



Bill Barrett Corporation

Bill Barrett Corp.

Weld Co., CO

Sec.34-T6N-R62W

Fiducial 6-62-34-4841BH2

Wellbore #1

Survey: Survey #1

Standard Survey Report

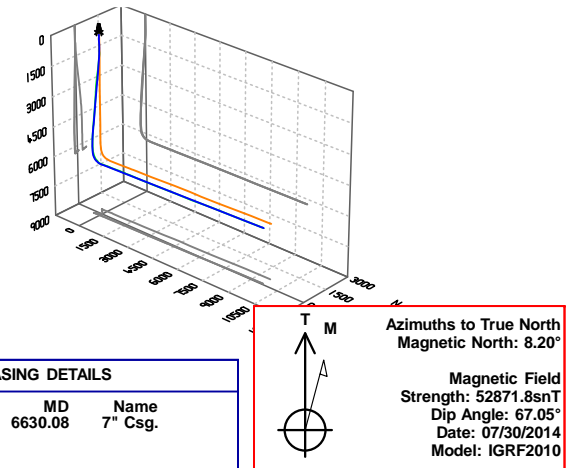
08 September, 2014

Archer



Bill Barrett Corp.
Project: Weld Co., CO
Site: Sec.34-T6N-R62W
Well: Fiducial 6-62-34-4841BH2
Wellbore: Wellbore #1
Design: Design #2
Lat: 40° 26' 34.641 N
Long: 104° 19' 2.572 W
Pad GL: 4685.00
KB: WELL @ 4707.00usft (Original Well Elev)

Archer



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1178.78	5.58	244.99	1178.34	-5.73	-12.28	2.00	244.99	-12.42	Start 3918.40 hold at 1178.78 MD
5097.18	5.58	244.99	5078.20	-166.71	-357.28	0.00	0.00	-361.30	Start Drop -2.00
5375.96	0.00	0.00	5356.54	-172.44	-369.56	2.00	180.00	-373.72	Start 500.01 hold at 5375.96 MD
5875.97	0.00	0.00	5856.55	-172.44	-369.56	0.00	0.00	-373.72	Start Build 12.00
6630.08	90.49	88.58	6334.00	-160.54	111.87	12.00	88.58	107.86	Start 9525.61 hold at 6630.08 MD
16155.69	90.49	88.58	6252.00	74.75	9634.22	0.00	0.00	9633.11	TD at 16155.69

WELL DETAILS: Fiducial 6-62-34-4841BH2

+N/-S	+E/-W	Northing	Ground Level: Easting	Latitude	Longitude	Slot
0.00	0.00	1406404.117	3329153.180	40° 26' 34.641 N	104° 19' 2.572 W	

PROJECT DETAILS: Weld Co., CO

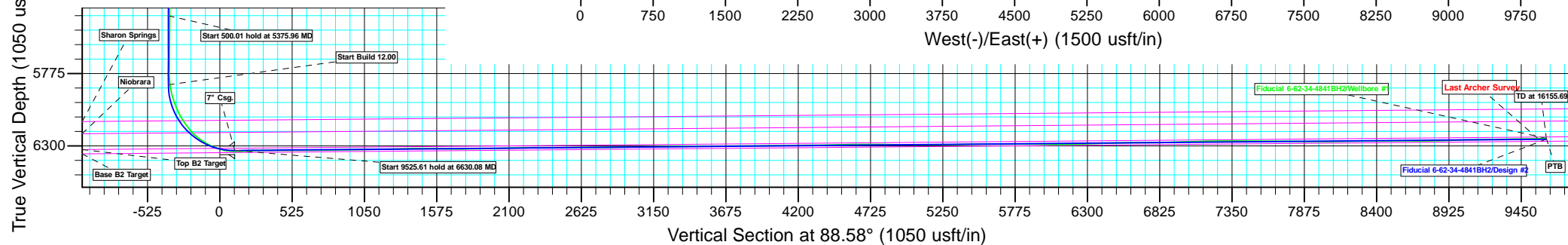
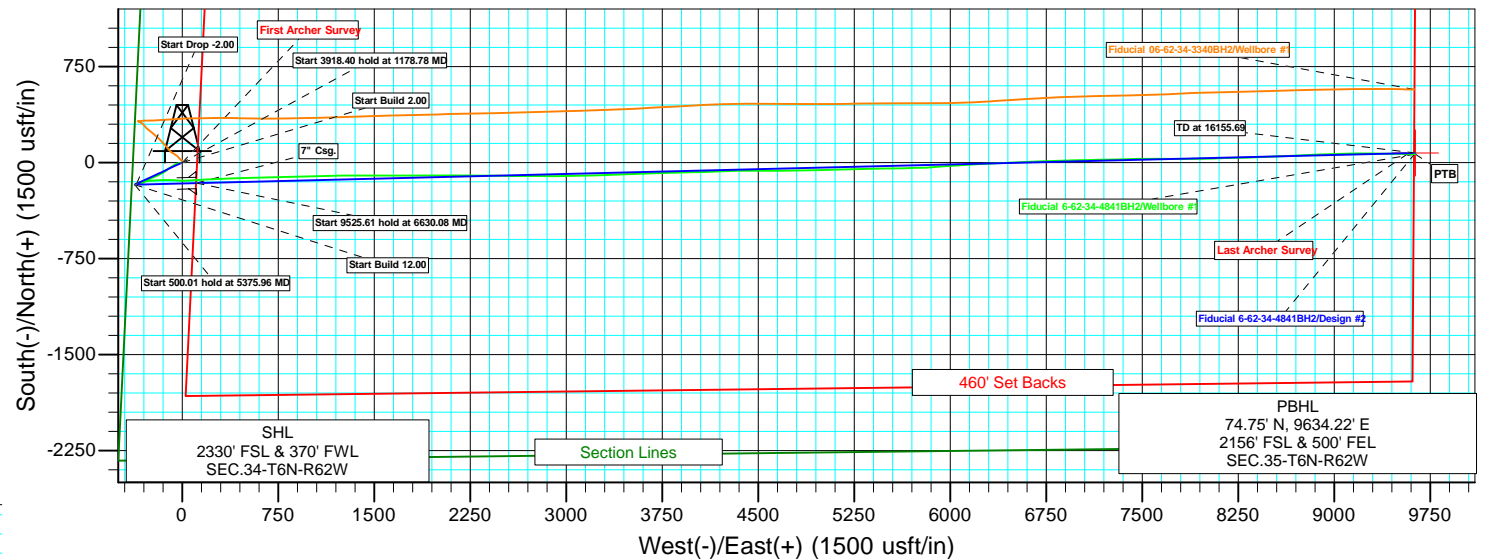
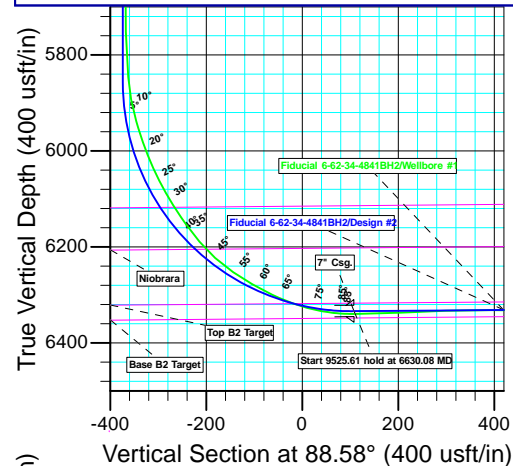
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

CASING DETAILS

TVD	MD	Name
6334.00	6630.08	7" Csg.

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
Fiducial 6-62-34-4841BH2 tgt	6252.00	74.75	9634.22	40° 26' 35.362 N	104° 16' 57.961 W	



Plan: Design #2 (Fiducial 6-62-34-4841BH2/Wellbore #1)

Created By: Ricky Osburn Date: 6:13, September 08 2014

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Fiducial 6-62-34-4841BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4707.00usft (Original Well Elev)
Site:	Sec.34-T6N-R62W	MD Reference:	WELL @ 4707.00usft (Original Well Elev)
Well:	Fiducial 6-62-34-4841BH2	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDMDBBW

Project	Weld Co., CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Sec.34-T6N-R62W			
Site Position:		Northing:	1,407,388.563 usft	Latitude:	40° 26' 44.369 N
From:	Lat/Long	Easting:	3,329,153.968 usft	Longitude:	104° 19' 2.392 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.76 °

Well	Fiducial 6-62-34-4841BH2					
Well Position	+N/-S	0.00 usft	Northing:	1,406,404.117 usft	Latitude:	40° 26' 34.641 N
	+E/-W	0.00 usft	Easting:	3,329,153.180 usft	Longitude:	104° 19' 2.572 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,685.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2014/07/30	8.20	67.05	52,872

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	88.58	

Survey Program	Date	2014/09/08			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
800.00	16,141.00	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	
First Archer Survey										
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
883.00	0.20	199.30	883.00	-0.14	-0.05	-0.05	0.24	0.24	0.00	
974.00	1.60	265.90	973.99	-0.38	-1.37	-1.38	1.68	1.54	73.19	
1,065.00	2.90	254.60	1,064.92	-1.08	-4.85	-4.88	1.50	1.43	-12.42	
1,154.00	5.20	262.00	1,153.69	-2.24	-11.02	-11.07	2.64	2.58	8.31	
1,246.00	5.60	264.80	1,245.28	-3.23	-19.62	-19.69	0.52	0.43	3.04	
1,337.00	6.90	249.20	1,335.74	-5.57	-29.15	-29.28	2.34	1.43	-17.14	
1,429.00	8.00	252.70	1,426.97	-9.44	-40.43	-40.65	1.29	1.20	3.80	
1,522.00	7.60	242.30	1,519.11	-14.22	-52.05	-52.39	1.58	-0.43	-11.18	
1,612.00	7.60	237.50	1,608.32	-20.18	-62.34	-62.82	0.71	0.00	-5.33	
1,703.00	7.40	237.30	1,698.54	-26.58	-72.35	-72.99	0.22	-0.22	-0.22	

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Fiducial 6-62-34-4841BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4707.00usft (Original Well Elev)
Site:	Sec.34-T6N-R62W	MD Reference:	WELL @ 4707.00usft (Original Well Elev)
Well:	Fiducial 6-62-34-4841BH2	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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)	
1,794.00	7.70	237.30	1,788.75	-33.04	-82.41	-83.21	0.33	0.33	0.00	
1,885.00	7.60	237.80	1,878.94	-39.54	-92.63	-93.59	0.13	-0.11	0.55	
1,979.00	7.60	236.50	1,972.12	-46.29	-103.08	-104.19	0.18	0.00	-1.38	
2,074.00	7.80	235.90	2,066.26	-53.37	-113.65	-114.94	0.23	0.21	-0.63	
2,169.00	6.60	223.40	2,160.52	-60.95	-122.74	-124.22	2.07	-1.26	-13.16	
2,264.00	6.90	232.90	2,254.86	-68.36	-131.05	-132.70	1.22	0.32	10.00	
2,359.00	6.10	242.20	2,349.25	-74.16	-140.06	-141.86	1.39	-0.84	9.79	
2,454.00	4.70	244.40	2,443.83	-78.19	-148.04	-149.93	1.49	-1.47	2.32	
2,549.00	4.60	241.40	2,538.51	-81.70	-154.89	-156.87	0.28	-0.11	-3.16	
2,644.00	4.60	242.50	2,633.21	-85.28	-161.62	-163.68	0.09	0.00	1.16	
2,739.00	4.30	240.60	2,727.92	-88.79	-168.10	-170.25	0.35	-0.32	-2.00	
2,834.00	4.10	243.50	2,822.67	-92.05	-174.24	-176.47	0.31	-0.21	3.05	
2,929.00	4.10	239.70	2,917.42	-95.28	-180.21	-182.52	0.29	0.00	-4.00	
3,024.00	4.00	238.30	3,012.19	-98.73	-185.96	-188.35	0.15	-0.11	-1.47	
3,119.00	4.30	245.00	3,106.94	-101.98	-192.01	-194.48	0.60	0.32	7.05	
3,214.00	4.00	251.30	3,201.69	-104.55	-198.38	-200.91	0.57	-0.32	6.63	
3,309.00	4.80	250.10	3,296.41	-106.96	-205.25	-207.84	0.85	0.84	-1.26	
3,403.00	4.90	247.20	3,390.07	-109.86	-212.65	-215.31	0.28	0.11	-3.09	
3,498.00	5.00	251.00	3,484.72	-112.78	-220.31	-223.03	0.36	0.11	4.00	
3,593.00	4.90	245.90	3,579.36	-115.78	-227.93	-230.72	0.47	-0.11	-5.37	
3,688.00	5.30	246.00	3,673.99	-119.22	-235.64	-238.52	0.42	0.42	0.11	
3,783.00	5.10	247.10	3,768.60	-122.65	-243.54	-246.50	0.24	-0.21	1.16	
3,877.00	5.10	241.50	3,862.23	-126.27	-251.06	-254.11	0.53	0.00	-5.96	
3,971.00	4.70	240.70	3,955.88	-130.15	-258.09	-261.23	0.43	-0.43	-0.85	
4,066.00	4.50	236.30	4,050.58	-134.12	-264.58	-267.82	0.43	-0.21	-4.63	
4,160.00	4.40	234.20	4,144.29	-138.28	-270.57	-273.92	0.20	-0.11	-2.23	
4,255.00	5.00	245.70	4,238.97	-142.11	-277.30	-280.74	1.17	0.63	12.11	
4,350.00	5.00	243.80	4,333.61	-145.64	-284.79	-288.31	0.17	0.00	-2.00	
4,445.00	4.70	237.70	4,428.27	-149.55	-291.79	-295.41	0.63	-0.32	-6.42	
4,541.00	6.20	242.50	4,523.84	-154.05	-299.72	-303.44	1.63	1.56	5.00	
4,636.00	6.20	240.70	4,618.28	-158.93	-308.74	-312.59	0.20	0.00	-1.89	
4,730.00	5.80	241.90	4,711.77	-163.65	-317.36	-321.32	0.45	-0.43	1.28	
4,826.00	6.50	251.10	4,807.22	-167.69	-326.78	-330.83	1.26	0.73	9.58	
4,920.00	6.00	251.10	4,900.66	-171.01	-336.46	-340.59	0.53	-0.53	0.00	
5,015.00	5.60	250.00	4,995.17	-174.20	-345.51	-349.72	0.44	-0.42	-1.16	
5,110.00	4.00	247.30	5,089.83	-177.06	-352.93	-357.21	1.70	-1.68	-2.84	
5,204.00	2.70	286.30	5,183.68	-177.71	-358.08	-362.37	2.71	-1.38	41.49	
5,300.00	1.50	350.70	5,279.63	-175.83	-360.45	-364.70	2.56	-1.25	67.08	
5,394.00	0.40	57.20	5,373.62	-174.44	-360.37	-364.59	1.48	-1.17	70.74	
5,488.00	1.20	316.00	5,467.61	-173.56	-360.78	-364.97	1.42	0.85	-107.66	
5,583.00	1.50	319.70	5,562.58	-171.89	-362.28	-366.42	0.33	0.32	3.89	
5,678.00	1.30	319.00	5,657.55	-170.13	-363.79	-367.89	0.21	-0.21	-0.74	
5,772.00	1.60	67.70	5,751.54	-168.83	-363.27	-367.35	2.51	0.32	115.64	
5,867.00	4.40	66.60	5,846.40	-166.88	-358.70	-362.73	2.95	2.95	-1.16	
5,914.00	11.80	65.60	5,892.90	-164.17	-352.66	-356.62	15.75	15.74	-2.13	
5,961.00	17.60	64.30	5,938.34	-159.10	-341.87	-345.71	12.36	12.34	-2.77	
6,008.00	20.40	71.10	5,982.78	-153.36	-327.72	-331.42	7.59	5.96	14.47	
6,057.00	23.40	76.80	6,028.24	-148.37	-310.16	-313.74	7.50	6.12	11.63	
6,104.00	28.10	83.50	6,070.57	-144.99	-290.06	-293.56	11.75	10.00	14.26	
6,152.00	32.60	86.80	6,111.99	-142.98	-265.90	-269.36	9.99	9.37	6.87	
6,199.00	34.60	86.90	6,151.13	-141.56	-239.93	-243.37	4.26	4.26	0.21	
6,247.00	40.60	86.90	6,189.14	-139.97	-210.70	-214.11	12.50	12.50	0.00	
6,294.00	47.70	87.30	6,222.85	-138.32	-178.03	-181.40	15.12	15.11	0.85	
6,342.00	55.50	87.60	6,252.64	-136.66	-140.48	-143.82	16.26	16.25	0.62	

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Fiducial 6-62-34-4841BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4707.00usft (Original Well Elev)
Site:	Sec.34-T6N-R62W	MD Reference:	WELL @ 4707.00usft (Original Well Elev)
Well:	Fiducial 6-62-34-4841BH2	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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)
6,389.00	60.00	92.00	6,277.72	-136.56	-100.75	-104.11	12.42	9.57	9.36
6,436.00	64.10	93.50	6,299.75	-138.56	-59.29	-62.71	9.17	8.72	3.19
6,484.00	71.10	92.80	6,318.03	-140.99	-15.01	-18.50	14.65	14.58	-1.46
6,532.00	77.00	89.60	6,331.21	-141.94	31.11	27.58	13.86	12.29	-6.67
6,555.00	81.40	88.40	6,335.52	-141.54	53.69	50.16	19.80	19.13	-5.22
6,615.00	90.70	84.50	6,339.65	-137.83	113.35	109.90	16.80	15.50	-6.50
6,710.00	92.70	86.50	6,336.83	-130.38	208.01	204.71	2.98	2.11	2.11
6,804.00	92.00	87.70	6,332.98	-125.62	301.81	298.60	1.48	-0.74	1.28
6,899.00	89.30	89.10	6,331.90	-122.97	396.75	393.58	3.20	-2.84	1.47
6,995.00	90.30	89.10	6,332.24	-121.47	492.74	489.58	1.04	1.04	0.00
7,089.00	90.20	88.40	6,331.83	-119.41	586.72	583.58	0.75	-0.11	-0.74
7,184.00	90.20	87.00	6,331.50	-115.60	681.64	678.56	1.47	0.00	-1.47
7,279.00	90.50	88.60	6,330.92	-111.96	776.56	773.55	1.71	0.32	1.68
7,375.00	91.20	90.30	6,329.49	-111.03	872.54	869.52	1.91	0.73	1.77
7,469.00	91.00	87.70	6,327.69	-109.39	966.50	963.49	2.77	-0.21	-2.77
7,563.00	90.40	88.80	6,326.54	-106.52	1,060.45	1,057.48	1.33	-0.64	1.17
7,658.00	91.20	88.20	6,325.21	-104.04	1,155.41	1,152.47	1.05	0.84	-0.63
7,753.00	90.80	89.90	6,323.55	-102.46	1,250.38	1,247.45	1.84	-0.42	1.79
7,847.00	91.80	89.70	6,321.42	-102.13	1,344.35	1,341.41	1.08	1.06	-0.21
7,942.00	91.20	90.10	6,318.93	-101.97	1,439.32	1,436.35	0.76	-0.63	0.42
8,037.00	88.80	90.00	6,318.93	-102.05	1,534.31	1,531.31	2.53	-2.53	-0.11
8,132.00	88.70	90.40	6,321.01	-102.38	1,629.29	1,626.25	0.43	-0.11	0.42
8,227.00	89.90	89.90	6,322.17	-102.63	1,724.28	1,721.20	1.37	1.26	-0.53
8,322.00	91.30	90.20	6,321.17	-102.71	1,819.27	1,816.16	1.51	1.47	0.32
8,417.00	90.30	89.10	6,319.85	-102.13	1,914.25	1,911.14	1.56	-1.05	-1.16
8,511.00	91.10	89.90	6,318.70	-101.31	2,008.24	2,005.12	1.20	0.85	0.85
8,607.00	92.50	90.30	6,315.68	-101.48	2,104.19	2,101.03	1.52	1.46	0.42
8,701.00	89.70	90.20	6,313.88	-101.89	2,198.17	2,194.97	2.98	-2.98	-0.11
8,796.00	89.80	90.50	6,314.29	-102.47	2,293.16	2,289.92	0.33	0.11	0.32
8,890.00	89.50	90.10	6,314.87	-102.96	2,387.16	2,383.87	0.53	-0.32	-0.43
8,984.00	90.90	90.80	6,314.54	-103.70	2,481.15	2,477.82	1.67	1.49	0.74
9,078.00	91.60	90.90	6,312.49	-105.10	2,575.12	2,571.72	0.75	0.74	0.11
9,173.00	89.90	90.00	6,311.24	-105.84	2,670.10	2,666.66	2.02	-1.79	-0.95
9,267.00	90.20	89.90	6,311.16	-105.76	2,764.10	2,760.63	0.34	0.32	-0.11
9,362.00	90.80	90.20	6,310.33	-105.84	2,859.10	2,855.60	0.71	0.63	0.32
9,456.00	90.60	89.40	6,309.18	-105.51	2,953.09	2,949.57	0.88	-0.21	-0.85
9,551.00	91.20	89.20	6,307.69	-104.35	3,048.07	3,044.55	0.67	0.63	-0.21
9,645.00	90.60	88.80	6,306.22	-102.71	3,142.05	3,138.53	0.77	-0.64	-0.43
9,740.00	90.60	88.40	6,305.22	-100.39	3,237.01	3,233.53	0.42	0.00	-0.42
9,834.00	90.90	88.40	6,303.99	-97.77	3,330.97	3,327.52	0.32	0.32	0.00
9,928.00	90.50	88.40	6,302.84	-95.14	3,424.92	3,421.51	0.43	-0.43	0.00
10,024.00	89.70	87.50	6,302.67	-91.71	3,520.86	3,517.51	1.25	-0.83	-0.94
10,119.00	90.40	87.10	6,302.59	-87.24	3,615.75	3,612.48	0.85	0.74	-0.42
10,214.00	91.20	86.70	6,301.27	-82.10	3,710.60	3,707.43	0.94	0.84	-0.42
10,305.00	90.10	88.90	6,300.23	-78.61	3,801.52	3,798.41	2.70	-1.21	2.42
10,396.00	90.10	88.70	6,300.07	-76.70	3,892.50	3,889.41	0.22	0.00	-0.22
10,488.00	90.90	89.40	6,299.27	-75.17	3,984.49	3,981.40	1.16	0.87	0.76
10,580.00	90.60	88.30	6,298.07	-73.33	4,076.46	4,073.39	1.24	-0.33	-1.20
10,672.00	90.90	87.60	6,296.86	-70.04	4,168.39	4,165.38	0.83	0.33	-0.76
10,764.00	90.60	88.30	6,295.66	-66.75	4,260.32	4,257.36	0.83	-0.33	0.76
10,853.00	90.50	89.60	6,294.80	-65.12	4,349.30	4,346.35	1.46	-0.11	1.46
10,944.00	90.80	89.90	6,293.77	-64.72	4,440.30	4,437.33	0.47	0.33	0.33
11,036.00	92.30	90.20	6,291.28	-64.80	4,532.26	4,529.26	1.66	1.63	0.33
11,128.00	89.80	89.70	6,289.60	-64.72	4,624.24	4,621.21	2.77	-2.72	-0.54

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Fiducial 6-62-34-4841BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4707.00usft (Original Well Elev)
Site:	Sec.34-T6N-R62W	MD Reference:	WELL @ 4707.00usft (Original Well Elev)
Well:	Fiducial 6-62-34-4841BH2	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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)	
11,220.00	90.30	90.00	6,289.52	-64.48	4,716.24	4,713.19	0.63	0.54	0.33	
11,311.00	89.10	88.40	6,289.99	-63.21	4,807.22	4,804.18	2.20	-1.32	-1.76	
11,403.00	89.10	88.40	6,291.44	-60.64	4,899.17	4,896.17	0.00	0.00	0.00	
11,494.00	89.20	88.70	6,292.79	-58.34	4,990.13	4,987.16	0.35	0.11	0.33	
11,584.00	89.80	88.80	6,293.57	-56.37	5,080.11	5,077.15	0.68	0.67	0.11	
11,676.00	90.90	88.80	6,293.01	-54.45	5,172.09	5,169.15	1.20	1.20	0.00	
11,767.00	90.40	86.90	6,291.98	-51.03	5,263.01	5,260.13	2.16	-0.55	-2.09	
11,859.00	91.70	90.00	6,290.29	-48.54	5,354.95	5,352.10	3.65	1.41	3.37	
11,951.00	90.80	90.00	6,288.29	-48.54	5,446.93	5,444.05	0.98	-0.98	0.00	
12,042.00	89.90	89.10	6,287.73	-47.83	5,537.92	5,535.03	1.40	-0.99	-0.99	
12,133.00	90.20	88.40	6,287.65	-45.84	5,628.90	5,626.03	0.84	0.33	-0.77	
12,224.00	90.60	87.90	6,287.02	-42.91	5,719.85	5,717.03	0.70	0.44	-0.55	
12,316.00	90.40	88.50	6,286.21	-40.02	5,811.80	5,809.02	0.69	-0.22	0.65	
12,407.00	88.90	85.20	6,286.77	-35.02	5,902.64	5,899.96	3.98	-1.65	-3.63	
12,498.00	88.90	85.50	6,288.52	-27.64	5,993.33	5,990.80	0.33	0.00	0.33	
12,589.00	90.30	86.20	6,289.15	-21.06	6,084.08	6,081.69	1.72	1.54	0.77	
12,681.00	90.70	86.20	6,288.35	-14.96	6,175.88	6,173.61	0.43	0.43	0.00	
12,772.00	91.20	86.90	6,286.84	-9.48	6,266.70	6,264.54	0.95	0.55	0.77	
12,864.00	91.50	87.40	6,284.67	-4.91	6,358.56	6,356.49	0.63	0.33	0.54	
12,954.00	92.40	87.50	6,281.61	-0.91	6,448.42	6,446.41	1.01	1.00	0.11	
13,045.00	92.20	88.00	6,277.96	2.66	6,539.27	6,537.33	0.59	-0.22	0.55	
13,136.00	89.50	88.10	6,276.61	5.76	6,630.20	6,628.31	2.97	-2.97	0.11	
13,228.00	89.60	88.40	6,277.33	8.56	6,722.16	6,720.30	0.34	0.11	0.33	
13,320.00	90.70	88.40	6,277.09	11.13	6,814.12	6,812.30	1.20	1.20	0.00	
13,411.00	92.80	87.70	6,274.31	14.23	6,905.02	6,903.25	2.43	2.31	-0.77	
13,503.00	92.10	88.40	6,270.38	17.36	6,996.88	6,995.16	1.08	-0.76	0.76	
13,595.00	90.70	88.70	6,268.13	19.68	7,088.82	7,087.13	1.56	-1.52	0.33	
13,687.00	91.50	88.40	6,266.36	22.01	7,180.77	7,179.11	0.93	0.87	-0.33	
13,779.00	90.60	88.90	6,264.68	24.18	7,272.73	7,271.10	1.12	-0.98	0.54	
13,870.00	89.00	89.20	6,265.00	25.69	7,363.72	7,362.09	1.79	-1.76	0.33	
13,963.00	89.90	89.20	6,265.89	26.98	7,456.70	7,455.08	0.97	0.97	0.00	
14,054.00	90.70	88.70	6,265.41	28.65	7,547.68	7,546.08	1.04	0.88	-0.55	
14,145.00	88.30	89.10	6,266.21	30.40	7,638.66	7,637.06	2.67	-2.64	0.44	
14,235.00	90.20	91.80	6,267.38	29.69	7,728.63	7,727.00	3.67	2.11	3.00	
14,326.00	88.90	89.70	6,268.10	28.50	7,819.62	7,817.92	2.71	-1.43	-2.31	
14,415.00	90.00	90.40	6,268.95	28.42	7,908.61	7,906.89	1.46	1.24	0.79	
14,507.00	90.50	88.40	6,268.55	29.39	8,000.60	7,998.87	2.24	0.54	-2.17	
14,598.00	89.60	87.30	6,268.47	32.80	8,091.53	8,089.86	1.56	-0.99	-1.21	
14,690.00	91.50	88.30	6,267.59	36.33	8,183.45	8,181.84	2.33	2.07	1.09	
14,782.00	90.50	88.40	6,265.98	38.98	8,275.40	8,273.83	1.09	-1.09	0.11	
14,873.00	90.60	88.70	6,265.11	41.28	8,366.37	8,364.82	0.35	0.11	0.33	
14,964.00	90.50	88.40	6,264.24	43.59	8,457.33	8,455.82	0.35	-0.11	-0.33	
15,055.00	90.50	87.70	6,263.44	46.68	8,548.28	8,546.81	0.77	0.00	-0.77	
15,145.00	89.50	87.00	6,263.44	50.84	8,638.18	8,636.79	1.36	-1.11	-0.78	
15,240.00	89.40	86.90	6,264.35	55.90	8,733.04	8,731.74	0.15	-0.11	-0.11	
15,335.00	91.60	87.70	6,263.53	60.37	8,827.93	8,826.71	2.46	2.32	0.84	
15,429.00	92.00	87.70	6,260.57	64.14	8,921.80	8,920.65	0.43	0.43	0.00	
15,524.00	91.20	88.50	6,257.92	67.29	9,016.71	9,015.61	1.19	-0.84	0.84	
15,619.00	91.80	88.70	6,255.43	69.61	9,111.65	9,110.58	0.67	0.63	0.21	
15,714.00	90.30	90.40	6,253.69	70.36	9,206.63	9,205.54	2.39	-1.58	1.79	
15,809.00	91.10	90.10	6,252.53	69.94	9,301.62	9,300.49	0.90	0.84	-0.32	
15,904.00	90.60	90.70	6,251.12	69.28	9,396.60	9,395.43	0.82	-0.53	0.63	
15,998.00	91.20	90.80	6,249.65	68.05	9,490.58	9,489.35	0.65	0.64	0.11	
Last Archer Survey										

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Fiducial 6-62-34-4841BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4707.00usft (Original Well Elev)
Site:	Sec.34-T6N-R62W	MD Reference:	WELL @ 4707.00usft (Original Well Elev)
Well:	Fiducial 6-62-34-4841BH2	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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)	
16,081.00	92.00	91.20	6,247.33	66.60	9,573.54	9,572.25	1.08	0.96	0.48	
PTB - Fiducial 6-62-34-4841BH2 tgt										
16,141.00	92.00	91.20	6,245.23	65.35	9,633.49	9,632.15	0.00	0.00	0.00	

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
800.00	800.00	0.00	0.00	First Archer Survey	
16,081.00	6,247.33	66.60	9,573.54	Last Archer Survey	
16,141.00	6,245.23	65.35	9,633.49	PTB	

Checked By: _____ Approved By: _____ Date: _____