

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 5-62-27-0560C2
 Wellbore: OH
 Design: Plan 1



Azinuths 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 5-62-27-0560C2/OH)

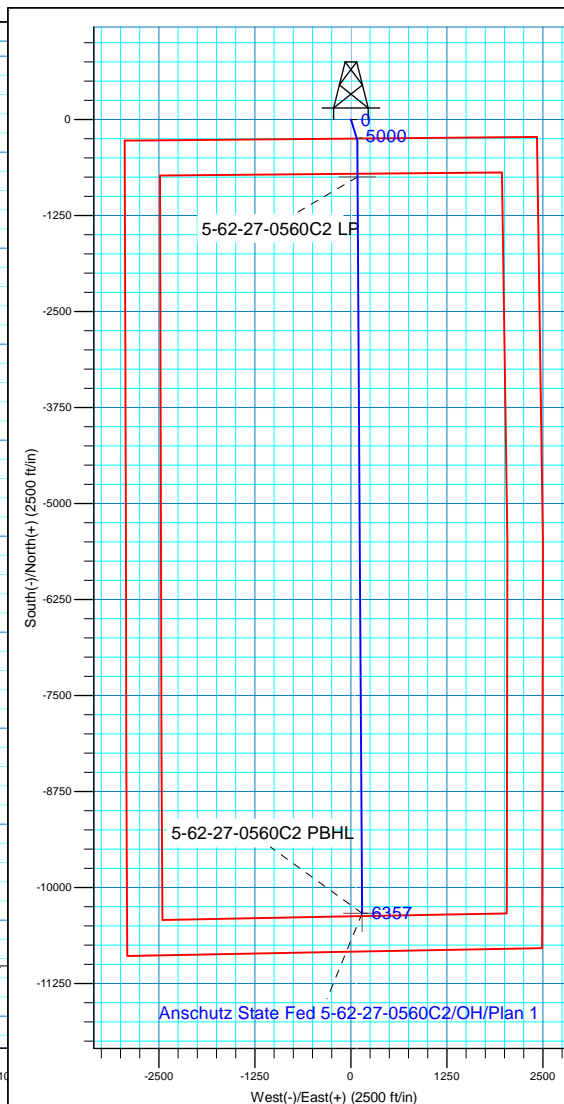
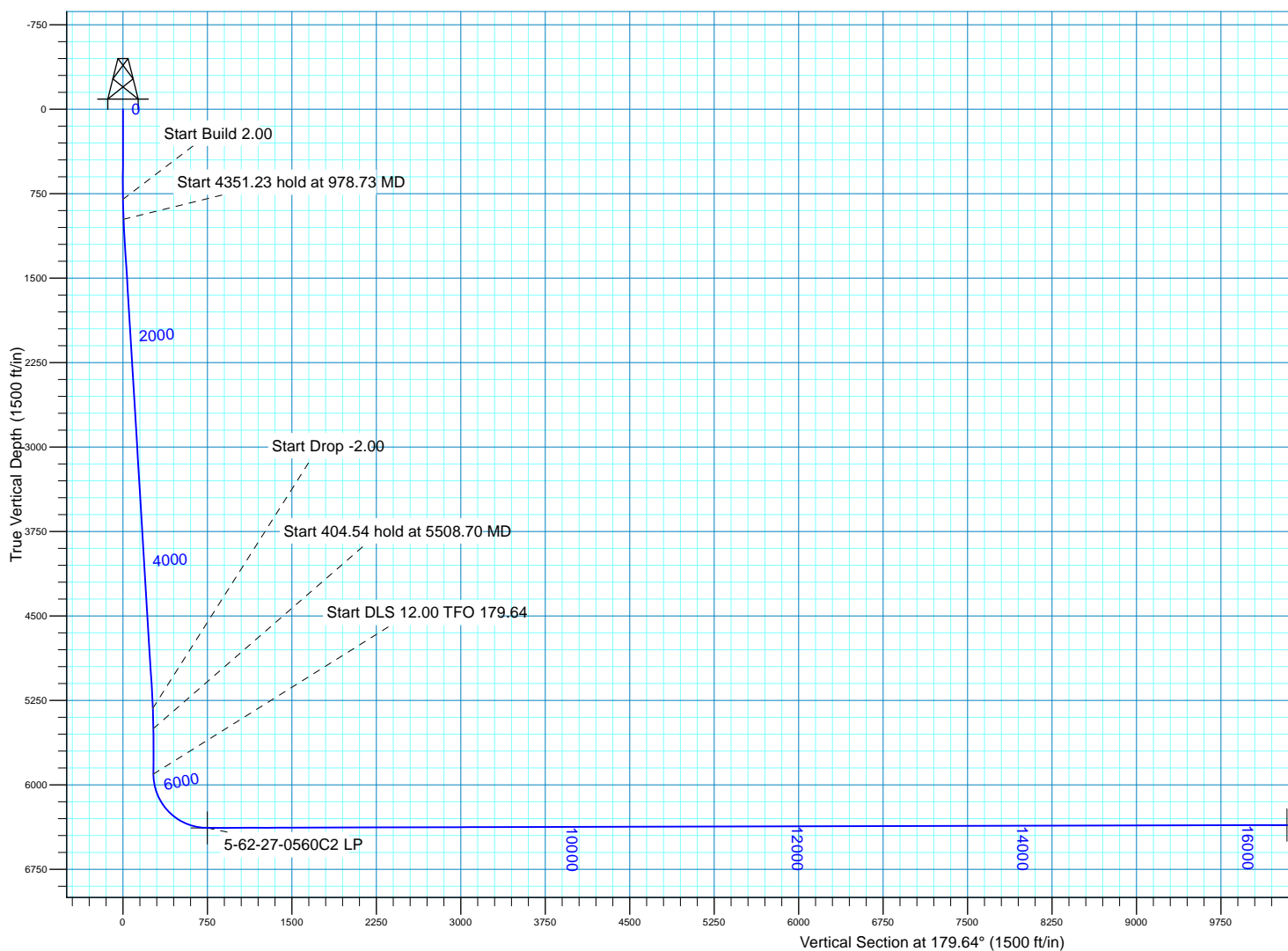
Created By: Seth Burstad Date: 11-11-2015

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
978.73	3.57	163.12	978.62	-5.33	1.62	2.00	163.12	5.34
5329.97	3.57	163.12	5321.38	-264.95	80.37	0.00	0.00	265.45
5508.70	0.00	0.00	5500.00	-270.28	81.99	2.00	180.00	270.79
5913.24	0.00	0.00	5904.54	-270.28	81.99	0.00	0.00	270.79
6664.48	90.15	179.64	6382.00	-748.98	84.97	12.00	179.64	749.50
16251.48	90.15	179.64	6357.00	-10335.76	144.65	0.00	0.00	10336.46

WELL DETAILS: Anschutz State Fed 5-62-27-0560C2

		GL 4701' & KB 16' @ 4717.00ft		4701.00	Longitude
+N/-S	+E/-W	Northing	Easting	Latitude	
0.00	0.00	1383056.32	3331790.52	40° 22' 43.590 N	104° 18' 32.519 W





Bill Barrett Corp.

Weld County, CO NAD 83
Anschutz State 5-62-27_34 SWSE 22 Pad
Anschutz State Fed 5-62-27-0560C2

OH

Plan: Plan 1

Standard Planning Report

11 November, 2015



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560C2
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 5-62-27-0560C2	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 5-62-27-0560C2, 250' FSL 2430' FEL Sec 22 T5N R62W			
Well Position	+N/-S	-1.11 ft	Northing:	1,383,056.31 usft
	+E/-W	-30.09 ft	Easting:	3,331,790.52 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)	+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	
978.73	3.57	163.12	978.62	-5.33	1.62	2.00	2.00	0.00	163.12	
5,329.97	3.57	163.12	5,321.38	-264.95	80.37	0.00	0.00	0.00	0.00	
5,508.70	0.00	0.00	5,500.00	-270.28	81.99	2.00	-2.00	0.00	180.00	
5,913.24	0.00	0.00	5,904.54	-270.28	81.99	0.00	0.00	0.00	0.00	
6,664.48	90.15	179.64	6,382.00	-748.98	84.97	12.00	12.00	23.91	179.64	
16,251.47	90.15	179.64	6,357.00	-10,335.75	144.65	0.00	0.00	0.00	0.00	5-62-27-0560C2 PBH

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560C2
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 5-62-27-0560C2	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	163.12	899.98	-1.67	0.51	1.67	2.00	2.00	0.00
978.73	3.57	163.12	978.62	-5.33	1.62	5.34	2.00	2.00	0.00
Start 4351.23 hold at 978.73 MD									
1,000.00	3.57	163.12	999.84	-6.60	2.00	6.62	0.00	0.00	0.00
1,100.00	3.57	163.12	1,099.65	-12.57	3.81	12.59	0.00	0.00	0.00
1,200.00	3.57	163.12	1,199.45	-18.54	5.62	18.57	0.00	0.00	0.00
1,300.00	3.57	163.12	1,299.26	-24.50	7.43	24.55	0.00	0.00	0.00
1,400.00	3.57	163.12	1,399.06	-30.47	9.24	30.53	0.00	0.00	0.00
1,500.00	3.57	163.12	1,498.87	-36.43	11.05	36.50	0.00	0.00	0.00
1,600.00	3.57	163.12	1,598.68	-42.40	12.86	42.48	0.00	0.00	0.00
1,700.00	3.57	163.12	1,698.48	-48.37	14.67	48.46	0.00	0.00	0.00
1,800.00	3.57	163.12	1,798.29	-54.33	16.48	54.44	0.00	0.00	0.00
1,900.00	3.57	163.12	1,898.09	-60.30	18.29	60.41	0.00	0.00	0.00
2,000.00	3.57	163.12	1,997.90	-66.27	20.10	66.39	0.00	0.00	0.00
2,100.00	3.57	163.12	2,097.70	-72.23	21.91	72.37	0.00	0.00	0.00
2,200.00	3.57	163.12	2,197.51	-78.20	23.72	78.35	0.00	0.00	0.00
2,300.00	3.57	163.12	2,297.31	-84.17	25.53	84.32	0.00	0.00	0.00
2,400.00	3.57	163.12	2,397.12	-90.13	27.34	90.30	0.00	0.00	0.00
2,500.00	3.57	163.12	2,496.92	-96.10	29.15	96.28	0.00	0.00	0.00
2,600.00	3.57	163.12	2,596.73	-102.07	30.96	102.26	0.00	0.00	0.00
2,700.00	3.57	163.12	2,696.54	-108.03	32.77	108.24	0.00	0.00	0.00
2,800.00	3.57	163.12	2,796.34	-114.00	34.58	114.21	0.00	0.00	0.00
2,900.00	3.57	163.12	2,896.15	-119.96	36.39	120.19	0.00	0.00	0.00
3,000.00	3.57	163.12	2,995.95	-125.93	38.20	126.17	0.00	0.00	0.00
3,100.00	3.57	163.12	3,095.76	-131.90	40.01	132.15	0.00	0.00	0.00
3,200.00	3.57	163.12	3,195.56	-137.86	41.82	138.12	0.00	0.00	0.00
3,300.00	3.57	163.12	3,295.37	-143.83	43.63	144.10	0.00	0.00	0.00
3,400.00	3.57	163.12	3,395.17	-149.80	45.44	150.08	0.00	0.00	0.00
3,500.00	3.57	163.12	3,494.98	-155.76	47.25	156.06	0.00	0.00	0.00
3,600.00	3.57	163.12	3,594.78	-161.73	49.06	162.03	0.00	0.00	0.00
3,700.00	3.57	163.12	3,694.59	-167.70	50.87	168.01	0.00	0.00	0.00
3,800.00	3.57	163.12	3,794.40	-173.66	52.68	173.99	0.00	0.00	0.00
3,900.00	3.57	163.12	3,894.20	-179.63	54.49	179.97	0.00	0.00	0.00
4,000.00	3.57	163.12	3,994.01	-185.60	56.30	185.95	0.00	0.00	0.00
4,100.00	3.57	163.12	4,093.81	-191.56	58.11	191.92	0.00	0.00	0.00
4,200.00	3.57	163.12	4,193.62	-197.53	59.92	197.90	0.00	0.00	0.00
4,300.00	3.57	163.12	4,293.42	-203.49	61.73	203.88	0.00	0.00	0.00
4,400.00	3.57	163.12	4,393.23	-209.46	63.54	209.86	0.00	0.00	0.00
4,500.00	3.57	163.12	4,493.03	-215.43	65.35	215.83	0.00	0.00	0.00
4,600.00	3.57	163.12	4,592.84	-221.39	67.16	221.81	0.00	0.00	0.00
4,700.00	3.57	163.12	4,692.64	-227.36	68.97	227.79	0.00	0.00	0.00
4,724.40	3.57	163.12	4,717.00	-228.82	69.41	229.25	0.00	0.00	0.00
BASE OF FOX HILLS									

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560C2
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 5-62-27-0560C2	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	3.57	163.12	4,792.45	-233.33	70.78	233.77	0.00	0.00	0.00
4,900.00	3.57	163.12	4,892.26	-239.29	72.59	239.74	0.00	0.00	0.00
5,000.00	3.57	163.12	4,992.06	-245.26	74.40	245.72	0.00	0.00	0.00
5,100.00	3.57	163.12	5,091.87	-251.23	76.21	251.70	0.00	0.00	0.00
5,200.00	3.57	163.12	5,191.67	-257.19	78.02	257.68	0.00	0.00	0.00
5,215.36	3.57	163.12	5,207.00	-258.11	78.30	258.60	0.00	0.00	0.00
SHANNON									
5,300.00	3.57	163.12	5,291.48	-263.16	79.83	263.65	0.00	0.00	0.00
5,329.97	3.57	163.12	5,321.38	-264.95	80.37	265.45	0.00	0.00	0.00
Start Drop -2.00									
5,400.00	2.17	163.12	5,391.33	-268.31	81.39	268.81	2.00	-2.00	0.00
5,500.00	0.17	163.12	5,491.30	-270.27	81.99	270.78	2.00	-2.00	0.00
5,508.70	0.00	0.00	5,500.00	-270.28	81.99	270.79	2.00	-2.00	0.00
Start 404.54 hold at 5508.70 MD									
5,600.00	0.00	0.00	5,591.30	-270.28	81.99	270.79	0.00	0.00	0.00
5,700.00	0.00	0.00	5,691.30	-270.28	81.99	270.79	0.00	0.00	0.00
5,800.00	0.00	0.00	5,791.30	-270.28	81.99	270.79	0.00	0.00	0.00
5,900.00	0.00	0.00	5,891.30	-270.28	81.99	270.79	0.00	0.00	0.00
5,913.24	0.00	0.00	5,904.54	-270.28	81.99	270.79	0.00	0.00	0.00
Start DLS 12.00 TFO 179.64									
6,000.00	10.41	179.64	5,990.83	-278.14	82.04	278.65	12.00	12.00	0.00
6,084.34	20.53	179.64	6,072.00	-300.61	82.18	301.12	12.00	12.00	0.00
SHARON SPRINGS									
6,100.00	22.41	179.64	6,086.58	-306.34	82.21	306.85	12.00	12.00	0.00
6,197.13	34.07	179.64	6,172.00	-352.22	82.50	352.73	12.00	12.00	0.00
NIORARA									
6,200.00	34.41	179.64	6,174.37	-353.83	82.51	354.35	12.00	12.00	0.00
6,300.00	46.41	179.64	6,250.37	-418.54	82.91	419.05	12.00	12.00	0.00
6,400.00	58.41	179.64	6,311.26	-497.64	83.41	498.15	12.00	12.00	0.00
6,500.00	70.41	179.64	6,354.37	-587.66	83.97	588.18	12.00	12.00	0.00
6,508.03	71.38	179.64	6,357.00	-595.25	84.01	595.77	12.00	12.00	0.00
TOP C CHALK TARGET - TD (HORIZONTAL)									
6,600.00	82.41	179.64	6,377.82	-684.68	84.57	685.20	12.00	12.00	0.00
6,661.09	89.74	179.64	6,382.00	-745.59	84.95	746.11	12.00	12.00	0.00
LANDING POINT									
6,664.48	90.15	179.64	6,382.00	-748.98	84.97	749.50	12.00	12.00	0.00
Start 9587.00 hold at 6664.48 MD									
6,700.00	90.15	179.64	6,381.91	-784.50	85.19	785.02	0.00	0.00	0.00
6,800.00	90.15	179.64	6,381.65	-884.49	85.81	885.02	0.00	0.00	0.00
6,900.00	90.15	179.64	6,381.39	-984.49	86.44	985.02	0.00	0.00	0.00
7,000.00	90.15	179.64	6,381.13	-1,084.49	87.06	1,085.02	0.00	0.00	0.00
7,100.00	90.15	179.64	6,380.87	-1,184.49	87.68	1,185.02	0.00	0.00	0.00
7,200.00	90.15	179.64	6,380.61	-1,284.49	88.30	1,285.02	0.00	0.00	0.00
7,300.00	90.15	179.64	6,380.35	-1,384.48	88.93	1,385.01	0.00	0.00	0.00
7,400.00	90.15	179.64	6,380.09	-1,484.48	89.55	1,485.01	0.00	0.00	0.00
7,500.00	90.15	179.64	6,379.82	-1,584.48	90.17	1,585.01	0.00	0.00	0.00
7,600.00	90.15	179.64	6,379.56	-1,684.48	90.79	1,685.01	0.00	0.00	0.00
7,700.00	90.15	179.64	6,379.30	-1,784.47	91.42	1,785.01	0.00	0.00	0.00
7,800.00	90.15	179.64	6,379.04	-1,884.47	92.04	1,885.01	0.00	0.00	0.00
7,900.00	90.15	179.64	6,378.78	-1,984.47	92.66	1,985.01	0.00	0.00	0.00
8,000.00	90.15	179.64	6,378.52	-2,084.47	93.28	2,085.01	0.00	0.00	0.00
8,100.00	90.15	179.64	6,378.26	-2,184.47	93.91	2,185.01	0.00	0.00	0.00
8,200.00	90.15	179.64	6,378.00	-2,284.46	94.53	2,285.01	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560C2
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 5-62-27-0560C2	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)
8,300.00	90.15	179.64	6,377.74	-2,384.46	95.15	2,385.01	0.00	0.00	0.00
8,400.00	90.15	179.64	6,377.48	-2,484.46	95.77	2,485.01	0.00	0.00	0.00
8,500.00	90.15	179.64	6,377.22	-2,584.46	96.40	2,585.01	0.00	0.00	0.00
8,600.00	90.15	179.64	6,376.96	-2,684.45	97.02	2,685.01	0.00	0.00	0.00
8,700.00	90.15	179.64	6,376.69	-2,784.45	97.64	2,785.01	0.00	0.00	0.00
8,800.00	90.15	179.64	6,376.43	-2,884.45	98.26	2,885.01	0.00	0.00	0.00
8,900.00	90.15	179.64	6,376.17	-2,984.45	98.89	2,985.01	0.00	0.00	0.00
9,000.00	90.15	179.64	6,375.91	-3,084.44	99.51	3,085.01	0.00	0.00	0.00
9,100.00	90.15	179.64	6,375.65	-3,184.44	100.13	3,185.01	0.00	0.00	0.00
9,200.00	90.15	179.64	6,375.39	-3,284.44	100.75	3,285.01	0.00	0.00	0.00
9,300.00	90.15	179.64	6,375.13	-3,384.44	101.38	3,385.01	0.00	0.00	0.00
9,400.00	90.15	179.64	6,374.87	-3,484.44	102.00	3,485.01	0.00	0.00	0.00
9,500.00	90.15	179.64	6,374.61	-3,584.43	102.62	3,585.01	0.00	0.00	0.00
9,600.00	90.15	179.64	6,374.35	-3,684.43	103.24	3,685.01	0.00	0.00	0.00
9,700.00	90.15	179.64	6,374.09	-3,784.43	103.87	3,785.01	0.00	0.00	0.00
9,800.00	90.15	179.64	6,373.83	-3,884.43	104.49	3,885.01	0.00	0.00	0.00
9,900.00	90.15	179.64	6,373.57	-3,984.42	105.11	3,985.01	0.00	0.00	0.00
10,000.00	90.15	179.64	6,373.30	-4,084.42	105.74	4,085.01	0.00	0.00	0.00
10,100.00	90.15	179.64	6,373.04	-4,184.42	106.36	4,185.01	0.00	0.00	0.00
10,200.00	90.15	179.64	6,372.78	-4,284.42	106.98	4,285.01	0.00	0.00	0.00
10,300.00	90.15	179.64	6,372.52	-4,384.42	107.60	4,385.00	0.00	0.00	0.00
10,400.00	90.15	179.64	6,372.26	-4,484.41	108.23	4,485.00	0.00	0.00	0.00
10,500.00	90.15	179.64	6,372.00	-4,584.41	108.85	4,585.00	0.00	0.00	0.00
10,600.00	90.15	179.64	6,371.74	-4,684.41	109.47	4,685.00	0.00	0.00	0.00
10,700.00	90.15	179.64	6,371.48	-4,784.41	110.09	4,785.00	0.00	0.00	0.00
10,800.00	90.15	179.64	6,371.22	-4,884.40	110.72	4,885.00	0.00	0.00	0.00
10,900.00	90.15	179.64	6,370.96	-4,984.40	111.34	4,985.00	0.00	0.00	0.00
11,000.00	90.15	179.64	6,370.70	-5,084.40	111.96	5,085.00	0.00	0.00	0.00
11,100.00	90.15	179.64	6,370.44	-5,184.40	112.58	5,185.00	0.00	0.00	0.00
11,200.00	90.15	179.64	6,370.17	-5,284.39	113.21	5,285.00	0.00	0.00	0.00
11,300.00	90.15	179.64	6,369.91	-5,384.39	113.83	5,385.00	0.00	0.00	0.00
11,400.00	90.15	179.64	6,369.65	-5,484.39	114.45	5,485.00	0.00	0.00	0.00
11,500.00	90.15	179.64	6,369.39	-5,584.39	115.07	5,585.00	0.00	0.00	0.00
11,600.00	90.15	179.64	6,369.13	-5,684.39	115.70	5,685.00	0.00	0.00	0.00
11,700.00	90.15	179.64	6,368.87	-5,784.38	116.32	5,785.00	0.00	0.00	0.00
11,800.00	90.15	179.64	6,368.61	-5,884.38	116.94	5,885.00	0.00	0.00	0.00
11,900.00	90.15	179.64	6,368.35	-5,984.38	117.56	5,985.00	0.00	0.00	0.00
12,000.00	90.15	179.64	6,368.09	-6,084.38	118.19	6,085.00	0.00	0.00	0.00
12,100.00	90.15	179.64	6,367.83	-6,184.37	118.81	6,185.00	0.00	0.00	0.00
12,200.00	90.15	179.64	6,367.57	-6,284.37	119.43	6,285.00	0.00	0.00	0.00
12,300.00	90.15	179.64	6,367.31	-6,384.37	120.05	6,385.00	0.00	0.00	0.00
12,400.00	90.15	179.64	6,367.04	-6,484.37	120.68	6,485.00	0.00	0.00	0.00
12,500.00	90.15	179.64	6,366.78	-6,584.37	121.30	6,585.00	0.00	0.00	0.00
12,600.00	90.15	179.64	6,366.52	-6,684.36	121.92	6,685.00	0.00	0.00	0.00
12,700.00	90.15	179.64	6,366.26	-6,784.36	122.54	6,785.00	0.00	0.00	0.00
12,800.00	90.15	179.64	6,366.00	-6,884.36	123.17	6,885.00	0.00	0.00	0.00
12,900.00	90.15	179.64	6,365.74	-6,984.36	123.79	6,985.00	0.00	0.00	0.00
13,000.00	90.15	179.64	6,365.48	-7,084.35	124.41	7,085.00	0.00	0.00	0.00
13,100.00	90.15	179.64	6,365.22	-7,184.35	125.03	7,185.00	0.00	0.00	0.00
13,200.00	90.15	179.64	6,364.96	-7,284.35	125.66	7,284.99	0.00	0.00	0.00
13,300.00	90.15	179.64	6,364.70	-7,384.35	126.28	7,384.99	0.00	0.00	0.00
13,400.00	90.15	179.64	6,364.44	-7,484.34	126.90	7,484.99	0.00	0.00	0.00
13,500.00	90.15	179.64	6,364.18	-7,584.34	127.52	7,584.99	0.00	0.00	0.00
13,600.00	90.15	179.64	6,363.92	-7,684.34	128.15	7,684.99	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560C2
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 5-62-27-0560C2	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)	
13,700.00	90.15	179.64	6,363.65	-7,784.34	128.77	7,784.99	0.00	0.00	0.00	
13,800.00	90.15	179.64	6,363.39	-7,884.34	129.39	7,884.99	0.00	0.00	0.00	
13,900.00	90.15	179.64	6,363.13	-7,984.33	130.01	7,984.99	0.00	0.00	0.00	
14,000.00	90.15	179.64	6,362.87	-8,084.33	130.64	8,084.99	0.00	0.00	0.00	
14,100.00	90.15	179.64	6,362.61	-8,184.33	131.26	8,184.99	0.00	0.00	0.00	
14,200.00	90.15	179.64	6,362.35	-8,284.33	131.88	8,284.99	0.00	0.00	0.00	
14,300.00	90.15	179.64	6,362.09	-8,384.32	132.50	8,384.99	0.00	0.00	0.00	
14,400.00	90.15	179.64	6,361.83	-8,484.32	133.13	8,484.99	0.00	0.00	0.00	
14,500.00	90.15	179.64	6,361.57	-8,584.32	133.75	8,584.99	0.00	0.00	0.00	
14,600.00	90.15	179.64	6,361.31	-8,684.32	134.37	8,684.99	0.00	0.00	0.00	
14,700.00	90.15	179.64	6,361.05	-8,784.32	134.99	8,784.99	0.00	0.00	0.00	
14,800.00	90.15	179.64	6,360.79	-8,884.31	135.62	8,884.99	0.00	0.00	0.00	
14,900.00	90.15	179.64	6,360.52	-8,984.31	136.24	8,984.99	0.00	0.00	0.00	
15,000.00	90.15	179.64	6,360.26	-9,084.31	136.86	9,084.99	0.00	0.00	0.00	
15,100.00	90.15	179.64	6,360.00	-9,184.31	137.48	9,184.99	0.00	0.00	0.00	
15,200.00	90.15	179.64	6,359.74	-9,284.30	138.11	9,284.99	0.00	0.00	0.00	
15,300.00	90.15	179.64	6,359.48	-9,384.30	138.73	9,384.99	0.00	0.00	0.00	
15,400.00	90.15	179.64	6,359.22	-9,484.30	139.35	9,484.99	0.00	0.00	0.00	
15,500.00	90.15	179.64	6,358.96	-9,584.30	139.97	9,584.99	0.00	0.00	0.00	
15,600.00	90.15	179.64	6,358.70	-9,684.29	140.60	9,684.99	0.00	0.00	0.00	
15,700.00	90.15	179.64	6,358.44	-9,784.29	141.22	9,784.99	0.00	0.00	0.00	
15,800.00	90.15	179.64	6,358.18	-9,884.29	141.84	9,884.99	0.00	0.00	0.00	
15,900.00	90.15	179.64	6,357.92	-9,984.29	142.46	9,984.99	0.00	0.00	0.00	
16,000.00	90.15	179.64	6,357.66	-10,084.29	143.09	10,084.99	0.00	0.00	0.00	
16,100.00	90.15	179.64	6,357.40	-10,184.28	143.71	10,184.99	0.00	0.00	0.00	
16,200.00	90.15	179.64	6,357.13	-10,284.28	144.33	10,284.98	0.00	0.00	0.00	
16,251.47	90.15	179.64	6,357.00	-10,335.75	144.65	10,336.46	0.00	0.00	0.00	
TD at 16251.49										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
5-62-27-0560C2 PBHL	0.00	0.00	6,357.00	-10,335.75	144.65	1,372,723.46	3,332,073.97	40° 21' 1.451 N	104° 18' 30.650 W	
- hit/miss target										
- Shape										
- Point										
5-62-27-0560C2 LP	0.00	0.00	6,382.00	-748.97	84.98	1,382,308.55	3,331,885.55	40° 22' 36.188 N	104° 18' 31.421 W	
- plan misses target center by 0.01ft at 6664.47ft MD (6382.00 TVD, -748.97 N, 84.97 E)										
- Point										

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz State Fed 5-62-27-0560C2
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 5-62-27-0560C2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,724.40	4,717.00	BASE OF FOX HILLS		0.00	
5,215.36	5,207.00	SHANNON		0.00	
6,084.34	6,072.00	SHARON SPRINGS		0.00	
6,197.13	6,172.00	NIOBRARA		0.00	
6,508.03	6,357.00	TOP C CHALK TARGET		0.00	
6,508.03	6,357.00	TD (HORIZONTAL)		0.00	
6,661.09	6,382.00	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	
978.73	978.62	-5.33	1.62	Start 4351.23 hold at 978.73 MD	
5,329.97	5,321.38	-264.95	80.37	Start Drop -2.00	
5,508.70	5,500.00	-270.28	81.99	Start 404.54 hold at 5508.70 MD	
5,913.24	5,904.54	-270.28	81.99	Start DLS 12.00 TFO 179.64	
6,664.48	6,382.00	-748.98	84.97	Start 9587.00 hold at 6664.48 MD	
16,251.47	6,357.00	-10,335.75	144.65	TD at 16251.49	