673.67	-268.09	406.56	270.64	0.00	0.00	0.00
5,800.00	0.00	0.00	5,773.67	-268.09	406.56	270.64	0.00	0.00	0.00
5,861.87	0.00	0.00	5,835.54	-268.09	406.56	270.64	0.00	0.00	0.00
Start DLS 12.00 TFO 179.64									
5,900.00	4.58	179.64	5,873.63	-269.61	406.57	272.16	12.00	12.00	0.00
6,000.00	16.58	179.64	5,971.76	-287.93	406.68	290.48	12.00	12.00	0.00
6,100.00	28.58	179.64	6,063.92	-326.25	406.92	328.80	12.00	12.00	0.00
6,103.51	29.00	179.64	6,067.00	-327.94	406.93	330.49	12.00	12.00	0.00
SHARON SPRINGS									
6,200.00	40.58	179.64	6,146.11	-382.90	407.28	385.45	12.00	12.00	0.00
6,228.23	43.96	179.64	6,167.00	-401.89	407.40	404.44	12.00	12.00	0.00
NIOBRARA									
6,300.00	52.58	179.64	6,214.72	-455.39	407.73	457.94	12.00	12.00	0.00
6,400.00	64.58	179.64	6,266.77	-540.57	408.26	543.12	12.00	12.00	0.00
6,430.58	68.25	179.64	6,279.00	-568.59	408.44	571.14	12.00	12.00	0.00
TOP B CHALK TARGET									
6,456.66	71.38	179.64	6,288.00	-593.06	408.59	595.62	12.00	12.00	0.00
TD (HORIZONTAL)									
6,500.00	76.58	179.64	6,299.96	-634.70	408.85	637.26	12.00	12.00	0.00
6,600.00	88.58	179.64	6,312.86	-733.68	409.47	736.24	12.00	12.00	0.00
6,609.72	89.74	179.64	6,313.00	-743.40	409.53	745.96	12.00	12.00	0.00
LANDING POINT									
6,613.11	90.15	179.64	6,313.00	-746.79	409.55	749.35	12.00	12.00	0.00
Start 9583.36 hold at 6613.11 MD									
6,700.00	90.15	179.64	6,312.78	-833.68	410.09	836.24	0.00	0.00	0.00
6,800.00	90.15	179.64	6,312.52	-933.68	410.71	936.24	0.00	0.00	0.00
6,900.00	90.15	179.64	6,312.25	-1,033.67	411.34	1,036.24	0.00	0.00	0.00
7,000.00	90.15	179.64	6,311.99	-1,133.67	411.96	1,136.24	0.00	0.00	0.00
7,100.00	90.15	179.64	6,311.73	-1,233.67	412.59	1,236.24	0.00	0.00	0.00
7,200.00	90.15	179.64	6,311.47	-1,333.67	413.21	1,336.24	0.00	0.00	0.00
7,300.00	90.15	179.64	6,311.21	-1,433.66	413.83	1,436.24	0.00	0.00	0.00
7,400.00	90.15	179.64	6,310.95	-1,533.66	414.46	1,536.24	0.00	0.00	0.00
7,500.00	90.15	179.64	6,310.69	-1,633.66	415.08	1,636.23	0.00	0.00	0.00
7,600.00	90.15	179.64	6,310.43	-1,733.66	415.71	1,736.23	0.00	0.00	0.00
7,700.00	90.15	179.64	6,310.17	-1,833.65	416.33	1,836.23	0.00	0.00	0.00
7,800.00	90.15	179.64	6,309.91	-1,933.65	416.95	1,936.23	0.00	0.00	0.00
7,900.00	90.15	179.64	6,309.65	-2,033.65	417.58	2,036.23	0.00	0.00	0.00
8,000.00	90.15	179.64	6,309.38	-2,133.65	418.20	2,136.23	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560B2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4701' & KB 16' @ 4717.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4701' & KB 16' @ 4717.00ft
Site:	Anschutz State 5-62-27_34 SWSE 22 Pad	North Reference:	True
Well:	Anschutz State Fed 5-62-27-0560B2	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)
8,100.00	90.15	179.64	6,309.12	-2,233.65	418.83	2,236.23	0.00	0.00	0.00
8,200.00	90.15	179.64	6,308.86	-2,333.64	419.45	2,336.23	0.00	0.00	0.00
8,300.00	90.15	179.64	6,308.60	-2,433.64	420.08	2,436.23	0.00	0.00	0.00
8,400.00	90.15	179.64	6,308.34	-2,533.64	420.70	2,536.23	0.00	0.00	0.00
8,500.00	90.15	179.64	6,308.08	-2,633.64	421.32	2,636.23	0.00	0.00	0.00
8,600.00	90.15	179.64	6,307.82	-2,733.63	421.95	2,736.23	0.00	0.00	0.00
8,700.00	90.15	179.64	6,307.56	-2,833.63	422.57	2,836.23	0.00	0.00	0.00
8,800.00	90.15	179.64	6,307.30	-2,933.63	423.20	2,936.23	0.00	0.00	0.00
8,900.00	90.15	179.64	6,307.04	-3,033.63	423.82	3,036.23	0.00	0.00	0.00
9,000.00	90.15	179.64	6,306.78	-3,133.62	424.44	3,136.23	0.00	0.00	0.00
9,100.00	90.15	179.64	6,306.51	-3,233.62	425.07	3,236.23	0.00	0.00	0.00
9,200.00	90.15	179.64	6,306.25	-3,333.62	425.69	3,336.23	0.00	0.00	0.00
9,300.00	90.15	179.64	6,305.99	-3,433.62	426.32	3,436.23	0.00	0.00	0.00
9,400.00	90.15	179.64	6,305.73	-3,533.62	426.94	3,536.23	0.00	0.00	0.00
9,500.00	90.15	179.64	6,305.47	-3,633.61	427.56	3,636.23	0.00	0.00	0.00
9,600.00	90.15	179.64	6,305.21	-3,733.61	428.19	3,736.23	0.00	0.00	0.00
9,700.00	90.15	179.64	6,304.95	-3,833.61	428.81	3,836.23	0.00	0.00	0.00
9,800.00	90.15	179.64	6,304.69	-3,933.61	429.44	3,936.23	0.00	0.00	0.00
9,900.00	90.15	179.64	6,304.43	-4,033.60	430.06	4,036.23	0.00	0.00	0.00
10,000.00	90.15	179.64	6,304.17	-4,133.60	430.68	4,136.23	0.00	0.00	0.00
10,100.00	90.15	179.64	6,303.91	-4,233.60	431.31	4,236.23	0.00	0.00	0.00
10,200.00	90.15	179.64	6,303.65	-4,333.60	431.93	4,336.23	0.00	0.00	0.00
10,300.00	90.15	179.64	6,303.38	-4,433.60	432.56	4,436.23	0.00	0.00	0.00
10,400.00	90.15	179.64	6,303.12	-4,533.59	433.18	4,536.22	0.00	0.00	0.00
10,500.00	90.15	179.64	6,302.86	-4,633.59	433.80	4,636.22	0.00	0.00	0.00
10,600.00	90.15	179.64	6,302.60	-4,733.59	434.43	4,736.22	0.00	0.00	0.00
10,700.00	90.15	179.64	6,302.34	-4,833.59	435.05	4,836.22	0.00	0.00	0.00
10,800.00	90.15	179.64	6,302.08	-4,933.58	435.68	4,936.22	0.00	0.00	0.00
10,900.00	90.15	179.64	6,301.82	-5,033.58	436.30	5,036.22	0.00	0.00	0.00
11,000.00	90.15	179.64	6,301.56	-5,133.58	436.93	5,136.22	0.00	0.00	0.00
11,100.00	90.15	179.64	6,301.30	-5,233.58	437.55	5,236.22	0.00	0.00	0.00
11,200.00	90.15	179.64	6,301.04	-5,333.57	438.17	5,336.22	0.00	0.00	0.00
11,300.00	90.15	179.64	6,300.78	-5,433.57	438.80	5,436.22	0.00	0.00	0.00
11,400.00	90.15	179.64	6,300.51	-5,533.57	439.42	5,536.22	0.00	0.00	0.00
11,500.00	90.15	179.64	6,300.25	-5,633.57	440.05	5,636.22	0.00	0.00	0.00
11,600.00	90.15	179.64	6,299.99	-5,733.57	440.67	5,736.22	0.00	0.00	0.00
11,700.00	90.15	179.64	6,299.73	-5,833.56	441.29	5,836.22	0.00	0.00	0.00
11,800.00	90.15	179.64	6,299.47	-5,933.56	441.92	5,936.22	0.00	0.00	0.00
11,900.00	90.15	179.64	6,299.21	-6,033.56	442.54	6,036.22	0.00	0.00	0.00
12,000.00	90.15	179.64	6,298.95	-6,133.56	443.17	6,136.22	0.00	0.00	0.00
12,100.00	90.15	179.64	6,298.69	-6,233.55	443.79	6,236.22	0.00	0.00	0.00
12,200.00	90.15	179.64	6,298.43	-6,333.55	444.41	6,336.22	0.00	0.00	0.00
12,300.00	90.15	179.64	6,298.17	-6,433.55	445.04	6,436.22	0.00	0.00	0.00
12,400.00	90.15	179.64	6,297.91	-6,533.55	445.66	6,536.22	0.00	0.00	0.00
12,500.00	90.15	179.64	6,297.64	-6,633.54	446.29	6,636.22	0.00	0.00	0.00
12,600.00	90.15	179.64	6,297.38	-6,733.54	446.91	6,736.22	0.00	0.00	0.00
12,700.00	90.15	179.64	6,297.12	-6,833.54	447.53	6,836.22	0.00	0.00	0.00
12,800.00	90.15	179.64	6,296.86	-6,933.54	448.16	6,936.22	0.00	0.00	0.00
12,900.00	90.15	179.64	6,296.60	-7,033.54	448.78	7,036.22	0.00	0.00	0.00
13,000.00	90.15	179.64	6,296.34	-7,133.53	449.41	7,136.22	0.00	0.00	0.00
13,100.00	90.15	179.64	6,296.08	-7,233.53	450.03	7,236.22	0.00	0.00	0.00
13,200.00	90.15	179.64	6,295.82	-7,333.53	450.66	7,336.22	0.00	0.00	0.00
13,300.00	90.15	179.64	6,295.56	-7,433.53	451.28	7,436.22	0.00	0.00	0.00
13,400.00	90.15	179.64	6,295.30	-7,533.52	451.90	7,536.21	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560B2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4701' & KB 16' @ 4717.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4701' & KB 16' @ 4717.00ft
Site:	Anschutz State 5-62-27_34 SWSE 22 Pad	North Reference:	True
Well:	Anschutz State Fed 5-62-27-0560B2	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)	
13,500.00	90.15	179.64	6,295.04	-7,633.52	452.53	7,636.21	0.00	0.00	0.00	
13,600.00	90.15	179.64	6,294.77	-7,733.52	453.15	7,736.21	0.00	0.00	0.00	
13,700.00	90.15	179.64	6,294.51	-7,833.52	453.78	7,836.21	0.00	0.00	0.00	
13,800.00	90.15	179.64	6,294.25	-7,933.52	454.40	7,936.21	0.00	0.00	0.00	
13,900.00	90.15	179.64	6,293.99	-8,033.51	455.02	8,036.21	0.00	0.00	0.00	
14,000.00	90.15	179.64	6,293.73	-8,133.51	455.65	8,136.21	0.00	0.00	0.00	
14,100.00	90.15	179.64	6,293.47	-8,233.51	456.27	8,236.21	0.00	0.00	0.00	
14,200.00	90.15	179.64	6,293.21	-8,333.51	456.90	8,336.21	0.00	0.00	0.00	
14,300.00	90.15	179.64	6,292.95	-8,433.50	457.52	8,436.21	0.00	0.00	0.00	
14,400.00	90.15	179.64	6,292.69	-8,533.50	458.14	8,536.21	0.00	0.00	0.00	
14,500.00	90.15	179.64	6,292.43	-8,633.50	458.77	8,636.21	0.00	0.00	0.00	
14,600.00	90.15	179.64	6,292.17	-8,733.50	459.39	8,736.21	0.00	0.00	0.00	
14,700.00	90.15	179.64	6,291.90	-8,833.49	460.02	8,836.21	0.00	0.00	0.00	
14,800.00	90.15	179.64	6,291.64	-8,933.49	460.64	8,936.21	0.00	0.00	0.00	
14,900.00	90.15	179.64	6,291.38	-9,033.49	461.26	9,036.21	0.00	0.00	0.00	
15,000.00	90.15	179.64	6,291.12	-9,133.49	461.89	9,136.21	0.00	0.00	0.00	
15,100.00	90.15	179.64	6,290.86	-9,233.49	462.51	9,236.21	0.00	0.00	0.00	
15,200.00	90.15	179.64	6,290.60	-9,333.48	463.14	9,336.21	0.00	0.00	0.00	
15,300.00	90.15	179.64	6,290.34	-9,433.48	463.76	9,436.21	0.00	0.00	0.00	
15,400.00	90.15	179.64	6,290.08	-9,533.48	464.38	9,536.21	0.00	0.00	0.00	
15,500.00	90.15	179.64	6,289.82	-9,633.48	465.01	9,636.21	0.00	0.00	0.00	
15,600.00	90.15	179.64	6,289.56	-9,733.47	465.63	9,736.21	0.00	0.00	0.00	
15,700.00	90.15	179.64	6,289.30	-9,833.47	466.26	9,836.21	0.00	0.00	0.00	
15,800.00	90.15	179.64	6,289.03	-9,933.47	466.88	9,936.21	0.00	0.00	0.00	
15,900.00	90.15	179.64	6,288.77	-10,033.47	467.51	10,036.21	0.00	0.00	0.00	
16,000.00	90.15	179.64	6,288.51	-10,133.46	468.13	10,136.21	0.00	0.00	0.00	
16,100.00	90.15	179.64	6,288.25	-10,233.46	468.75	10,236.21	0.00	0.00	0.00	
16,196.46	90.15	179.64	6,288.00	-10,329.92	469.36	10,332.67	0.00	0.00	0.00	
TD at 16196.47										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
5-62-27-0560B2 PBHL	0.00	0.00	6,288.00	-10,329.92	469.36	1,372,734.94	3,332,413.05	40° 21' 1.519 N	104° 18' 26.269 W	
- plan hits target center										
- Point										
5-62-27-0560B2 LP	0.00	0.00	6,313.00	-746.78	409.55	1,382,316.39	3,332,224.54	40° 22' 36.221 N	104° 18' 27.040 W	
- plan misses target center by 0.01ft at 6613.10ft MD (6313.00 TVD, -746.78 N, 409.55 E)										
- Point										

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560B2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4701' & KB 16' @ 4717.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4701' & KB 16' @ 4717.00ft
Site:	Anschutz State 5-62-27_34 SWSE 22 Pad	North Reference:	True
Well:	Anschutz State Fed 5-62-27-0560B2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,739.81	4,717.00	BASE OF FOX HILLS		0.00	
5,227.79	5,202.00	SHANNON		0.00	
6,103.51	6,067.00	SHARON SPRINGS		0.00	
6,228.23	6,167.00	NIOBRARA		0.00	
6,430.58	6,279.00	TOP B CHALK TARGET		0.00	
6,456.66	6,288.00	TD (HORIZONTAL)		0.00	
6,609.72	6,313.00	LANDING POINT		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
800.00	800.00	0.00	0.00	Start Build 2.00	
1,117.03	1,116.38	-9.65	14.63	Start 4092.26 hold at 1117.03 MD	
5,209.30	5,183.62	-258.44	391.93	Start Drop -2.00	
5,526.33	5,500.00	-268.09	406.56	Start 335.54 hold at 5526.33 MD	
5,861.87	5,835.54	-268.09	406.56	Start DLS 12.00 TFO 179.64	
6,613.11	6,313.00	-746.79	409.55	Start 9583.36 hold at 6613.11 MD	
16,196.46	6,288.00	-10,329.92	469.36	TD at 16196.47	