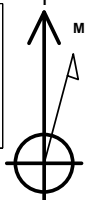


BRI Barrett Corporation

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: RSU Anschutz Fed 4-61-4 NW Pad
Well: RSU Anschutz Fed 4-61-05-0909CS
Wellbore: OH
Design: Plan 1



Azimuths to True North
Magnetic North: 8.22°

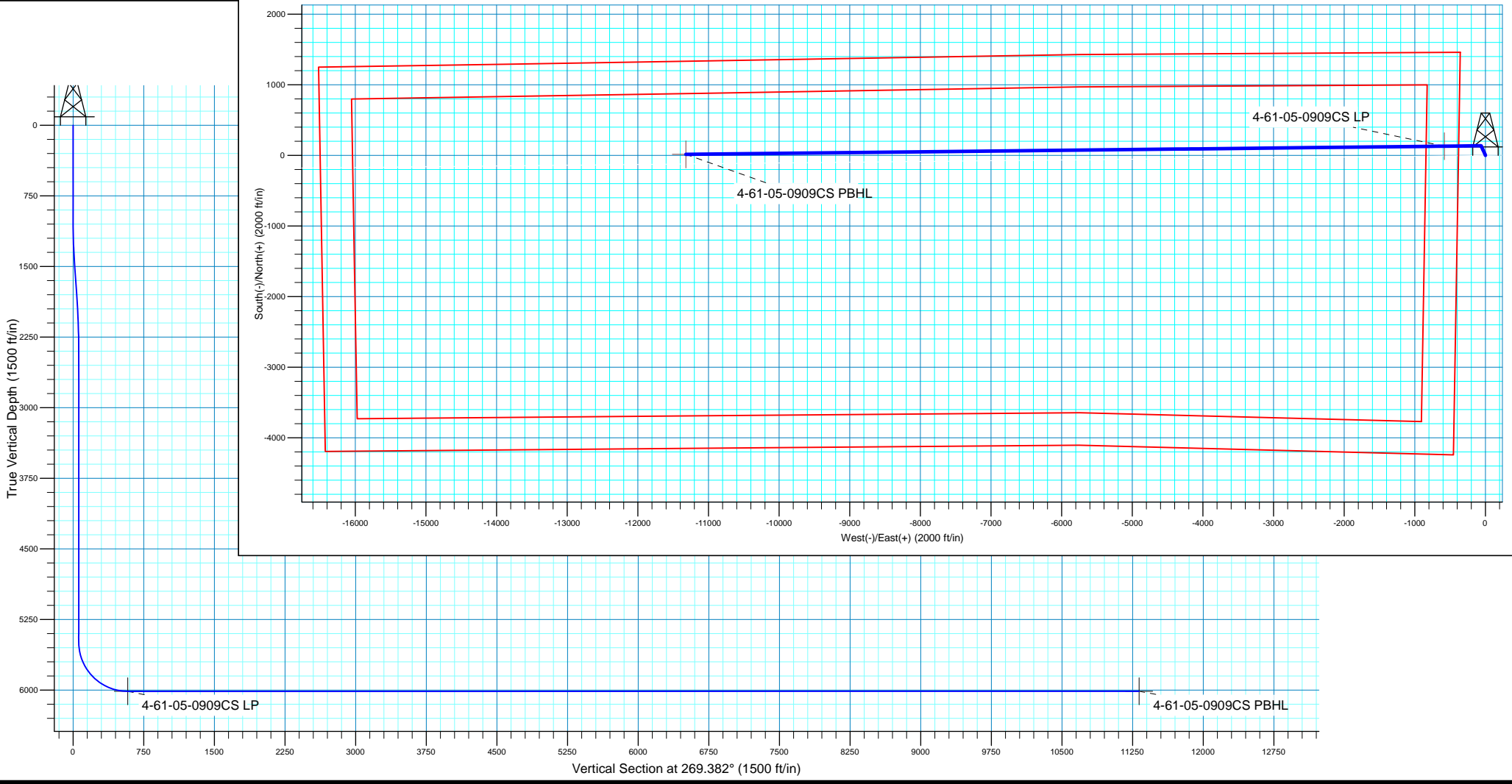
Magnetic Field
Strength: 52299.6nT
Dip Angle: 67.00°
Date: 2/12/2018
Model: HDGM



Plan: Plan 1 (RSU Anschutz Fed 4-61-05-0909CS/OH)

Created By: Seth Burstad

SECTION DETAILS									WELL DETAILS: RSU Anschutz Fed 4-61-05-0909CS							
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	GL 4501.5' & KB 20' @ 4521.50ft 4501.50							
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	+N/-S	+E/-W	Northing	Easting	Latitude			
1000.00	0.00	0.000	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1371438.40	3355586.31	40° 20' 45.521 N			
1490.89	9.82	335.545	1488.49	38.19	-17.37	2.00	335.54	16.96	Longitude							
1790.97	9.82	335.545	1784.18	84.77	-38.55	0.00	0.00	37.64	0.00	0.00						
2445.49	0.00	0.000	2435.50	135.69	-61.71	1.50	180.00	60.24								
5501.12	0.00	0.000	5491.13	135.69	-61.71	0.00	0.00	60.24								
6319.30	90.00	269.382	6012.00	130.07	-582.55	11.00	269.38	581.11								
17056.71	90.00	269.382	6012.00	14.27	-11319.34	0.00	0.00	11318.52								



The figure displays a wellbore diagram. On the left, a vertical axis represents True Vertical Depth (1500 ft/in), ranging from 0 to 6000. A blue line indicates the well path, which is vertical until approximately 5500 ft, then curves to the right. On the right, a plan view shows the well path (blue line) and the wellbore (red line) on a grid. The horizontal axis is labeled 'West(-)/East(+) (2000 ft/in)' and ranges from -16000 to 0. The vertical axis is labeled 'South(-)/North(+) (2000 ft/in)' and ranges from -4000 to 2000. The well path is labeled '4-61-05-0909CS LP' and the wellbore is labeled '4-61-05-0909CS PBHL'.



Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

RSU Anschutz Fed 4-61-4 NW Pad

RSU Anschutz Fed 4-61-05-0909CS

OH

Plan: Plan 1

Standard Planning Report

13 February, 2018



Scientific Drilling

www.scientificdrilling.com



Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-61-05-0909CS
Company:	Bill Barrett Corp.	TVD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Site:	RSU Anschutz Fed 4-61-4 NW Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-61-05-0909CS	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	RSU Anschutz Fed 4-61-4 NW Pad, Site Center : RSU Anschutz Fed 4-61-04-0808C				
Site Position:		Northing:	1,371,469.36 usft	Latitude:	40° 20' 45.852 N
From:	Lat/Long	Easting:	3,355,406.34 usft	Longitude:	104° 13' 29.543 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.82

Well	RSU Anschutz Fed 4-61-05-0909CS, 1462' FNL 385' FWL Sec 4 T4N R61W					
Well Position	+N/-S	-33.53 ft	Northing:	1,371,438.41 usft	Latitude:	40° 20' 45.521 N
	+E/-W	179.50 ft	Easting:	3,355,586.30 usft	Longitude:	104° 13' 27.224 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,501.50 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	2/12/2018	8.22	67.00	52,300

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	269.382

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	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,490.89	9.82	335.545	1,488.49	38.19	-17.37	2.00	2.00	0.00	335.54	
1,790.97	9.82	335.545	1,784.18	84.77	-38.55	0.00	0.00	0.00	0.00	
2,445.49	0.00	0.000	2,435.50	135.69	-61.71	1.50	-1.50	0.00	180.00	
5,501.12	0.00	0.000	5,491.13	135.69	-61.71	0.00	0.00	0.00	0.00	
6,319.30	90.00	269.382	6,012.00	130.07	-582.55	11.00	11.00	-11.08	269.38	
17,056.71	90.00	269.382	6,012.00	14.27	-11,319.34	0.00	0.00	0.00	0.00	4-61-05-0909CS PBH

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-61-05-0909CS
Company:	Bill Barrett Corp.	TVD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Site:	RSU Anschutz Fed 4-61-4 NW Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-61-05-0909CS	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	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,100.00	2.00	335.545	1,099.98	1.59	-0.72	0.71	2.00	2.00	0.00
1,200.00	4.00	335.545	1,199.84	6.35	-2.89	2.82	2.00	2.00	0.00
1,300.00	6.00	335.545	1,299.45	14.29	-6.50	6.34	2.00	2.00	0.00
1,400.00	8.00	335.545	1,398.70	25.38	-11.54	11.27	2.00	2.00	0.00
1,490.89	9.82	335.545	1,488.49	38.19	-17.37	16.96	2.00	2.00	0.00
Start 300.08 hold at 1490.89 MD									
1,500.00	9.82	335.545	1,497.47	39.60	-18.01	17.58	0.00	0.00	0.00
1,600.00	9.82	335.545	1,596.00	55.13	-25.07	24.47	0.00	0.00	0.00
1,700.00	9.82	335.545	1,694.54	70.65	-32.13	31.37	0.00	0.00	0.00
1,790.97	9.82	335.545	1,784.18	84.77	-38.55	37.64	0.00	0.00	0.00
Start Drop -1.50									
1,800.00	9.68	335.545	1,793.08	86.16	-39.18	38.25	1.50	-1.50	0.00
1,900.00	8.18	335.545	1,891.86	100.29	-45.61	44.53	1.50	-1.50	0.00
2,000.00	6.68	335.545	1,991.02	112.07	-50.97	49.76	1.50	-1.50	0.00
2,100.00	5.18	335.545	2,090.48	121.48	-55.25	53.93	1.50	-1.50	0.00
2,200.00	3.68	335.545	2,190.18	128.51	-58.45	57.06	1.50	-1.50	0.00
2,300.00	2.18	335.545	2,290.04	133.17	-60.56	59.12	1.50	-1.50	0.00
2,400.00	0.68	335.545	2,390.01	135.44	-61.60	60.13	1.50	-1.50	0.00
2,445.49	0.00	0.000	2,435.50	135.69	-61.71	60.24	1.50	-1.50	0.00
Start 3055.63 hold at 2445.49 MD									
2,500.00	0.00	0.000	2,490.01	135.69	-61.71	60.24	0.00	0.00	0.00
2,600.00	0.00	0.000	2,590.01	135.69	-61.71	60.24	0.00	0.00	0.00
2,700.00	0.00	0.000	2,690.01	135.69	-61.71	60.24	0.00	0.00	0.00
2,800.00	0.00	0.000	2,790.01	135.69	-61.71	60.24	0.00	0.00	0.00
2,900.00	0.00	0.000	2,890.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,000.00	0.00	0.000	2,990.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,100.00	0.00	0.000	3,090.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,200.00	0.00	0.000	3,190.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,300.00	0.00	0.000	3,290.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,400.00	0.00	0.000	3,390.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,500.00	0.00	0.000	3,490.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,600.00	0.00	0.000	3,590.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,700.00	0.00	0.000	3,690.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,800.00	0.00	0.000	3,790.01	135.69	-61.71	60.24	0.00	0.00	0.00
3,900.00	0.00	0.000	3,890.01	135.69	-61.71	60.24	0.00	0.00	0.00
4,000.00	0.00	0.000	3,990.01	135.69	-61.71	60.24	0.00	0.00	0.00
4,100.00	0.00	0.000	4,090.01	135.69	-61.71	60.24	0.00	0.00	0.00
4,200.00	0.00	0.000	4,190.01	135.69	-61.71	60.24	0.00	0.00	0.00
4,300.00	0.00	0.000	4,290.01	135.69	-61.71	60.24	0.00	0.00	0.00
4,400.00	0.00	0.000	4,390.01	135.69	-61.71	60.24	0.00	0.00	0.00
4,500.00	0.00	0.000	4,490.01	135.69	-61.71	60.24	0.00	0.00	0.00
4,600.00	0.00	0.000	4,590.01	135.69	-61.71	60.24	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-61-05-0909CS
Company:	Bill Barrett Corp.	TVD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Site:	RSU Anschutz Fed 4-61-4 NW Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-61-05-0909CS	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)
4,700.00	0.00	0.000	4,690.01	135.69	-61.71	60.24	0.00	0.00	0.00
4,800.00	0.00	0.000	4,790.01	135.69	-61.71	60.24	0.00	0.00	0.00
4,900.00	0.00	0.000	4,890.01	135.69	-61.71	60.24	0.00	0.00	0.00
5,000.00	0.00	0.000	4,990.01	135.69	-61.71	60.24	0.00	0.00	0.00
5,100.00	0.00	0.000	5,090.01	135.69	-61.71	60.24	0.00	0.00	0.00
5,200.00	0.00	0.000	5,190.01	135.69	-61.71	60.24	0.00	0.00	0.00
5,300.00	0.00	0.000	5,290.01	135.69	-61.71	60.24	0.00	0.00	0.00
5,400.00	0.00	0.000	5,390.01	135.69	-61.71	60.24	0.00	0.00	0.00
5,500.00	0.00	0.000	5,490.01	135.69	-61.71	60.24	0.00	0.00	0.00
5,501.12	0.00	0.000	5,491.13	135.69	-61.71	60.24	0.00	0.00	0.00
Start DLS 11.00 TFO 269.38									
5,600.00	10.88	269.382	5,589.42	135.59	-71.07	69.60	11.00	11.00	0.00
5,700.00	21.88	269.382	5,685.21	135.29	-99.22	97.75	11.00	11.00	0.00
5,800.00	32.88	269.382	5,773.88	134.79	-145.13	143.66	11.00	11.00	0.00
5,900.00	43.88	269.382	5,852.15	134.12	-207.11	205.65	11.00	11.00	0.00
6,000.00	54.88	269.382	5,917.16	133.30	-282.89	281.44	11.00	11.00	0.00
6,100.00	65.88	269.382	5,966.51	132.37	-369.68	368.23	11.00	11.00	0.00
6,200.00	76.88	269.382	5,998.40	131.35	-464.29	462.85	11.00	11.00	0.00
6,300.00	87.88	269.382	6,011.64	130.28	-563.25	561.81	11.00	11.00	0.00
6,319.30	90.00	269.382	6,012.00	130.07	-582.55	581.11	11.00	11.00	0.00
Start 10737.41 hold at 6319.30 MD									
6,400.00	90.00	269.382	6,012.00	129.20	-663.24	661.81	0.00	0.00	0.00
6,500.00	90.00	269.382	6,012.00	128.12	-763.24	761.81	0.00	0.00	0.00
6,600.00	90.00	269.382	6,012.00	127.04	-863.23	861.81	0.00	0.00	0.00
6,700.00	90.00	269.382	6,012.00	125.97	-963.22	961.81	0.00	0.00	0.00
6,800.00	90.00	269.382	6,012.00	124.89	-1,063.22	1,061.81	0.00	0.00	0.00
6,900.00	90.00	269.382	6,012.00	123.81	-1,163.21	1,161.81	0.00	0.00	0.00
7,000.00	90.00	269.382	6,012.00	122.73	-1,263.21	1,261.81	0.00	0.00	0.00
7,100.00	90.00	269.382	6,012.00	121.65	-1,363.20	1,361.81	0.00	0.00	0.00
7,200.00	90.00	269.382	6,012.00	120.57	-1,463.20	1,461.81	0.00	0.00	0.00
7,300.00	90.00	269.382	6,012.00	119.50	-1,563.19	1,561.81	0.00	0.00	0.00
7,400.00	90.00	269.382	6,012.00	118.42	-1,663.18	1,661.81	0.00	0.00	0.00
7,500.00	90.00	269.382	6,012.00	117.34	-1,763.18	1,761.81	0.00	0.00	0.00
7,600.00	90.00	269.382	6,012.00	116.26	-1,863.17	1,861.81	0.00	0.00	0.00
7,700.00	90.00	269.382	6,012.00	115.18	-1,963.17	1,961.81	0.00	0.00	0.00
7,800.00	90.00	269.382	6,012.00	114.10	-2,063.16	2,061.81	0.00	0.00	0.00
7,900.00	90.00	269.382	6,012.00	113.02	-2,163.15	2,161.81	0.00	0.00	0.00
8,000.00	90.00	269.382	6,012.00	111.95	-2,263.15	2,261.81	0.00	0.00	0.00
8,100.00	90.00	269.382	6,012.00	110.87	-2,363.14	2,361.81	0.00	0.00	0.00
8,200.00	90.00	269.382	6,012.00	109.79	-2,463.14	2,461.81	0.00	0.00	0.00
8,300.00	90.00	269.382	6,012.00	108.71	-2,563.13	2,561.81	0.00	0.00	0.00
8,400.00	90.00	269.382	6,012.00	107.63	-2,663.13	2,661.81	0.00	0.00	0.00
8,500.00	90.00	269.382	6,012.00	106.55	-2,763.12	2,761.81	0.00	0.00	0.00
8,600.00	90.00	269.382	6,012.00	105.47	-2,863.11	2,861.81	0.00	0.00	0.00
8,700.00	90.00	269.382	6,012.00	104.40	-2,963.11	2,961.81	0.00	0.00	0.00
8,800.00	90.00	269.382	6,012.00	103.32	-3,063.10	3,061.81	0.00	0.00	0.00
8,900.00	90.00	269.382	6,012.00	102.24	-3,163.10	3,161.81	0.00	0.00	0.00
9,000.00	90.00	269.382	6,012.00	101.16	-3,263.09	3,261.81	0.00	0.00	0.00
9,100.00	90.00	269.382	6,012.00	100.08	-3,363.09	3,361.81	0.00	0.00	0.00
9,200.00	90.00	269.382	6,012.00	99.00	-3,463.08	3,461.81	0.00	0.00	0.00
9,300.00	90.00	269.382	6,012.00	97.92	-3,563.07	3,561.81	0.00	0.00	0.00
9,400.00	90.00	269.382	6,012.00	96.85	-3,663.07	3,661.81	0.00	0.00	0.00
9,500.00	90.00	269.382	6,012.00	95.77	-3,763.06	3,761.81	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-61-05-0909CS
Company:	Bill Barrett Corp.	TVD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Site:	RSU Anschutz Fed 4-61-4 NW Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-61-05-0909CS	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)	
9,600.00	90.00	269.382	6,012.00	94.69	-3,863.06	3,861.81	0.00	0.00	0.00	
9,700.00	90.00	269.382	6,012.00	93.61	-3,963.05	3,961.81	0.00	0.00	0.00	
9,800.00	90.00	269.382	6,012.00	92.53	-4,063.04	4,061.81	0.00	0.00	0.00	
9,900.00	90.00	269.382	6,012.00	91.45	-4,163.04	4,161.81	0.00	0.00	0.00	
10,000.00	90.00	269.382	6,012.00	90.37	-4,263.03	4,261.81	0.00	0.00	0.00	
10,100.00	90.00	269.382	6,012.00	89.30	-4,363.03	4,361.81	0.00	0.00	0.00	
10,200.00	90.00	269.382	6,012.00	88.22	-4,463.02	4,461.81	0.00	0.00	0.00	
10,300.00	90.00	269.382	6,012.00	87.14	-4,563.02	4,561.81	0.00	0.00	0.00	
10,400.00	90.00	269.382	6,012.00	86.06	-4,663.01	4,661.81	0.00	0.00	0.00	
10,500.00	90.00	269.382	6,012.00	84.98	-4,763.00	4,761.81	0.00	0.00	0.00	
10,600.00	90.00	269.382	6,012.00	83.90	-4,863.00	4,861.81	0.00	0.00	0.00	
10,700.00	90.00	269.382	6,012.00	82.82	-4,962.99	4,961.81	0.00	0.00	0.00	
10,800.00	90.00	269.382	6,012.00	81.75	-5,062.99	5,061.81	0.00	0.00	0.00	
10,900.00	90.00	269.382	6,012.00	80.67	-5,162.98	5,161.81	0.00	0.00	0.00	
11,000.00	90.00	269.382	6,012.00	79.59	-5,262.97	5,261.81	0.00	0.00	0.00	
11,100.00	90.00	269.382	6,012.00	78.51	-5,362.97	5,361.81	0.00	0.00	0.00	
11,200.00	90.00	269.382	6,012.00	77.43	-5,462.96	5,461.81	0.00	0.00	0.00	
11,300.00	90.00	269.382	6,012.00	76.35	-5,562.96	5,561.81	0.00	0.00	0.00	
11,400.00	90.00	269.382	6,012.00	75.28	-5,662.95	5,661.81	0.00	0.00	0.00	
11,500.00	90.00	269.382	6,012.00	74.20	-5,762.95	5,761.81	0.00	0.00	0.00	
11,600.00	90.00	269.382	6,012.00	73.12	-5,862.94	5,861.81	0.00	0.00	0.00	
11,700.00	90.00	269.382	6,012.00	72.04	-5,962.93	5,961.81	0.00	0.00	0.00	
11,800.00	90.00	269.382	6,012.00	70.96	-6,062.93	6,061.81	0.00	0.00	0.00	
11,900.00	90.00	269.382	6,012.00	69.88	-6,162.92	6,161.81	0.00	0.00	0.00	
12,000.00	90.00	269.382	6,012.00	68.80	-6,262.92	6,261.81	0.00	0.00	0.00	
12,100.00	90.00	269.382	6,012.00	67.73	-6,362.91	6,361.81	0.00	0.00	0.00	
12,200.00	90.00	269.382	6,012.00	66.65	-6,462.90	6,461.81	0.00	0.00	0.00	
12,300.00	90.00	269.382	6,012.00	65.57	-6,562.90	6,561.81	0.00	0.00	0.00	
12,400.00	90.00	269.382	6,012.00	64.49	-6,662.89	6,661.81	0.00	0.00	0.00	
12,500.00	90.00	269.382	6,012.00	63.41	-6,762.89	6,761.81	0.00	0.00	0.00	
12,600.00	90.00	269.382	6,012.00	62.33	-6,862.88	6,861.81	0.00	0.00	0.00	
12,700.00	90.00	269.382	6,012.00	61.25	-6,962.88	6,961.81	0.00	0.00	0.00	
12,800.00	90.00	269.382	6,012.00	60.18	-7,062.87	7,061.81	0.00	0.00	0.00	
12,900.00	90.00	269.382	6,012.00	59.10	-7,162.86	7,161.81	0.00	0.00	0.00	
13,000.00	90.00	269.382	6,012.00	58.02	-7,262.86	7,261.81	0.00	0.00	0.00	
13,100.00	90.00	269.382	6,012.00	56.94	-7,362.85	7,361.81	0.00	0.00	0.00	
13,200.00	90.00	269.382	6,012.00	55.86	-7,462.85	7,461.81	0.00	0.00	0.00	
13,300.00	90.00	269.382	6,012.00	54.78	-7,562.84	7,561.81	0.00	0.00	0.00	
13,400.00	90.00	269.382	6,012.00	53.70	-7,662.84	7,661.81	0.00	0.00	0.00	
13,500.00	90.00	269.382	6,012.00	52.63	-7,762.83	7,761.81	0.00	0.00	0.00	
13,600.00	90.00	269.382	6,012.00	51.55	-7,862.82	7,861.81	0.00	0.00	0.00	
13,700.00	90.00	269.382	6,012.00	50.47	-7,962.82	7,961.81	0.00	0.00	0.00	
13,800.00	90.00	269.382	6,012.00	49.39	-8,062.81	8,061.81	0.00	0.00	0.00	
13,900.00	90.00	269.382	6,012.00	48.31	-8,162.81	8,161.81	0.00	0.00	0.00	
14,000.00	90.00	269.382	6,012.00	47.23	-8,262.80	8,261.81	0.00	0.00	0.00	
14,100.00	90.00	269.382	6,012.00	46.15	-8,362.79	8,361.81	0.00	0.00	0.00	
14,200.00	90.00	269.382	6,012.00	45.08	-8,462.79	8,461.81	0.00	0.00	0.00	
14,300.00	90.00	269.382	6,012.00	44.00	-8,562.78	8,561.81	0.00	0.00	0.00	
14,400.00	90.00	269.382	6,012.00	42.92	-8,662.78	8,661.81	0.00	0.00	0.00	
14,500.00	90.00	269.382	6,012.00	41.84	-8,762.77	8,761.81	0.00	0.00	0.00	
14,600.00	90.00	269.382	6,012.00	40.76	-8,862.77	8,861.81	0.00	0.00	0.00	
14,700.00	90.00	269.382	6,012.00	39.68	-8,962.76	8,961.81	0.00	0.00	0.00	
14,800.00	90.00	269.382	6,012.00	38.61	-9,062.75	9,061.81	0.00	0.00	0.00	
14,900.00	90.00	269.382	6,012.00	37.53	-9,162.75	9,161.81	0.00	0.00	0.00	

Database:	Casper District	Local Co-ordinate Reference:	Well RSU Anschutz Fed 4-61-05-0909CS
Company:	Bill Barrett Corp.	TVD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4501.5' & KB 20' @ 4521.50ft
Site:	RSU Anschutz Fed 4-61-4 NW Pad	North Reference:	True
Well:	RSU Anschutz Fed 4-61-05-0909CS	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)	
15,000.00	90.00	269.382	6,012.00	36.45	-9,262.74	9,261.81	0.00	0.00	0.00	
15,100.00	90.00	269.382	6,012.00	35.37	-9,362.74	9,361.81	0.00	0.00	0.00	
15,200.00	90.00	269.382	6,012.00	34.29	-9,462.73	9,461.81	0.00	0.00	0.00	
15,300.00	90.00	269.382	6,012.00	33.21	-9,562.72	9,561.81	0.00	0.00	0.00	
15,400.00	90.00	269.382	6,012.00	32.13	-9,662.72	9,661.81	0.00	0.00	0.00	
15,500.00	90.00	269.382	6,012.00	31.06	-9,762.71	9,761.81	0.00	0.00	0.00	
15,600.00	90.00	269.382	6,012.00	29.98	-9,862.71	9,861.81	0.00	0.00	0.00	
15,700.00	90.00	269.382	6,012.00	28.90	-9,962.70	9,961.81	0.00	0.00	0.00	
15,800.00	90.00	269.382	6,012.00	27.82	-10,062.70	10,061.81	0.00	0.00	0.00	
15,900.00	90.00	269.382	6,012.00	26.74	-10,162.69	10,161.81	0.00	0.00	0.00	
16,000.00	90.00	269.382	6,012.00	25.66	-10,262.68	10,261.81	0.00	0.00	0.00	
16,100.00	90.00	269.382	6,012.00	24.58	-10,362.68	10,361.81	0.00	0.00	0.00	
16,200.00	90.00	269.382	6,012.00	23.51	-10,462.67	10,461.81	0.00	0.00	0.00	
16,300.00	90.00	269.382	6,012.00	22.43	-10,562.67	10,561.81	0.00	0.00	0.00	
16,400.00	90.00	269.382	6,012.00	21.35	-10,662.66	10,661.81	0.00	0.00	0.00	
16,500.00	90.00	269.382	6,012.00	20.27	-10,762.65	10,761.81	0.00	0.00	0.00	
16,600.00	90.00	269.382	6,012.00	19.19	-10,862.65	10,861.81	0.00	0.00	0.00	
16,700.00	90.00	269.382	6,012.00	18.11	-10,962.64	10,961.81	0.00	0.00	0.00	
16,800.00	90.00	269.382	6,012.00	17.03	-11,062.64	11,061.81	0.00	0.00	0.00	
16,900.00	90.00	269.382	6,012.00	15.96	-11,162.63	11,161.81	0.00	0.00	0.00	
17,000.00	90.00	269.382	6,012.00	14.88	-11,262.63	11,261.81	0.00	0.00	0.00	
17,056.71	90.00	269.382	6,012.00	14.27	-11,319.34	11,318.52	0.00	0.00	0.00	
TD at 17056.71										

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										
4-61-05-0909CS PBHL	0.00	0.000	6,012.00	14.27	-11,319.34	1,371,289.83	3,344,267.96	40° 20' 45.636 N	104° 15' 53.420 W	
- plan hits target center										
- Point										
4-61-05-0909CS LP	0.00	0.000	6,012.00	130.08	-582.55	1,371,560.09	3,355,001.95	40° 20' 46.806 N	104° 13' 34.748 W	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00	
1,490.89	1,488.49	38.19	-17.37	Start 300.08 hold at 1490.89 MD	
1,790.97	1,784.18	84.77	-38.55	Start Drop -1.50	
2,445.49	2,435.50	135.69	-61.71	Start 3055.63 hold at 2445.49 MD	
5,501.12	5,491.13	135.69	-61.71	Start DLS 11.00 TFO 269.38	
6,319.30	6,012.00	130.07	-582.55	Start 10737.41 hold at 6319.30 MD	
17,056.71	6,012.00	14.27	-11,319.34	TD at 17056.71	