



Project: Weld County, CO NAD 83  
Site: Anschutz-Williams 5-61-27 SWSW Pad  
Well: Anschutz-Williams 5-61-27-6457BN  
Wellbore: OH  
Design: OH

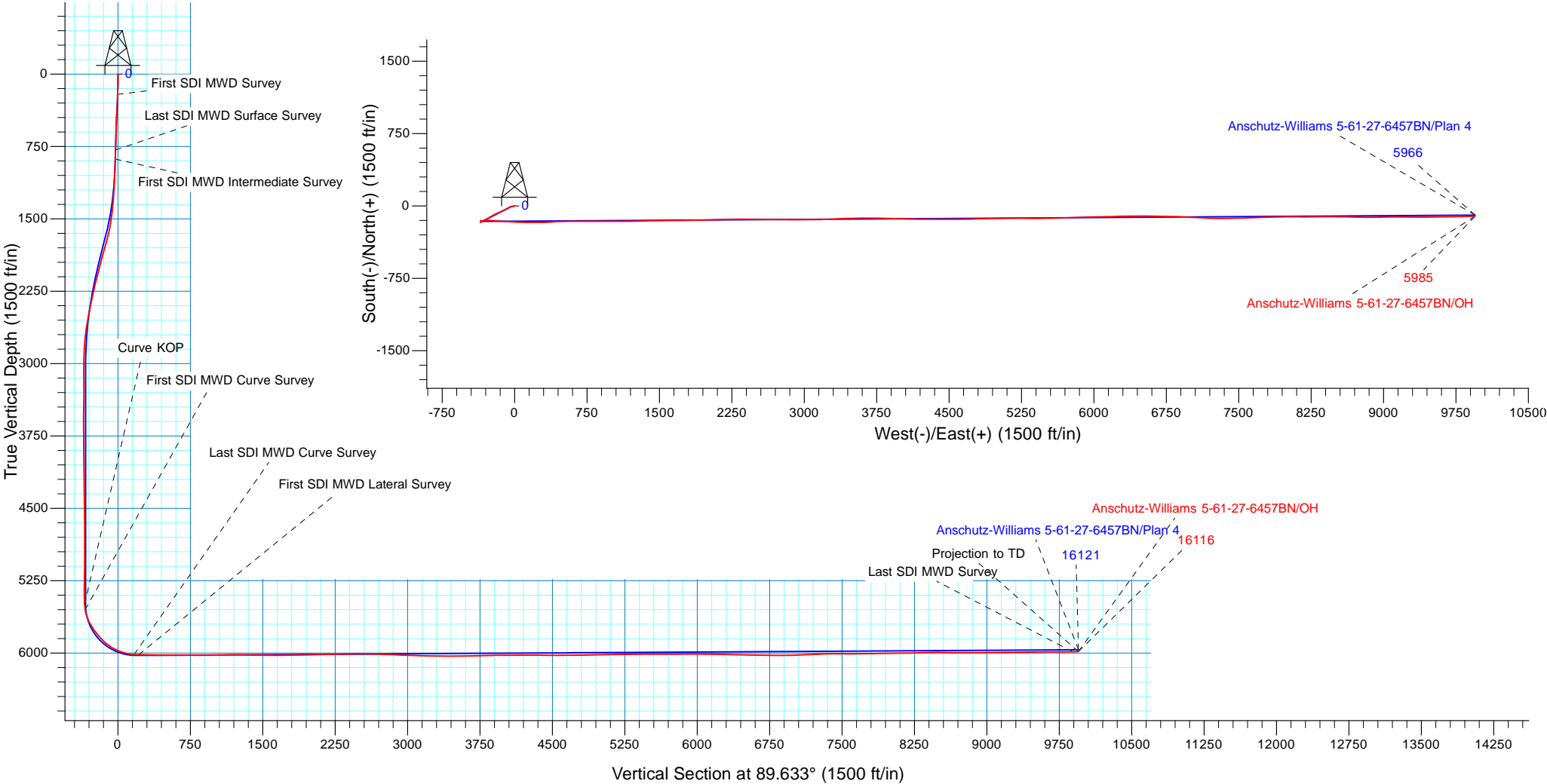


WELL DETAILS: Anschutz-Williams 5-61-27-6457BN			
GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)	4593.10		
Northing	Easting	Latitude	Longitude
1379060.93	3361240.21	40° 22' 0.029 N	104° 12' 12.769 W

Design: OH (Anschutz-Williams 5-61-27-6457BN/OH)	
Created By: Seth Burstad	Date: 12-28-2017

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

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
210.97	211.00	1.72	258.010	-0.66	-3.10	-3.10	3.17	First SDI MWD Survey	
786.49	787.00	1.94	257.750	-6.40	-25.71	-25.75	26.58	Last SDI MWD Surface Survey	
880.43	881.00	2.05	268.880	-6.77	-28.94	-28.99	29.85	First SDI MWD Intermediate Survey	
5498.70	5540.00	1.86	91.625	-158.99	-345.05	-346.07	434.64	Curve KOP	
5553.36	5595.00	9.89	80.483	-158.23	-339.49	-340.50	442.56	First SDI MWD Curve Survey	
6017.28	6331.00	88.19	88.790	-169.53	167.85	166.76	948.78	Last SDI MWD Curve Survey	
6018.22	6379.00	89.56	91.530	-169.66	215.83	214.74	996.77	First SDI MWD Lateral Survey	
5986.41	16058.00	91.64	89.480	-108.99	9890.52	9889.62	10674.07	Last SDI MWD Survey	
5984.75	16116.00	91.64	89.480	-108.46	9948.49	9947.59	10732.05	Projection to TD	





**Bill Barrett Corporation**

## **Bill Barrett Corp.**

Weld County, CO NAD 83

Anschutz-Williams 5-61-27 SWSW Pad

Anschutz-Williams 5-61-27-6457BN

OH

Design: OH

## **Standard Survey Report**

28 December, 2017



**Scientific Drilling**

[www.scientificdrilling.com](http://www.scientificdrilling.com)



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Anschutz-Williams 5-61-27-6457BN
<b>Project:</b>	Weld County, CO NAD 83	<b>TVD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Site:</b>	Anschutz-Williams 5-61-27 SWSW Pad	<b>MD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Well:</b>	Anschutz-Williams 5-61-27-6457BN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Casper District

<b>Project</b>	Weld County, CO NAD 83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site	Anschutz-Williams 5-61-27 SWSW Pad, Site Center : Anschutz-Williams 5-61-27-4956B				
Site Position:		Northing:	1,379,076.31 usft	Latitude:	40° 22' 0.181 N
From:	Lat/Long	Easting:	3,361,239.98 usft	Longitude:	104° 12' 12.769 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.84 °

Well	Anschutz-Williams 5-61-27-6457BN, 735' FSL 270' FWL Sec 27 T5N R61W					
Well Position	+N/-S	0.00 ft	Northing:	1,379,060.93 usft	Latitude:	40° 22' 0.029 N
	+E/-W	0.00 ft	Easting:	3,361,240.21 usft	Longitude:	104° 12' 12.769 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,593.10 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM	7/24/2017	8.27	67.03	52,361

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	89.633	

<b>Survey Program</b>	<b>Date</b>	12/28/2017			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
211.00	787.00	Survey #1 - Surface (OH)	OWSG MWD	OWSG MWD - Standard	
881.00	6,331.00	Survey #2 - Intermediate (OH)	OWSG MWD	OWSG MWD - Standard	
6,379.00	16,116.00	Survey #3 - Lateral (OH)	OWSG MWD	OWSG MWD - Standard	

<b>Survey</b>									
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211.00	1.72	258.010	210.97	-0.66	-3.10	-3.10	0.82	0.82	0.00
<b>First SDI MWD Survey</b>									
302.00	2.55	256.460	301.90	-1.42	-6.40	-6.41	0.91	0.91	-1.70
394.00	2.58	249.120	393.81	-2.63	-10.33	-10.34	0.36	0.03	-7.98
485.00	2.45	261.290	484.73	-3.66	-14.16	-14.19	0.60	-0.14	13.37
576.00	2.36	251.800	575.65	-4.54	-17.86	-17.89	0.45	-0.10	-10.43
667.00	2.20	254.470	666.57	-5.59	-21.33	-21.36	0.21	-0.18	2.93
759.00	2.13	263.790	758.51	-6.25	-24.73	-24.77	0.39	-0.08	10.13

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Anschutz-Williams 5-61-27-6457BN
<b>Project:</b>	Weld County, CO NAD 83	<b>TVD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Site:</b>	Anschutz-Williams 5-61-27 SWSW Pad	<b>MD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Well:</b>	Anschutz-Williams 5-61-27-6457BN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	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)	
787.00	1.94	257.750	786.49	-6.40	-25.71	-25.75	1.02	-0.68	-21.57	
<b>Last SDI MWD Surface Survey</b>										
881.00	2.05	268.880	880.43	-6.77	-28.94	-28.99	0.43	0.12	11.84	
<b>First SDI MWD Intermediate Survey</b>										
973.00	1.96	260.330	972.38	-7.07	-32.14	-32.19	0.34	-0.10	-9.29	
1,065.00	1.74	267.310	1,064.33	-7.40	-35.09	-35.13	0.34	-0.24	7.59	
1,155.00	3.22	246.060	1,154.24	-8.49	-38.76	-38.82	1.91	1.64	-23.61	
1,247.00	4.00	240.970	1,246.06	-11.10	-43.93	-44.00	0.92	0.85	-5.53	
1,338.00	5.17	244.000	1,336.77	-14.43	-50.39	-50.48	1.31	1.29	3.33	
1,429.00	8.34	238.930	1,427.13	-19.64	-59.73	-59.86	3.54	3.48	-5.57	
1,520.00	9.90	238.220	1,516.97	-27.17	-72.03	-72.21	1.72	1.71	-0.78	
1,612.00	12.71	240.230	1,607.18	-36.36	-87.55	-87.78	3.08	3.05	2.18	
1,703.00	15.74	246.570	1,695.38	-46.24	-107.57	-107.86	3.74	3.33	6.97	
1,795.00	17.09	249.080	1,783.63	-56.03	-131.64	-132.00	1.66	1.47	2.73	
1,886.00	16.98	247.400	1,870.64	-65.91	-156.40	-156.82	0.55	-0.12	-1.85	
1,977.00	16.28	245.230	1,957.84	-76.36	-180.25	-180.74	1.03	-0.77	-2.38	
2,069.00	15.65	242.540	2,046.29	-87.49	-202.97	-203.53	1.06	-0.68	-2.92	
2,160.00	15.19	241.660	2,134.01	-98.80	-224.36	-224.98	0.57	-0.51	-0.97	
2,251.00	14.93	239.890	2,221.89	-110.34	-244.99	-245.69	0.58	-0.29	-1.95	
2,343.00	14.13	239.640	2,310.94	-121.97	-264.93	-265.71	0.87	-0.87	-0.27	
2,436.00	13.22	240.800	2,401.31	-132.89	-284.01	-284.86	1.02	-0.98	1.25	
2,530.00	11.54	242.920	2,493.12	-142.42	-301.77	-302.67	1.85	-1.79	2.26	
2,623.00	9.79	247.780	2,584.51	-149.64	-317.37	-318.32	2.11	-1.88	5.23	
2,717.00	8.23	250.190	2,677.35	-154.94	-331.10	-332.08	1.71	-1.66	2.56	
2,811.00	6.63	247.180	2,770.56	-159.33	-342.43	-343.44	1.75	-1.70	-3.20	
2,905.00	3.11	220.940	2,864.21	-163.36	-349.11	-350.15	4.34	-3.74	-27.91	
3,000.00	2.27	213.120	2,959.11	-166.88	-351.82	-352.88	0.96	-0.88	-8.23	
3,094.00	0.09	218.700	3,053.08	-168.50	-352.89	-353.96	2.32	-2.32	5.94	
3,188.00	0.47	56.350	3,147.08	-168.35	-352.61	-353.68	0.59	0.40	-172.71	
3,281.00	0.64	4.630	3,240.08	-167.62	-352.25	-353.32	0.55	0.18	-55.61	
3,375.00	0.70	341.200	3,334.07	-166.55	-352.39	-353.45	0.30	0.06	-24.93	
3,469.00	0.94	310.420	3,428.06	-165.51	-353.17	-354.22	0.52	0.26	-32.74	
3,564.00	1.11	304.520	3,523.05	-164.48	-354.52	-355.56	0.21	0.18	-6.21	
3,657.00	0.93	29.110	3,616.04	-163.31	-354.89	-355.93	1.48	-0.19	90.96	
3,751.00	0.98	35.610	3,710.02	-161.99	-354.05	-355.08	0.13	0.05	6.91	
3,846.00	1.43	38.890	3,805.00	-160.41	-352.84	-353.86	0.48	0.47	3.45	
3,940.00	1.09	20.580	3,898.98	-158.66	-351.79	-352.80	0.56	-0.36	-19.48	
4,034.00	0.90	340.120	3,992.97	-157.13	-351.72	-352.72	0.76	-0.20	-43.04	
4,128.00	0.82	341.890	4,086.95	-155.79	-352.18	-353.17	0.09	-0.09	1.88	
4,223.00	2.59	26.140	4,181.91	-153.22	-351.45	-352.42	2.19	1.86	46.58	
4,317.00	2.38	101.890	4,275.85	-151.71	-348.60	-349.57	3.25	-0.22	80.59	
4,411.00	0.44	142.380	4,369.81	-152.40	-346.47	-347.44	2.20	-2.06	43.07	
4,505.00	0.42	139.260	4,463.81	-152.95	-346.03	-347.00	0.03	-0.02	-3.32	
4,599.00	0.36	85.410	4,557.81	-153.19	-345.51	-346.48	0.38	-0.06	-57.29	

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<b>Site:</b>	Anschutz-Williams 5-61-27 SWSW Pad	<b>MD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Well:</b>	Anschutz-Williams 5-61-27-6457BN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	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)
4,693.00	0.21	87.990	4,651.81	-153.16	-345.04	-346.02	0.16	-0.16	2.74
4,786.00	0.47	89.900	4,744.81	-153.15	-344.49	-345.46	0.28	0.28	2.05
4,880.00	0.23	142.710	4,838.80	-153.30	-343.99	-344.96	0.40	-0.26	56.18
4,974.00	0.81	137.900	4,932.80	-153.94	-343.43	-344.41	0.62	0.62	-5.12
5,068.00	1.07	144.510	5,026.79	-155.15	-342.47	-343.46	0.30	0.28	7.03
5,161.00	1.39	232.280	5,119.77	-156.55	-342.86	-343.86	1.85	0.34	94.38
5,255.00	1.48	243.140	5,213.74	-157.79	-344.85	-345.85	0.30	0.10	11.55
5,349.00	1.12	230.680	5,307.72	-158.92	-346.64	-347.65	0.48	-0.38	-13.26
5,442.00	0.73	58.010	5,400.72	-159.19	-346.84	-347.85	1.99	-0.42	-185.67
5,537.00	1.44	95.770	5,495.70	-158.98	-345.14	-346.15	1.02	0.75	39.75
5,540.00	1.86	91.625	5,498.70	-158.99	-345.05	-346.07	14.67	14.13	-138.18
<b>Curve KOP</b>									
5,595.00	9.89	80.483	5,553.36	-158.23	-339.49	-340.50	14.67	14.59	-20.26
<b>First SDI MWD Curve Survey</b>									
5,631.00	15.17	79.580	5,588.49	-156.87	-331.81	-332.80	14.67	14.66	-2.51
5,724.00	25.64	80.860	5,675.54	-151.46	-299.88	-300.85	11.27	11.26	1.38
5,818.00	36.27	94.000	5,756.13	-150.16	-251.87	-252.83	13.34	11.31	13.98
5,912.00	40.33	95.030	5,829.88	-154.77	-193.81	-194.80	4.37	4.32	1.10
6,005.00	48.77	91.860	5,896.10	-158.55	-128.75	-129.77	9.38	9.08	-3.41
6,100.00	61.02	94.610	5,950.64	-163.07	-51.33	-52.37	13.11	12.89	2.89
6,194.00	71.25	92.370	5,988.62	-168.23	34.36	33.28	11.10	10.88	-2.38
6,287.00	79.09	89.950	6,012.41	-170.01	124.17	123.07	8.80	8.43	-2.60
6,331.00	88.19	88.790	6,017.28	-169.53	167.85	166.76	20.85	20.68	-2.64
<b>Last SDI MWD Curve Survey</b>									
6,379.00	89.56	91.530	6,018.22	-169.66	215.83	214.74	6.38	2.85	5.71
<b>First SDI MWD Lateral Survey</b>									
6,473.00	89.46	87.800	6,019.03	-169.11	309.81	308.72	3.97	-0.11	-3.97
6,567.00	88.79	86.650	6,020.46	-164.56	403.69	402.62	1.42	-0.71	-1.22
6,661.00	89.33	89.520	6,022.00	-161.42	497.61	496.57	3.11	0.57	3.05
6,755.00	88.99	88.730	6,023.38	-159.99	591.59	590.55	0.91	-0.36	-0.84
6,848.00	89.87	89.890	6,024.31	-158.87	684.57	683.54	1.57	0.95	1.25
6,943.00	90.60	90.710	6,023.92	-159.36	779.57	778.53	1.16	0.77	0.86
7,037.00	90.94	89.430	6,022.66	-159.48	873.56	872.52	1.41	0.36	-1.36
7,131.00	90.70	89.680	6,021.31	-158.75	967.55	966.51	0.37	-0.26	0.27
7,225.00	90.67	90.430	6,020.19	-158.84	1,061.54	1,060.50	0.80	-0.03	0.80
7,319.00	89.87	90.260	6,019.74	-159.40	1,155.54	1,154.49	0.87	-0.85	-0.18
7,413.00	89.63	87.790	6,020.15	-157.80	1,249.52	1,248.48	2.64	-0.26	-2.63
7,507.00	89.56	89.290	6,020.82	-155.41	1,343.48	1,342.46	1.60	-0.07	1.60
7,600.00	89.46	88.500	6,021.61	-153.62	1,436.46	1,435.44	0.86	-0.11	-0.85
7,694.00	89.73	89.450	6,022.28	-151.93	1,530.44	1,529.44	1.05	0.29	1.01
7,787.00	89.50	89.170	6,022.90	-150.81	1,623.43	1,622.43	0.39	-0.25	-0.30
7,881.00	90.27	89.450	6,023.09	-149.68	1,717.42	1,716.43	0.87	0.82	0.30
7,975.00	91.14	88.860	6,021.93	-148.30	1,811.40	1,810.42	1.12	0.93	-0.63
8,069.00	90.80	89.080	6,020.34	-146.61	1,905.38	1,904.40	0.43	-0.36	0.23

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<b>Site:</b>	Anschutz-Williams 5-61-27 SWSW Pad	<b>MD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Well:</b>	Anschutz-Williams 5-61-27-6457BN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	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)
8,162.00	91.51	89.150	6,018.47	-145.17	1,998.34	1,997.37	0.77	0.76	0.08
8,257.00	91.04	88.620	6,016.36	-143.32	2,093.30	2,092.34	0.75	-0.49	-0.56
8,350.00	91.28	89.400	6,014.47	-141.72	2,186.27	2,185.32	0.88	0.26	0.84
8,444.00	91.81	88.170	6,011.94	-139.72	2,280.21	2,279.27	1.42	0.56	-1.31
8,538.00	91.14	89.140	6,009.52	-137.52	2,374.15	2,373.22	1.25	-0.71	1.03
8,633.00	89.83	90.110	6,008.71	-136.90	2,469.14	2,468.22	1.72	-1.38	1.02
8,727.00	90.30	90.760	6,008.61	-137.61	2,563.14	2,562.21	0.85	0.50	0.69
8,821.00	87.95	91.380	6,010.04	-139.37	2,657.11	2,656.16	2.59	-2.50	0.66
8,915.00	88.09	90.900	6,013.29	-141.23	2,751.03	2,750.07	0.53	0.15	-0.51
9,009.00	87.78	89.990	6,016.68	-141.96	2,844.97	2,844.00	1.02	-0.33	-0.97
9,103.00	88.02	91.260	6,020.12	-142.99	2,938.90	2,937.92	1.37	0.26	1.35
9,197.00	86.28	89.010	6,024.80	-143.21	3,032.77	3,031.79	3.02	-1.85	-2.39
9,291.00	89.03	89.910	6,028.64	-142.33	3,126.68	3,125.70	3.08	2.93	0.96
9,385.00	88.96	86.560	6,030.29	-139.43	3,220.60	3,219.64	3.56	-0.07	-3.56
9,479.00	89.36	87.130	6,031.67	-134.26	3,314.45	3,313.52	0.74	0.43	0.61
9,574.00	90.84	88.490	6,031.50	-130.63	3,409.38	3,408.47	2.12	1.56	1.43
9,668.00	89.46	88.920	6,031.26	-128.51	3,503.35	3,502.45	1.54	-1.47	0.46
9,761.00	91.27	88.790	6,030.67	-126.65	3,596.33	3,595.44	1.95	1.95	-0.14
9,855.00	91.04	91.070	6,028.77	-126.53	3,690.30	3,689.41	2.44	-0.24	2.43
9,949.00	91.28	91.840	6,026.87	-128.92	3,784.25	3,783.35	0.86	0.26	0.82
10,043.00	91.91	89.800	6,024.25	-130.26	3,878.20	3,877.28	2.27	0.67	-2.17
10,137.00	90.20	92.270	6,022.52	-131.96	3,972.16	3,971.23	3.20	-1.82	2.63
10,232.00	90.10	91.520	6,022.27	-135.10	4,067.10	4,066.15	0.80	-0.11	-0.79
10,326.00	90.30	90.900	6,021.94	-137.09	4,161.08	4,160.12	0.69	0.21	-0.66
10,417.00	90.94	89.820	6,020.96	-137.66	4,252.07	4,251.10	1.38	0.70	-1.19
10,509.00	88.99	91.070	6,021.01	-138.37	4,344.06	4,343.09	2.52	-2.12	1.36
10,600.00	88.63	89.450	6,022.90	-138.79	4,435.04	4,434.06	1.82	-0.40	-1.78
10,692.00	89.40	89.840	6,024.49	-138.22	4,527.02	4,526.04	0.94	0.84	0.42
10,783.00	90.87	89.460	6,024.27	-137.66	4,618.02	4,617.04	1.67	1.62	-0.42
10,874.00	90.77	89.180	6,022.97	-136.58	4,709.00	4,708.03	0.33	-0.11	-0.31
10,966.00	91.17	88.070	6,021.41	-134.37	4,800.96	4,800.00	1.28	0.43	-1.21
11,057.00	90.71	88.410	6,019.92	-131.58	4,891.91	4,890.96	0.63	-0.51	0.37
11,148.00	91.54	88.280	6,018.13	-128.95	4,982.85	4,981.92	0.92	0.91	-0.14
11,240.00	91.04	90.240	6,016.06	-127.76	5,074.81	5,073.89	2.20	-0.54	2.13
11,330.00	91.01	88.200	6,014.45	-126.54	5,164.79	5,163.87	2.27	-0.03	-2.27
11,422.00	90.30	92.100	6,013.40	-126.78	5,256.76	5,255.84	4.31	-0.77	4.24
11,513.00	90.23	90.520	6,012.98	-128.86	5,347.73	5,346.80	1.74	-0.08	-1.74
11,604.00	90.60	89.470	6,012.32	-128.85	5,438.73	5,437.79	1.22	0.41	-1.15
11,695.00	89.73	89.880	6,012.06	-128.34	5,529.73	5,528.79	1.06	-0.96	0.45
11,787.00	89.63	87.750	6,012.57	-126.43	5,621.70	5,620.78	2.32	-0.11	-2.32
11,879.00	90.17	88.080	6,012.73	-123.09	5,713.64	5,712.73	0.69	0.59	0.36
11,971.00	90.23	88.610	6,012.41	-120.43	5,805.60	5,804.71	0.58	0.07	0.58
12,062.00	91.04	87.500	6,011.40	-117.34	5,896.54	5,895.67	1.51	0.89	-1.22

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Anschutz-Williams 5-61-27-6457BN
<b>Project:</b>	Weld County, CO NAD 83	<b>TVD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Site:</b>	Anschutz-Williams 5-61-27 SWSW Pad	<b>MD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Well:</b>	Anschutz-Williams 5-61-27-6457BN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	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)
12,153.00	89.06	88.300	6,011.32	-114.01	5,987.47	5,986.62	2.35	-2.18	0.88
12,244.00	89.16	90.150	6,012.74	-112.78	6,078.45	6,077.60	2.04	0.11	2.03
12,336.00	89.56	88.350	6,013.76	-111.57	6,170.43	6,169.59	2.00	0.43	-1.96
12,427.00	90.07	87.570	6,014.06	-108.33	6,261.37	6,260.55	1.02	0.56	-0.86
12,518.00	88.96	89.970	6,014.83	-106.38	6,352.34	6,351.53	2.91	-1.22	2.64
12,609.00	88.46	91.260	6,016.88	-107.36	6,443.31	6,442.49	1.52	-0.55	1.42
12,699.00	88.15	88.730	6,019.54	-107.35	6,533.26	6,532.44	2.83	-0.34	-2.81
12,791.00	88.12	90.280	6,022.53	-106.55	6,625.21	6,624.39	1.68	-0.03	1.68
12,881.00	89.80	90.120	6,024.17	-106.87	6,715.19	6,714.37	1.88	1.87	-0.18
12,972.00	90.20	93.610	6,024.17	-109.83	6,806.13	6,805.28	3.86	0.44	3.84
13,063.00	90.10	92.400	6,023.93	-114.60	6,897.00	6,896.12	1.33	-0.11	-1.33
13,155.00	90.91	91.110	6,023.12	-117.42	6,988.95	6,988.06	1.66	0.88	-1.40
13,247.00	92.58	93.760	6,020.32	-121.32	7,080.81	7,079.89	3.40	1.82	2.88
13,338.00	93.12	92.040	6,015.79	-125.92	7,171.58	7,170.63	1.98	0.59	-1.89
13,429.00	92.21	90.330	6,011.56	-127.80	7,262.46	7,261.49	2.13	-1.00	-1.88
13,520.00	91.91	92.260	6,008.29	-129.86	7,353.37	7,352.39	2.14	-0.33	2.12
13,612.00	89.50	87.810	6,007.15	-129.91	7,445.34	7,444.35	5.50	-2.62	-4.84
13,703.00	89.23	88.160	6,008.16	-126.71	7,536.27	7,535.31	0.49	-0.30	0.38
13,794.00	90.71	87.390	6,008.21	-123.18	7,627.20	7,626.26	1.83	1.63	-0.85
13,885.00	90.84	87.150	6,006.98	-118.85	7,718.09	7,717.17	0.30	0.14	-0.26
13,976.00	90.47	88.750	6,005.94	-115.59	7,809.02	7,808.12	1.80	-0.41	1.76
14,068.00	90.57	88.630	6,005.10	-113.49	7,900.99	7,900.11	0.17	0.11	-0.13
14,159.00	91.17	89.920	6,003.72	-112.34	7,991.97	7,991.09	1.56	0.66	1.42
14,250.00	91.51	91.680	6,001.59	-113.61	8,082.94	8,082.04	1.97	0.37	1.93
14,341.00	90.60	89.280	5,999.92	-114.37	8,173.91	8,173.01	2.82	-1.00	-2.64
14,433.00	91.14	88.390	5,998.52	-112.50	8,265.88	8,264.99	1.13	0.59	-0.97
14,525.00	92.21	90.510	5,995.83	-111.61	8,357.83	8,356.94	2.58	1.16	2.30
14,616.00	90.64	89.550	5,993.57	-111.66	8,448.80	8,447.91	2.02	-1.73	-1.05
14,707.00	88.79	91.550	5,994.02	-112.54	8,539.78	8,538.89	2.99	-2.03	2.20
14,798.00	89.80	91.340	5,995.14	-114.83	8,630.75	8,629.83	1.13	1.11	-0.23
14,889.00	89.06	90.500	5,996.05	-116.29	8,721.73	8,720.81	1.23	-0.81	-0.92
14,980.00	89.66	90.790	5,997.06	-117.31	8,812.72	8,811.79	0.73	0.66	0.32
15,071.00	90.70	88.900	5,996.78	-117.07	8,903.71	8,902.78	2.37	1.14	-2.08
15,162.00	91.48	89.210	5,995.05	-115.57	8,994.68	8,993.76	0.92	0.86	0.34
15,254.00	90.34	89.090	5,993.59	-114.20	9,086.66	9,085.74	1.25	-1.24	-0.13
15,345.00	90.03	90.490	5,993.29	-113.87	9,177.65	9,176.74	1.58	-0.34	1.54
15,437.00	90.81	91.180	5,992.62	-115.21	9,269.64	9,268.71	1.13	0.85	0.75
15,528.00	90.70	90.390	5,991.42	-116.46	9,360.62	9,359.69	0.88	-0.12	-0.87
15,620.00	91.24	88.770	5,989.86	-115.78	9,452.61	9,451.67	1.86	0.59	-1.76
15,711.00	90.03	89.010	5,988.85	-114.02	9,543.58	9,542.65	1.36	-1.33	0.26
15,802.00	90.60	88.690	5,988.35	-112.19	9,634.56	9,633.64	0.72	0.63	-0.35
15,896.00	89.63	89.750	5,988.16	-110.91	9,728.55	9,727.64	1.53	-1.03	1.13
15,990.00	90.77	89.000	5,987.84	-109.89	9,822.54	9,821.64	1.45	1.21	-0.80

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Anschutz-Williams 5-61-27-6457BN
<b>Project:</b>	Weld County, CO NAD 83	<b>TVD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Site:</b>	Anschutz-Williams 5-61-27 SWSW Pad	<b>MD Reference:</b>	GL 4593.1' & KB 20' @ 4613.10ft (Savanna 802)
<b>Well:</b>	Anschutz-Williams 5-61-27-6457BN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	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)
16,058.00	91.64	89.480	5,986.41	-108.99	9,890.52	9,889.62	1.46	1.28	0.71
<b>Last SDI MWD Survey</b>									
16,116.00	91.64	89.480	5,984.75	-108.46	9,948.49	9,947.59	0.00	0.00	0.00
<b>Projection to TD</b>									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
211.00	210.97	-0.66	-3.10	First SDI MWD Survey
787.00	786.49	-6.40	-25.71	Last SDI MWD Surface Survey
881.00	880.43	-6.77	-28.94	First SDI MWD Intermediate Survey
5,540.00	5,498.70	-158.99	-345.05	Curve KOP
5,595.00	5,553.36	-158.23	-339.49	First SDI MWD Curve Survey
6,331.00	6,017.28	-169.53	167.85	Last SDI MWD Curve Survey
6,379.00	6,018.22	-169.66	215.83	First SDI MWD Lateral Survey
16,058.00	5,986.41	-108.99	9,890.52	Last SDI MWD Survey
16,116.00	5,984.75	-108.46	9,948.49	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
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