



Bill Barrett Corp.
Project: Weld Co., CO
Site: Sec.11-T6N-R62W
Well: RUH 6-62-11-0461BH2
Wellbore: Wellbore #1
Design: Design #3
Lat: 40° 30' 29.721 N
Long: 104° 17' 29.558 W
Pad GL: 4777.00
KB: WELL @ 4800.00usft (Original Well Elev)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
12777.00	88.00	179.10	6428.44	-6411.88	565.53	0.00	0.00	6411.98	Start DLS 2.00 TFO 17.01
12888.47	90.13	179.75	6430.25	-6523.32	566.65	2.00	17.01	6523.42	Start 3149.00 hold at 12888.47 MD
16037.47	90.13	179.75	6423.00	-9672.28	580.27	0.00	0.00	9672.38	TD at 16037.47

WELL DETAILS: RUH 6-62-11-0461BH2

+N/-S	+E/-W	Northing	Ground Level: Easting	4777.00 Latitude	Longitude	Slot
0.00	0.00	1430287.858	3336019.654	40° 30' 29.721 N	104° 17' 29.558 W	

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
RUH 6-62-11-0461BH2 tgt	6423.00	-9672.28	580.27	40° 28' 54.142 N	104° 17' 22.049 W	

CASING DETAILS

TVD	MD	Name
	800.00	9 5/8" Csg.
	6797.83	7" Csg.

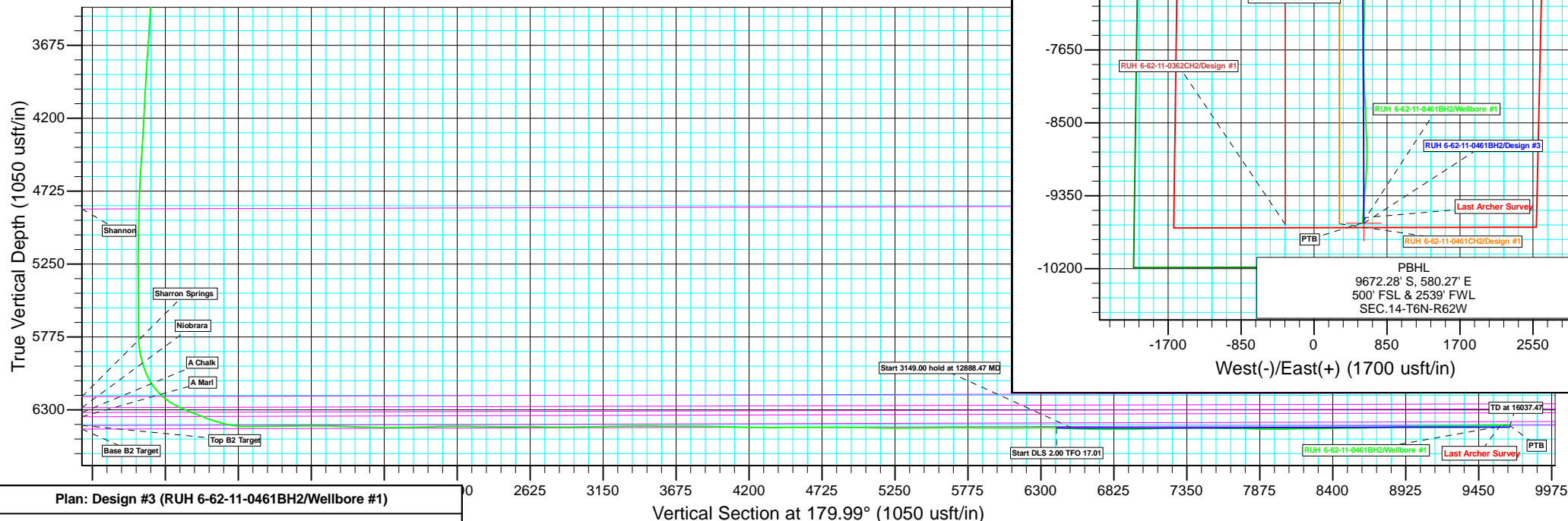
PROJECT DETAILS: Weld Co., CO

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

SHL
500' FNL & 1965' FWL
SEC.11-T6N-R62W

South(-)/North(+) (1700 usft/in)

West(-)/East(+) (1700 usft/in)





Bill Barrett Corporation

Bill Barrett Corp.

Weld Co., CO

Sec.11-T6N-R62W

RUH 6-62-11-0461BH2

Wellbore #1

Survey: Survey #1

Standard Survey Report

05 December, 2014

Archer

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well RUH 6-62-11-0461BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4800.00usft (Original Well Elev)
Site:	Sec.11-T6N-R62W	MD Reference:	WELL @ 4800.00usft (Original Well Elev)
Well:	RUH 6-62-11-0461BH2	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.11-T6N-R62W			
Site Position:		Northing:	1,430,288.186 usft	Latitude:	40° 30' 29.729 N
From:	Lat/Long	Easting:	3,335,989.337 usft	Longitude:	104° 17' 29.951 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.78 °

Well	RUH 6-62-11-0461BH2					
Well Position	+N/-S	0.00 usft	Northing:	1,430,287.858 usft	Latitude:	40° 30' 29.721 N
	+E/-W	0.00 usft	Easting:	3,336,019.654 usft	Longitude:	104° 17' 29.558 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,777.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	04/01/14	8.24	67.12	52,942

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	179.99

Survey Program	Date	12/05/14			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
840.00	16,037.00	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										
840.00	0.00	0.00	840.00	0.00	0.00	0.00	0.00	0.00	0.00	
861.00	0.40	153.30	861.00	-0.07	0.03	0.07	1.90	1.90	0.00	
893.00	0.60	153.50	893.00	-0.32	0.16	0.32	0.63	0.62	0.62	
988.00	3.50	77.00	987.94	-0.11	3.21	0.11	3.59	3.05	-80.53	
1,080.00	5.20	76.60	1,079.67	1.49	10.00	-1.49	1.85	1.85	-0.43	
1,172.00	5.80	67.10	1,171.24	4.27	18.34	-4.26	1.18	0.65	-10.33	
1,263.00	5.90	65.00	1,261.77	8.03	26.81	-8.03	0.26	0.11	-2.31	
1,355.00	7.00	75.20	1,353.19	11.46	36.52	-11.46	1.72	1.20	11.09	
1,447.00	8.50	79.30	1,444.35	14.16	48.62	-14.15	1.74	1.63	4.46	
1,538.00	10.20	81.50	1,534.14	16.60	63.20	-16.58	1.91	1.87	2.42	
1,630.00	10.50	79.30	1,624.64	19.36	79.49	-19.34	0.54	0.33	-2.39	

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well RUH 6-62-11-0461BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4800.00usft (Original Well Elev)
Site:	Sec. 11-T6N-R62W	MD Reference:	WELL @ 4800.00usft (Original Well Elev)
Well:	RUH 6-62-11-0461BH2	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)	
1,721.00	9.80	74.50	1,714.22	22.97	95.10	-22.95	1.21	-0.77	-5.27	
1,813.00	9.00	73.40	1,804.98	27.11	109.54	-27.09	0.89	-0.87	-1.20	
1,905.00	8.30	70.70	1,895.93	31.36	122.71	-31.34	0.88	-0.76	-2.93	
1,996.00	9.10	72.30	1,985.89	35.72	135.76	-35.70	0.92	0.88	1.76	
2,088.00	8.30	72.10	2,076.83	39.98	149.01	-39.95	0.87	-0.87	-0.22	
2,180.00	9.50	70.70	2,167.72	44.53	162.50	-44.50	1.33	1.30	-1.52	
2,272.00	9.20	69.90	2,258.50	49.56	176.57	-49.53	0.36	-0.33	-0.87	
2,364.00	8.30	69.90	2,349.42	54.37	189.71	-54.34	0.98	-0.98	0.00	
2,455.00	7.60	68.50	2,439.55	58.84	201.48	-58.80	0.80	-0.77	-1.54	
2,547.00	8.90	71.00	2,530.59	63.38	213.87	-63.35	1.47	1.41	2.72	
2,630.00	9.20	70.30	2,612.56	67.71	226.19	-67.67	0.39	0.36	-0.84	
2,730.00	8.70	70.70	2,711.34	72.90	240.85	-72.86	0.50	-0.50	0.40	
2,821.00	9.50	73.50	2,801.20	77.31	254.55	-77.27	1.00	0.88	3.08	
2,913.00	9.70	72.00	2,891.91	81.86	269.20	-81.82	0.35	0.22	-1.63	
3,005.00	9.20	71.70	2,982.66	86.57	283.55	-86.52	0.55	-0.54	-0.33	
3,097.00	9.00	71.50	3,073.50	91.16	297.36	-91.11	0.22	-0.22	-0.22	
3,189.00	8.80	71.50	3,164.40	95.68	310.86	-95.62	0.22	-0.22	0.00	
3,281.00	8.60	74.20	3,255.34	99.78	324.15	-99.73	0.49	-0.22	2.93	
3,373.00	8.10	72.10	3,346.36	103.65	336.93	-103.59	0.64	-0.54	-2.28	
3,465.00	9.60	69.80	3,437.26	108.29	350.30	-108.23	1.67	1.63	-2.50	
3,556.00	9.80	66.80	3,526.96	113.96	364.54	-113.90	0.60	0.22	-3.30	
3,648.00	10.20	67.20	3,617.57	120.20	379.25	-120.13	0.44	0.43	0.43	
3,740.00	9.80	67.00	3,708.17	126.42	393.97	-126.35	0.44	-0.43	-0.22	
3,832.00	9.70	67.70	3,798.84	132.42	408.34	-132.35	0.17	-0.11	0.76	
3,924.00	9.30	68.90	3,889.58	138.03	422.45	-137.96	0.49	-0.43	1.30	
4,018.00	8.90	70.00	3,982.39	143.26	436.37	-143.18	0.46	-0.43	1.17	
4,112.00	8.70	71.90	4,075.29	147.95	449.96	-147.87	0.38	-0.21	2.02	
4,208.00	8.50	72.00	4,170.21	152.40	463.61	-152.32	0.21	-0.21	0.10	
4,302.00	8.90	65.90	4,263.13	157.52	476.85	-157.43	1.07	0.43	-6.49	
4,398.00	8.50	65.20	4,358.02	163.52	490.07	-163.44	0.43	-0.42	-0.73	
4,492.00	8.40	64.00	4,451.00	169.45	502.55	-169.36	0.22	-0.11	-1.28	
4,587.00	8.10	64.60	4,545.02	175.36	514.83	-175.27	0.33	-0.32	0.63	
4,681.00	7.90	64.70	4,638.11	180.96	526.65	-180.87	0.21	-0.21	0.11	
4,776.00	6.60	69.60	4,732.34	185.65	537.67	-185.56	1.51	-1.37	5.16	
4,871.00	5.30	70.80	4,826.83	189.00	546.94	-188.91	1.37	-1.37	1.26	
4,965.00	5.20	73.60	4,920.44	191.63	555.12	-191.53	0.29	-0.11	2.98	
5,060.00	3.50	78.50	5,015.16	193.43	562.09	-193.33	1.83	-1.79	5.16	
5,154.00	3.10	80.60	5,109.00	194.41	567.41	-194.31	0.44	-0.43	2.23	
5,249.00	1.50	90.20	5,203.92	194.83	571.19	-194.73	1.73	-1.68	10.11	
5,343.00	0.30	220.30	5,297.91	194.64	572.26	-194.54	1.82	-1.28	138.40	
5,438.00	0.50	160.60	5,392.91	194.05	572.24	-193.95	0.46	0.21	-62.84	
5,532.00	0.40	114.20	5,486.91	193.53	572.67	-193.43	0.39	-0.11	-49.36	
5,627.00	0.70	116.80	5,581.91	193.14	573.50	-193.04	0.32	0.32	2.74	
5,722.00	0.70	101.50	5,676.90	192.76	574.58	-192.66	0.20	0.00	-16.11	
5,816.00	0.90	141.80	5,770.89	192.06	575.60	-191.96	0.62	0.21	42.87	
5,864.00	4.60	168.40	5,818.83	189.88	576.22	-189.78	7.95	7.71	55.42	
5,911.00	8.60	169.50	5,865.51	184.58	577.24	-184.48	8.51	8.51	2.34	
5,959.00	12.20	168.60	5,912.71	176.07	578.90	-175.97	7.51	7.50	-1.87	
6,005.00	15.80	167.60	5,957.34	165.19	581.20	-165.09	7.84	7.83	-2.17	
6,053.00	20.20	168.00	6,002.98	150.69	584.33	-150.59	9.17	9.17	0.83	
6,100.00	23.80	169.80	6,046.55	133.42	587.70	-133.32	7.79	7.66	3.83	
6,148.00	30.00	171.40	6,089.33	112.00	591.21	-111.90	13.00	12.92	3.33	
6,195.00	35.70	172.80	6,128.80	86.76	594.69	-86.65	12.23	12.13	2.98	
6,243.00	41.90	174.30	6,166.19	56.88	598.04	-56.78	13.06	12.92	3.12	

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well RUH 6-62-11-0461BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4800.00usft (Original Well Elev)
Site:	Sec. 11-T6N-R62W	MD Reference:	WELL @ 4800.00usft (Original Well Elev)
Well:	RUH 6-62-11-0461BH2	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)
6,291.00	48.90	177.50	6,199.88	22.82	600.43	-22.71	15.33	14.58	6.67
6,339.00	53.20	180.40	6,230.05	-14.49	601.08	14.59	10.11	8.96	6.04
6,386.00	60.10	181.40	6,255.87	-53.72	600.45	53.82	14.79	14.68	2.13
6,434.00	66.50	182.20	6,277.43	-96.56	599.10	96.66	13.42	13.33	1.67
6,481.00	67.20	182.30	6,295.91	-139.74	597.40	139.84	1.50	1.49	0.21
6,529.00	67.30	182.40	6,314.47	-183.97	595.59	184.07	0.28	0.21	0.21
6,576.00	67.50	182.40	6,332.53	-227.32	593.77	227.42	0.43	0.43	0.00
6,624.00	67.70	182.40	6,350.82	-271.66	591.91	271.76	0.42	0.42	0.00
6,671.00	71.00	182.70	6,367.40	-315.59	589.95	315.69	7.05	7.02	0.64
6,719.00	74.20	182.50	6,381.75	-361.34	587.88	361.44	6.68	6.67	-0.42
6,766.00	75.60	182.50	6,393.99	-406.67	585.90	406.78	2.98	2.98	0.00
6,814.00	77.60	182.60	6,405.11	-453.32	583.82	453.42	4.17	4.17	0.21
6,861.00	82.20	182.40	6,413.35	-499.53	581.80	499.64	9.80	9.79	-0.43
6,909.00	87.10	180.50	6,417.83	-547.29	580.60	547.39	10.94	10.21	-3.96
6,960.00	90.10	179.00	6,419.08	-598.27	580.82	598.37	6.58	5.88	-2.94
6,992.00	90.20	178.10	6,418.99	-630.26	581.63	630.36	2.83	0.31	-2.81
7,087.00	90.90	177.10	6,418.08	-725.17	585.61	725.27	1.28	0.74	-1.05
7,181.00	91.20	177.40	6,416.36	-819.05	590.12	819.15	0.45	0.32	0.32
7,276.00	91.00	176.80	6,414.53	-913.91	594.92	914.01	0.67	-0.21	-0.63
7,370.00	89.20	177.60	6,414.37	-1,007.79	599.51	1,007.89	2.10	-1.91	0.85
7,465.00	89.50	177.60	6,415.45	-1,102.70	603.49	1,102.80	0.32	0.32	0.00
7,561.00	89.70	179.70	6,416.12	-1,198.66	605.75	1,198.77	2.20	0.21	2.19
7,656.00	87.90	181.20	6,418.11	-1,293.63	605.01	1,293.74	2.47	-1.89	1.58
7,750.00	88.00	181.10	6,421.47	-1,387.56	603.12	1,387.66	0.15	0.11	-0.11
7,845.00	88.70	180.30	6,424.20	-1,482.51	601.96	1,482.61	1.12	0.74	-0.84
7,940.00	88.80	179.60	6,426.28	-1,577.48	602.04	1,577.59	0.74	0.11	-0.74
8,034.00	90.40	180.80	6,426.93	-1,671.48	601.72	1,671.58	2.13	1.70	1.28
8,129.00	91.30	180.70	6,425.52	-1,766.46	600.47	1,766.56	0.95	0.95	-0.11
8,223.00	91.60	179.60	6,423.15	-1,860.42	600.23	1,860.53	1.21	0.32	-1.17
8,318.00	92.10	179.80	6,420.08	-1,955.37	600.72	1,955.48	0.57	0.53	0.21
8,413.00	91.00	180.50	6,417.51	-2,050.34	600.47	2,050.44	1.37	-1.16	0.74
8,507.00	89.20	181.00	6,417.34	-2,144.32	599.24	2,144.43	1.99	-1.91	0.53
8,602.00	89.30	180.40	6,418.59	-2,239.31	598.08	2,239.41	0.64	0.11	-0.63
8,697.00	89.10	179.50	6,419.91	-2,334.30	598.17	2,334.40	0.97	-0.21	-0.95
8,791.00	89.30	178.80	6,421.23	-2,428.28	599.56	2,428.38	0.77	0.21	-0.74
8,886.00	91.10	180.00	6,420.90	-2,523.27	600.56	2,523.37	2.28	1.89	1.26
8,981.00	89.80	181.50	6,420.15	-2,618.25	599.31	2,618.36	2.09	-1.37	1.58
9,075.00	88.10	179.90	6,421.87	-2,712.22	598.16	2,712.33	2.48	-1.81	-1.70
9,171.00	89.60	181.90	6,423.80	-2,808.18	596.66	2,808.29	2.60	1.56	2.08
9,267.00	90.00	183.30	6,424.13	-2,904.08	592.30	2,904.18	1.52	0.42	1.46
9,361.00	91.30	182.60	6,423.07	-2,997.95	587.46	2,998.05	1.57	1.38	-0.74
9,455.00	91.60	181.30	6,420.69	-3,091.86	584.27	3,091.96	1.42	0.32	-1.38
9,550.00	91.20	181.90	6,418.37	-3,186.79	581.61	3,186.90	0.76	-0.42	0.63
9,644.00	90.40	182.90	6,417.06	-3,280.70	577.68	3,280.80	1.36	-0.85	1.06
9,739.00	91.20	182.10	6,415.73	-3,375.60	573.53	3,375.70	1.19	0.84	-0.84
9,834.00	89.10	182.30	6,415.48	-3,470.52	569.89	3,470.62	2.22	-2.21	0.21
9,926.00	89.40	182.00	6,416.68	-3,562.45	566.44	3,562.55	0.46	0.33	-0.33
10,018.00	89.70	181.40	6,417.41	-3,654.41	563.71	3,654.51	0.73	0.33	-0.65
10,109.00	91.00	181.10	6,416.85	-3,745.38	561.72	3,745.48	1.47	1.43	-0.33
10,201.00	88.90	181.00	6,416.93	-3,837.36	560.04	3,837.46	2.29	-2.28	-0.11
10,293.00	88.50	180.40	6,419.02	-3,929.33	558.91	3,929.43	0.78	-0.43	-0.65
10,385.00	89.00	180.30	6,421.03	-4,021.31	558.35	4,021.40	0.55	0.54	-0.11
10,476.00	88.90	180.00	6,422.69	-4,112.29	558.11	4,112.39	0.35	-0.11	-0.33
10,568.00	88.50	179.40	6,424.78	-4,204.27	558.59	4,204.36	0.78	-0.43	-0.65

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well RUH 6-62-11-0461BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4800.00usft (Original Well Elev)
Site:	Sec. 11-T6N-R62W	MD Reference:	WELL @ 4800.00usft (Original Well Elev)
Well:	RUH 6-62-11-0461BH2	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)
10,659.00	89.40	178.90	6,426.45	-4,295.24	559.94	4,295.34	1.13	0.99	-0.55
10,751.00	90.50	178.90	6,426.53	-4,387.22	561.71	4,387.32	1.20	1.20	0.00
10,843.00	90.20	178.40	6,425.97	-4,479.19	563.88	4,479.29	0.63	-0.33	-0.54
10,935.00	90.00	179.50	6,425.81	-4,571.18	565.56	4,571.27	1.22	-0.22	1.20
11,027.00	90.20	182.20	6,425.65	-4,663.16	564.20	4,663.26	2.94	0.22	2.93
11,118.00	90.20	184.60	6,425.33	-4,753.99	558.80	4,754.09	2.64	0.00	2.64
11,210.00	89.20	185.30	6,425.81	-4,845.64	550.86	4,845.74	1.33	-1.09	0.76
11,301.00	90.50	182.40	6,426.05	-4,936.43	544.76	4,936.52	3.49	1.43	-3.19
11,402.00	88.60	180.70	6,426.84	-5,037.38	542.02	5,037.47	2.52	-1.88	-1.68
11,494.00	88.50	180.60	6,429.17	-5,129.34	540.98	5,129.44	0.15	-0.11	-0.11
11,585.00	89.50	179.20	6,430.76	-5,220.32	541.14	5,220.42	1.89	1.10	-1.54
11,677.00	90.80	179.40	6,430.52	-5,312.32	542.26	5,312.41	1.43	1.41	0.22
11,769.00	90.10	177.40	6,429.79	-5,404.27	544.83	5,404.37	2.30	-0.76	-2.17
11,860.00	90.60	178.80	6,429.24	-5,495.22	547.85	5,495.31	1.63	0.55	1.54
11,952.00	90.80	178.80	6,428.11	-5,587.19	549.78	5,587.29	0.22	0.22	0.00
12,044.00	90.50	177.50	6,427.07	-5,679.13	552.75	5,679.23	1.45	-0.33	-1.41
12,136.00	89.50	177.30	6,427.07	-5,771.04	556.92	5,771.14	1.11	-1.09	-0.22
12,227.00	88.80	178.50	6,428.42	-5,861.97	560.25	5,862.06	1.53	-0.77	1.32
12,319.00	89.70	180.20	6,429.62	-5,953.95	561.30	5,954.04	2.09	0.98	1.85
12,411.00	90.20	179.80	6,429.70	-6,045.95	561.30	6,046.04	0.70	0.54	-0.43
12,502.00	90.70	179.20	6,428.99	-6,136.94	562.09	6,137.04	0.86	0.55	-0.66
12,594.00	91.20	179.00	6,427.46	-6,228.92	563.54	6,229.01	0.59	0.54	-0.22
12,685.00	89.80	179.70	6,426.67	-6,319.90	564.57	6,320.00	1.72	-1.54	0.77
12,777.00	88.00	179.10	6,428.44	-6,411.88	565.53	6,411.98	2.06	-1.96	-0.65
12,869.00	87.20	176.20	6,432.29	-6,503.71	569.30	6,503.81	3.27	-0.87	-3.15
12,961.00	87.90	176.70	6,436.22	-6,595.45	574.99	6,595.55	0.93	0.76	0.54
13,053.00	88.80	177.70	6,438.87	-6,687.30	579.48	6,687.40	1.46	0.98	1.09
13,145.00	90.50	178.10	6,439.43	-6,779.23	582.85	6,779.33	1.90	1.85	0.43
13,237.00	89.90	177.60	6,439.11	-6,871.16	586.30	6,871.27	0.85	-0.65	-0.54
13,328.00	91.10	178.60	6,438.32	-6,962.11	589.32	6,962.21	1.72	1.32	1.10
13,420.00	92.00	181.20	6,435.83	-7,054.06	589.48	7,054.17	2.99	0.98	2.83
13,511.00	93.10	181.00	6,431.78	-7,144.96	587.74	7,145.06	1.23	1.21	-0.22
13,603.00	90.10	181.70	6,429.21	-7,236.88	585.57	7,236.99	3.35	-3.26	0.76
13,696.00	89.70	181.50	6,429.37	-7,329.85	582.97	7,329.95	0.48	-0.43	-0.22
13,787.00	89.60	181.60	6,429.93	-7,420.81	580.51	7,420.91	0.16	-0.11	0.11
13,883.00	89.50	181.30	6,430.68	-7,516.78	578.08	7,516.88	0.33	-0.10	-0.31
13,978.00	89.40	180.70	6,431.60	-7,611.76	576.42	7,611.86	0.64	-0.11	-0.63
14,072.00	89.10	180.20	6,432.83	-7,705.75	575.69	7,705.85	0.62	-0.32	-0.53
14,166.00	88.00	178.00	6,435.21	-7,799.70	577.16	7,799.80	2.62	-1.17	-2.34
14,260.00	88.90	177.80	6,437.75	-7,893.60	580.61	7,893.70	0.98	0.96	-0.21
14,355.00	90.50	178.60	6,438.25	-7,988.55	583.59	7,988.65	1.88	1.68	0.84
14,450.00	91.40	178.80	6,436.67	-8,083.51	585.74	8,083.61	0.97	0.95	0.21
14,545.00	90.70	177.50	6,434.93	-8,178.44	588.81	8,178.54	1.55	-0.74	-1.37
14,639.00	89.40	175.30	6,434.85	-8,272.25	594.71	8,272.35	2.72	-1.38	-2.34
14,734.00	92.60	178.20	6,433.19	-8,367.06	600.10	8,367.16	4.55	3.37	3.05
14,828.00	90.50	178.70	6,430.65	-8,460.98	602.64	8,461.09	2.30	-2.23	0.53
14,922.00	90.20	177.60	6,430.07	-8,554.93	605.67	8,555.04	1.21	-0.32	-1.17
15,017.00	90.80	176.90	6,429.24	-8,649.82	610.23	8,649.92	0.97	0.63	-0.74
15,112.00	92.20	179.40	6,426.76	-8,744.73	613.30	8,744.83	3.02	1.47	2.63
15,207.00	92.40	179.00	6,422.94	-8,839.64	614.62	8,839.75	0.47	0.21	-0.42
15,301.00	91.40	180.40	6,419.83	-8,933.58	615.11	8,933.69	1.83	-1.06	1.49
15,396.00	92.00	182.90	6,417.01	-9,028.49	612.38	9,028.60	2.71	0.63	2.63
15,491.00	89.10	183.90	6,416.10	-9,123.31	606.75	9,123.42	3.23	-3.05	1.05
15,585.00	90.50	185.90	6,416.43	-9,216.96	598.72	9,217.06	2.60	1.49	2.13

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well RUH 6-62-11-0461BH2
Project:	Weld Co., CO	TVD Reference:	WELL @ 4800.00usft (Original Well Elev)
Site:	Sec. 11-T6N-R62W	MD Reference:	WELL @ 4800.00usft (Original Well Elev)
Well:	RUH 6-62-11-0461BH2	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)	
15,680.00	90.10	184.70	6,415.93	-9,311.55	589.94	9,311.65	1.33	-0.42	-1.26	
15,774.00	91.30	184.80	6,414.78	-9,405.22	582.16	9,405.32	1.28	1.28	0.11	
15,869.00	91.70	184.00	6,412.29	-9,499.91	574.87	9,500.01	0.94	0.42	-0.84	
15,964.00	91.80	183.60	6,409.39	-9,594.65	568.58	9,594.75	0.43	0.11	-0.42	
Last Archer Survey										
15,977.00	91.90	183.60	6,408.97	-9,607.62	567.77	9,607.72	0.77	0.77	0.00	
PTB - RUH 6-62-11-0461BH2 tgt										
16,037.00	91.90	183.60	6,406.98	-9,667.47	564.00	9,667.57	0.00	0.00	0.00	

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
840.00	840.00	0.00	0.00	First Archer Survey	
15,977.00	6,408.97	-9,607.62	567.77	Last Archer Survey	
16,037.00	6,406.98	-9,667.47	564.00	PTB	

Checked By: _____ Approved By: _____ Date: _____