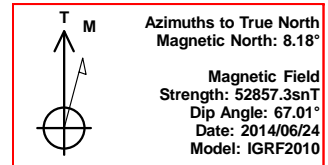
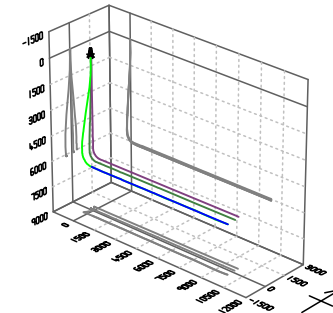




Bill Barrett Corp.  
Project: Weld Co., CO  
Site: Sec.19-T5N-R61W  
Well: Anschutz State 5-61-19-6457CH2  
Wellbore: Wellbore #1  
Design: Design #4  
Lat: 40° 22' 53.771 N  
Long: 104° 15' 38.228 W  
Pad GL: 4530.00  
KB: WELL @ 4546.00usft

# Archer



## SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
6484.00	90.00	88.00	6086.16	-427.70	352.25	0.00	0.00	350.83	Start DLS 2.50 TFO 118.95
6566.65	89.00	89.81	6086.88	-426.12	434.88	2.50	118.95	433.46	Start 447.00 hold at 6566.65 MD
7013.65	89.00	89.81	6094.68	-424.63	881.81	0.00	0.00	880.39	Start Build 2.50
7058.56	90.12	89.81	6095.02	-424.48	926.72	2.50	0.00	925.30	Start 8876.39 hold at 7058.56 MD
15934.95	90.12	89.81	6076.00	-394.76	9803.04	0.00	0.00	9801.68	TD at 15934.95

## WELL DETAILS: Anschutz State 5-61-19-6457CH2

+N/-S	+E/-W	Northing	Ground Level: Easting	4530.00 Latitude	Longitude	Slot
0.00	0.00	1384271.279	3345262.874	40° 22' 53.771 N	104° 15' 38.228 W	

## PROJECT DETAILS: Weld Co., CO

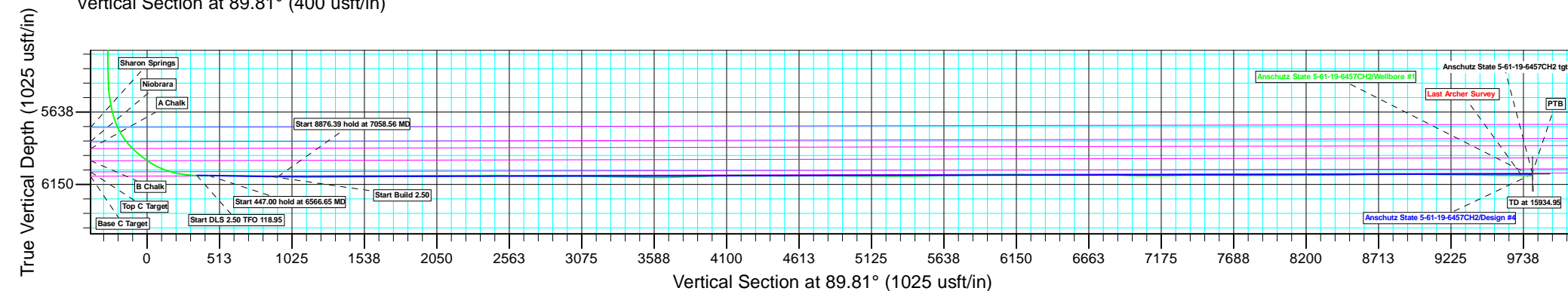
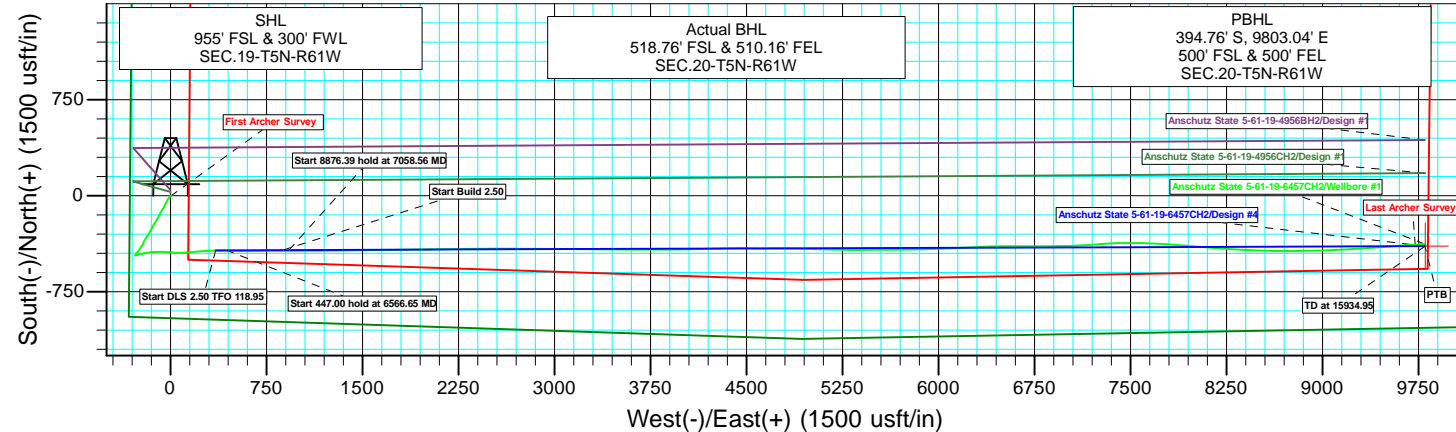
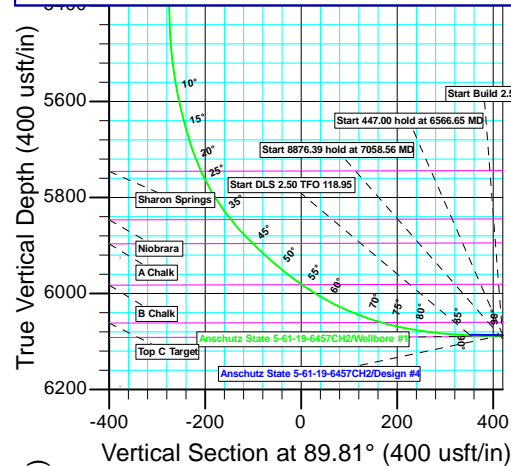
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Northern Zone  
System Datum: Mean Sea Level

## CASING DETAILS

TVD	MD	Name
	6446.73	7" Csg.

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
Anschutz State 5-61-19-6457CH2 tgt	6076.00	-394.76	9803.04	40° 22' 49.850 N	104° 13' 31.552 W	



Plan: Design #4 (Anschutz State 5-61-19-6457CH2/Wellbore #1)

Created By: Ricky Osburn

Date: 15:07, August 04 2014



**Bill Barrett Corporation**

## **Bill Barrett Corp.**

**Weld Co., CO**

**Sec.19-T5N-R61W**

**Anschutz State 5-61-19-6457CH2**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**13 July, 2014**

# **Archer**

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Anschutz State 5-61-19-6457CH2
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WEII @ 4546.00usft
<b>Site:</b>	Sec.19-T5N-R61W	<b>MD Reference:</b>	WEII @ 4546.00usft
<b>Well:</b>	Anschutz State 5-61-19-6457CH2	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDMDBBW

<b>Project</b>	Weld Co., CO		
<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		Sec.19-T5N-R61W			
Site Position:		Northing:	1,385,471.466 usft	Latitude:	40° 23' 5.640 N
From:	Lat/Long	Easting:	3,345,189.543 usft	Longitude:	104° 15' 38.959 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.80 °

Well		Anschutz State 5-61-19-6457CH2				
Well Position	+N/-S	0.00 usft	Northing:	1,384,271.279 usft	Latitude:	40° 22' 53.771 N
	+E/-W	0.00 usft	Easting:	3,345,262.874 usft	Longitude:	104° 15' 38.228 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,530.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2014/06/24	8.18	67.01	52,857

<b>Design</b>	Wellbore #1				
<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) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	89.64	

<b>Survey Program</b>	<b>Date</b>	2014/07/13			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
100.00	15,934.00	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.32	262.15	100.00	-0.04	-0.28	-0.28	0.32	0.32	0.00
200.00	0.46	234.42	200.00	-0.31	-0.88	-0.88	0.23	0.14	-27.73
300.00	0.30	184.08	300.00	-0.80	-1.22	-1.23	0.35	-0.16	-50.34
400.00	0.45	140.57	399.99	-1.37	-0.99	-1.00	0.31	0.15	-43.51
500.00	0.44	140.19	499.99	-1.97	-0.50	-0.51	0.01	-0.01	-0.38
600.00	0.52	126.80	599.99	-2.53	0.11	0.09	0.14	0.08	-13.39
700.00	0.49	91.04	699.98	-2.81	0.90	0.88	0.31	-0.03	-35.76
First Archer Survey									
742.00	0.60	105.52	741.98	-2.88	1.29	1.27	0.42	0.26	34.48
834.00	0.40	171.00	833.98	-3.32	1.81	1.79	0.62	-0.22	71.17
908.00	1.80	216.30	907.96	-4.51	1.16	1.13	2.09	1.89	61.22
1,003.00	3.40	235.20	1,002.86	-7.32	-2.04	-2.08	1.89	1.68	19.89

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Anschutz State 5-61-19-6457CH2
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WEII @ 4546.00usft
<b>Site:</b>	Sec.19-T5N-R61W	<b>MD Reference:</b>	WEII @ 4546.00usft
<b>Well:</b>	Anschutz State 5-61-19-6457CH2	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDMDBBW

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
1,095.00	5.00	228.40	1,094.61	-11.54	-7.28	-7.35	1.82	1.74	-7.39	
1,187.00	5.80	218.50	1,186.21	-17.84	-13.17	-13.28	1.33	0.87	-10.76	
1,278.00	7.60	213.40	1,276.58	-26.47	-19.34	-19.51	2.08	1.98	-5.60	
1,370.00	8.40	206.40	1,367.69	-37.56	-25.68	-25.92	1.37	0.87	-7.61	
1,462.00	7.60	205.50	1,458.79	-49.08	-31.29	-31.60	0.88	-0.87	-0.98	
1,553.00	8.70	206.10	1,548.87	-60.69	-36.91	-37.29	1.21	1.21	0.66	
1,645.00	8.70	204.00	1,639.81	-73.29	-42.80	-43.26	0.35	0.00	-2.28	
1,736.00	8.70	208.80	1,729.77	-85.61	-48.91	-49.45	0.80	0.00	5.27	
1,828.00	7.60	209.20	1,820.84	-97.02	-55.23	-55.84	1.20	-1.20	0.43	
1,920.00	8.50	216.70	1,911.93	-107.78	-62.26	-62.94	1.50	0.98	8.15	
2,012.00	7.90	211.60	2,002.99	-118.62	-69.64	-70.39	1.02	-0.65	-5.54	
2,103.00	7.60	205.80	2,093.16	-129.36	-75.54	-76.35	0.92	-0.33	-6.37	
2,195.00	8.40	202.30	2,184.27	-141.06	-80.74	-81.62	1.02	0.87	-3.80	
2,287.00	9.40	208.00	2,275.16	-153.91	-86.81	-87.78	1.45	1.09	6.20	
2,379.00	9.50	212.30	2,365.91	-166.96	-94.40	-95.44	0.77	0.11	4.67	
2,470.00	8.70	210.20	2,455.77	-179.26	-101.87	-103.00	0.95	-0.88	-2.31	
2,562.00	9.00	213.70	2,546.67	-191.26	-109.36	-110.56	0.67	0.33	3.80	
2,654.00	8.80	211.70	2,637.57	-203.23	-117.05	-118.33	0.40	-0.22	-2.17	
2,746.00	7.80	211.50	2,728.60	-214.54	-124.01	-125.36	1.09	-1.09	-0.22	
2,838.00	7.70	210.40	2,819.76	-225.18	-130.40	-131.81	0.19	-0.11	-1.20	
2,930.00	6.50	203.60	2,911.06	-235.27	-135.60	-137.07	1.59	-1.30	-7.39	
3,022.00	7.20	202.20	3,002.40	-245.38	-139.86	-141.40	0.78	0.76	-1.52	
3,114.00	7.90	210.20	3,093.60	-256.18	-145.22	-146.83	1.37	0.76	8.70	
3,205.00	9.10	210.90	3,183.60	-267.76	-152.06	-153.74	1.32	1.32	0.77	
3,297.00	9.70	211.30	3,274.37	-280.63	-159.83	-161.59	0.66	0.65	0.43	
3,389.00	10.30	211.00	3,364.97	-294.30	-168.09	-169.93	0.65	0.65	-0.33	
3,480.00	9.70	212.90	3,454.58	-307.71	-176.44	-178.37	0.75	-0.66	2.09	
3,572.00	9.30	212.80	3,545.32	-320.47	-184.68	-186.69	0.44	-0.43	-0.11	
3,663.00	8.90	212.50	3,635.18	-332.58	-192.45	-194.53	0.44	-0.44	-0.33	
3,755.00	8.70	211.10	3,726.09	-344.54	-199.86	-202.02	0.32	-0.22	-1.52	
3,846.00	7.70	206.30	3,816.16	-355.90	-206.12	-208.35	1.33	-1.10	-5.27	
3,941.00	7.80	204.10	3,910.30	-367.49	-211.57	-213.88	0.33	0.11	-2.32	
4,036.00	7.60	203.60	4,004.44	-379.13	-216.72	-219.10	0.22	-0.21	-0.53	
4,132.00	8.20	209.40	4,099.53	-390.92	-222.62	-225.07	1.04	0.62	6.04	
4,227.00	8.00	215.20	4,193.58	-402.22	-229.76	-232.28	0.89	-0.21	6.11	
4,322.00	6.20	213.30	4,287.85	-411.91	-236.39	-238.97	1.91	-1.89	-2.00	
4,417.00	6.50	220.40	4,382.27	-420.29	-242.69	-245.32	0.88	0.32	7.47	
4,512.00	6.70	216.60	4,476.64	-428.84	-249.48	-252.17	0.51	0.21	-4.00	
4,608.00	6.70	217.70	4,571.98	-437.77	-256.24	-258.99	0.13	0.00	1.15	
4,703.00	6.10	218.20	4,666.39	-446.12	-262.75	-265.55	0.63	-0.63	0.53	
4,799.00	4.70	211.60	4,761.96	-453.48	-267.97	-270.81	1.59	-1.46	-6.87	
4,894.00	3.60	201.70	4,856.72	-459.56	-271.11	-273.99	1.38	-1.16	-10.42	
4,990.00	2.30	218.00	4,952.59	-463.88	-273.41	-276.32	1.60	-1.35	16.98	
5,084.00	1.40	240.70	5,046.54	-465.93	-275.57	-278.49	1.22	-0.96	24.15	
5,179.00	0.70	345.40	5,141.53	-465.94	-276.73	-279.65	1.81	-0.74	110.21	
5,273.00	0.60	69.50	5,235.52	-465.21	-276.41	-279.33	0.93	-0.11	89.47	
5,368.00	1.20	114.40	5,330.51	-465.44	-275.04	-277.96	0.93	0.63	47.26	
5,463.00	2.00	121.00	5,425.48	-466.71	-272.72	-275.64	0.86	0.84	6.95	
5,510.00	3.50	96.90	5,472.42	-467.30	-270.59	-273.52	3.96	3.19	-51.28	
5,558.00	7.50	76.20	5,520.19	-466.73	-266.09	-269.02	9.17	8.33	-43.12	
5,605.00	10.50	72.40	5,566.61	-464.71	-259.03	-261.94	6.50	6.38	-8.09	
5,653.00	13.50	69.40	5,613.56	-461.41	-249.61	-252.50	6.38	6.25	-6.25	
5,700.00	16.70	71.50	5,658.93	-457.34	-238.07	-240.94	6.91	6.81	4.47	
5,748.00	20.00	74.30	5,704.48	-452.93	-223.62	-226.46	7.11	6.87	5.83	

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Anschutz State 5-61-19-6457CH2
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WEII @ 4546.00usft
<b>Site:</b>	Sec.19-T5N-R61W	<b>MD Reference:</b>	WEII @ 4546.00usft
<b>Well:</b>	Anschutz State 5-61-19-6457CH2	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDMDBBW

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,795.00	24.80	80.10	5,747.93	-449.05	-206.16	-208.98	11.23	10.21	12.34	
5,842.00	30.60	83.20	5,789.53	-445.94	-184.55	-187.35	12.71	12.34	6.60	
5,889.00	36.30	84.50	5,828.73	-443.19	-158.80	-161.59	12.22	12.13	2.77	
5,937.00	41.80	85.00	5,865.99	-440.43	-128.70	-131.47	11.48	11.46	1.04	
5,984.00	46.30	87.70	5,899.76	-438.38	-96.10	-98.86	10.37	9.57	5.74	
6,032.00	49.10	91.70	5,932.07	-438.22	-60.62	-63.37	8.48	5.83	8.33	
6,079.00	52.70	96.10	5,961.72	-440.74	-24.25	-27.02	10.55	7.66	9.36	
6,126.00	56.20	94.80	5,989.04	-444.36	13.81	11.01	7.78	7.45	-2.77	
6,173.00	60.70	91.90	6,013.63	-446.67	53.78	50.97	10.92	9.57	-6.17	
6,221.00	66.70	86.80	6,034.90	-446.14	96.76	93.96	15.71	12.50	-10.62	
6,268.00	71.20	84.70	6,051.78	-442.88	140.49	137.71	10.44	9.57	-4.47	
6,316.00	75.80	84.60	6,065.41	-438.59	186.30	183.54	9.59	9.58	-0.21	
6,363.00	80.50	85.40	6,075.06	-434.58	232.11	229.38	10.14	10.00	1.70	
6,417.00	83.70	86.60	6,082.48	-430.85	285.46	282.75	6.32	5.93	2.22	
6,524.00	90.30	90.90	6,088.08	-428.53	392.21	389.51	7.36	6.17	4.02	
6,571.00	90.60	91.00	6,087.71	-429.31	439.20	436.49	0.67	0.64	0.21	
6,663.00	90.30	91.50	6,086.99	-431.32	531.17	528.45	0.63	-0.33	0.54	
6,754.00	88.30	88.90	6,088.10	-431.64	622.15	619.43	3.60	-2.20	-2.86	
6,846.00	89.00	89.40	6,090.27	-430.27	714.12	711.40	0.93	0.76	0.54	
6,938.00	89.50	89.90	6,091.47	-429.71	806.11	803.39	0.77	0.54	0.54	
7,029.00	88.50	90.30	6,093.06	-429.87	897.09	894.37	1.18	-1.10	0.44	
7,121.00	90.30	89.70	6,094.02	-429.87	989.08	986.36	2.06	1.96	-0.65	
7,212.00	90.90	90.40	6,093.07	-429.95	1,080.08	1,077.35	1.01	0.66	0.77	
7,304.00	90.40	89.40	6,092.02	-429.79	1,172.07	1,169.35	1.22	-0.54	-1.09	
7,395.00	89.70	89.00	6,091.95	-428.52	1,263.06	1,260.34	0.89	-0.77	-0.44	
7,487.00	90.00	89.40	6,092.19	-427.23	1,355.05	1,352.34	0.54	0.33	0.43	
7,582.00	90.30	90.50	6,091.94	-427.15	1,450.05	1,447.34	1.20	0.32	1.16	
7,677.00	90.10	89.70	6,091.61	-427.32	1,545.05	1,542.33	0.87	-0.21	-0.84	
7,772.00	89.90	88.90	6,091.61	-426.16	1,640.04	1,637.33	0.87	-0.21	-0.84	
7,868.00	89.50	87.90	6,092.11	-423.48	1,736.00	1,733.30	1.12	-0.42	-1.04	
7,963.00	90.60	89.70	6,092.03	-421.49	1,830.97	1,828.29	2.22	1.16	1.89	
8,058.00	90.40	89.20	6,091.20	-420.58	1,925.96	1,923.28	0.57	-0.21	-0.53	
8,152.00	89.10	88.50	6,091.61	-418.69	2,019.94	2,017.27	1.57	-1.38	-0.74	
8,247.00	91.50	90.60	6,091.11	-417.94	2,114.92	2,112.26	3.36	2.53	2.21	
8,342.00	91.90	90.30	6,088.29	-418.69	2,209.88	2,207.21	0.53	0.42	-0.32	
8,437.00	90.30	88.90	6,086.47	-418.03	2,304.85	2,302.18	2.24	-1.68	-1.47	
8,531.00	89.50	87.90	6,086.63	-415.40	2,398.82	2,396.16	1.36	-0.85	-1.06	
8,626.00	89.50	89.00	6,087.46	-412.83	2,493.78	2,491.13	1.16	0.00	1.16	
8,720.00	90.10	90.90	6,087.79	-412.75	2,587.77	2,585.13	2.12	0.64	2.02	
8,815.00	89.30	90.20	6,088.29	-413.66	2,682.76	2,680.11	1.12	-0.84	-0.74	
8,911.00	87.70	90.90	6,090.80	-414.58	2,778.72	2,776.06	1.82	-1.67	0.73	
9,005.00	90.50	90.30	6,092.27	-415.57	2,872.70	2,870.03	3.05	2.98	-0.64	
9,099.00	91.30	91.00	6,090.80	-416.63	2,966.68	2,964.00	1.13	0.85	0.74	
9,195.00	89.20	90.90	6,090.38	-418.22	3,062.66	3,059.97	2.19	-2.19	-0.10	
9,289.00	89.10	89.80	6,091.77	-418.80	3,156.64	3,153.95	1.17	-0.11	-1.17	
9,385.00	87.80	89.70	6,094.37	-418.38	3,252.61	3,249.91	1.36	-1.35	-0.10	
9,480.00	89.40	90.60	6,096.69	-418.63	3,347.57	3,344.88	1.93	1.68	0.95	
9,575.00	89.50	90.60	6,097.60	-419.62	3,442.56	3,439.86	0.11	0.11	0.00	
9,670.00	88.90	91.00	6,098.93	-420.95	3,537.54	3,534.83	0.76	-0.63	0.42	
9,765.00	89.20	89.90	6,100.51	-421.69	3,632.53	3,629.81	1.20	0.32	-1.16	
9,860.00	91.80	89.70	6,099.68	-421.36	3,727.51	3,724.79	2.74	2.74	-0.21	
9,955.00	92.90	90.40	6,095.78	-421.45	3,822.43	3,819.71	1.37	1.16	0.74	
10,050.00	91.40	89.70	6,092.22	-421.53	3,917.36	3,914.64	1.74	-1.58	-0.74	
10,144.00	91.60	89.70	6,089.76	-421.04	4,011.33	4,008.60	0.21	0.21	0.00	

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Anschutz State 5-61-19-6457CH2
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WEII @ 4546.00usft
<b>Site:</b>	Sec.19-T5N-R61W	<b>MD Reference:</b>	WEII @ 4546.00usft
<b>Well:</b>	Anschutz State 5-61-19-6457CH2	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDMDBBW

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,238.00	91.60	87.50	6,087.13	-418.74	4,105.26	4,102.55	2.34	0.00	-2.34	
10,333.00	90.60	88.30	6,085.31	-415.26	4,200.17	4,197.48	1.35	-1.05	0.84	
10,428.00	89.00	88.40	6,085.64	-412.53	4,295.13	4,292.45	1.69	-1.68	0.11	
10,522.00	88.40	89.30	6,087.77	-410.64	4,389.09	4,386.42	1.15	-0.64	0.96	
10,616.00	90.40	90.90	6,088.76	-410.80	4,483.07	4,480.40	2.72	2.13	1.70	
10,711.00	90.90	91.20	6,087.68	-412.54	4,578.05	4,575.37	0.61	0.53	0.32	
10,806.00	89.60	89.80	6,087.26	-413.37	4,673.04	4,670.35	2.01	-1.37	-1.47	
10,900.00	89.50	89.70	6,088.00	-412.96	4,767.04	4,764.35	0.15	-0.11	-0.11	
10,996.00	89.10	90.30	6,089.18	-412.96	4,863.03	4,860.34	0.75	-0.42	0.62	
11,090.00	90.50	92.40	6,089.50	-415.18	4,957.00	4,954.29	2.68	1.49	2.23	
11,184.00	89.40	91.50	6,089.59	-418.38	5,050.94	5,048.21	1.51	-1.17	-0.96	
11,279.00	90.20	92.10	6,089.92	-421.36	5,145.89	5,143.14	1.05	0.84	0.63	
11,373.00	88.50	89.70	6,090.98	-422.84	5,239.86	5,237.10	3.13	-1.81	-2.55	
11,468.00	90.90	90.40	6,091.48	-422.92	5,334.85	5,332.09	2.63	2.53	0.74	
11,510.00	90.30	90.10	6,091.04	-423.10	5,376.85	5,374.09	1.60	-1.43	-0.71	
11,601.00	90.70	90.10	6,090.25	-423.26	5,467.85	5,465.08	0.44	0.44	0.00	
11,693.00	91.20	89.70	6,088.72	-423.10	5,559.83	5,557.07	0.70	0.54	-0.43	
11,785.00	91.10	89.60	6,086.88	-422.54	5,651.81	5,649.05	0.15	-0.11	-0.11	
11,877.00	90.60	89.20	6,085.51	-421.58	5,743.80	5,741.04	0.70	-0.54	-0.43	
11,968.00	91.00	89.00	6,084.24	-420.15	5,834.78	5,832.02	0.49	0.44	-0.22	
12,060.00	92.00	88.10	6,081.83	-417.82	5,926.71	5,923.97	1.46	1.09	-0.98	
12,152.00	90.60	88.10	6,079.74	-414.77	6,018.64	6,015.91	1.52	-1.52	0.00	
12,244.00	89.70	86.50	6,079.50	-410.44	6,110.53	6,107.83	2.00	-0.98	-1.74	
12,335.00	88.10	87.60	6,081.25	-405.75	6,201.39	6,198.72	2.13	-1.76	1.21	
12,427.00	89.20	87.10	6,083.42	-401.50	6,293.26	6,290.62	1.31	1.20	-0.54	
12,519.00	90.00	88.00	6,084.06	-397.57	6,385.18	6,382.55	1.31	0.87	0.98	
12,611.00	90.20	90.00	6,083.90	-395.96	6,477.16	6,474.54	2.18	0.22	2.17	
12,703.00	90.30	90.30	6,083.50	-396.20	6,569.16	6,566.54	0.34	0.11	0.33	
12,795.00	89.10	89.00	6,083.98	-395.64	6,661.15	6,658.53	1.92	-1.30	-1.41	
12,887.00	90.80	90.40	6,084.06	-395.16	6,753.14	6,750.53	2.39	1.85	1.52	
12,979.00	90.20	89.50	6,083.26	-395.08	6,845.14	6,842.52	1.18	-0.65	-0.98	
13,070.00	87.50	90.00	6,085.08	-394.68	6,936.11	6,933.49	3.02	-2.97	0.55	
13,162.00	89.10	87.60	6,087.81	-392.76	7,028.04	7,025.43	3.13	1.74	-2.61	
13,254.00	90.90	86.40	6,087.81	-387.94	7,119.91	7,117.33	2.35	1.96	-1.30	
13,345.00	90.50	85.60	6,086.70	-381.60	7,210.68	7,208.14	0.98	-0.44	-0.88	
13,437.00	91.40	86.80	6,085.18	-375.50	7,302.46	7,299.96	1.63	0.98	1.30	
13,528.00	91.00	89.00	6,083.27	-372.17	7,393.37	7,390.89	2.46	-0.44	2.42	
13,620.00	89.30	89.00	6,083.03	-370.56	7,485.36	7,482.88	1.85	-1.85	0.00	
13,711.00	89.40	90.90	6,084.06	-370.48	7,576.35	7,573.87	2.09	0.11	2.09	
13,806.00	90.00	93.00	6,084.56	-373.71	7,671.28	7,668.79	2.30	0.63	2.21	
13,900.00	89.30	92.60	6,085.13	-378.30	7,765.17	7,762.64	0.86	-0.74	-0.43	
13,994.00	90.70	95.40	6,085.13	-384.86	7,858.93	7,856.36	3.33	1.49	2.98	
14,089.00	90.10	94.40	6,084.47	-392.97	7,953.58	7,950.95	1.23	-0.63	-1.05	
14,184.00	89.90	94.20	6,084.47	-400.10	8,048.31	8,045.64	0.30	-0.21	-0.21	
14,278.00	90.30	94.40	6,084.31	-407.15	8,142.05	8,139.33	0.48	0.43	0.21	
14,373.00	90.00	94.00	6,084.06	-414.10	8,236.79	8,234.03	0.53	-0.32	-0.42	
14,467.00	89.50	93.70	6,084.47	-420.42	8,330.58	8,327.77	0.62	-0.53	-0.32	
14,562.00	91.70	92.60	6,083.47	-425.63	8,425.42	8,422.58	2.59	2.32	-1.16	
14,657.00	91.60	91.70	6,080.74	-429.20	8,520.31	8,517.45	0.95	-0.11	-0.95	
14,753.00	91.80	91.20	6,077.89	-431.63	8,616.24	8,613.36	0.56	0.21	-0.52	
14,847.00	91.40	91.00	6,075.26	-433.43	8,710.19	8,707.29	0.48	-0.43	-0.21	
14,942.00	89.30	88.90	6,074.68	-433.35	8,805.17	8,802.28	3.13	-2.21	-2.21	
15,037.00	88.70	88.50	6,076.34	-431.19	8,900.13	8,897.25	0.76	-0.63	-0.42	
15,132.00	89.10	87.90	6,078.17	-428.21	8,995.07	8,992.20	0.76	0.42	-0.63	

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Anschutz State 5-61-19-6457CH2
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WEII @ 4546.00usft
<b>Site:</b>	Sec.19-T5N-R61W	<b>MD Reference:</b>	WEII @ 4546.00usft
<b>Well:</b>	Anschutz State 5-61-19-6457CH2	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDMDBBW

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,227.00	90.00	87.60	6,078.91	-424.48	9,089.99	9,087.14	1.00	0.95	-0.32	
15,321.00	89.30	87.00	6,079.49	-420.05	9,183.88	9,181.06	0.98	-0.74	-0.64	
15,416.00	89.20	86.40	6,080.73	-414.58	9,278.72	9,275.93	0.64	-0.11	-0.63	
15,510.00	89.00	86.10	6,082.21	-408.44	9,372.51	9,369.75	0.38	-0.21	-0.32	
15,605.00	88.80	85.90	6,084.03	-401.81	9,467.26	9,464.54	0.30	-0.21	-0.21	
15,700.00	89.30	85.40	6,085.61	-394.60	9,561.97	9,559.30	0.74	0.53	-0.53	
15,794.00	89.60	85.50	6,086.51	-387.15	9,655.67	9,653.05	0.34	0.32	0.11	
<b>Last Archer Survey</b>										
15,864.00	89.50	85.30	6,087.06	-381.53	9,725.44	9,722.85	0.32	-0.14	-0.29	
<b>PTB - Anschutz State 5-61-19-6457CH2 tgt</b>										
15,934.00	89.50	85.30	6,087.67	-375.80	9,795.20	9,792.65	0.00	0.00	0.00	

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
742.00	741.98	-2.88	1.29	First Archer Survey	
15,864.00	6,087.06	-381.53	9,725.44	Last Archer Survey	
15,934.00	6,087.67	-375.80	9,795.20	PTB	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_