



**Bill Barrett Corporation**

## **Bill Barrett Corp.**

Weld Co., CO

Sec.15-T6N-R62W

Heath 6-62-15-0758BH2

Wellbore #1

Plan: Design #1

## **Standard Planning Report**

17 April, 2015

# **Archer**



Bill Barrett Corp.  
Project: Weld Co., CO  
Site: Sec.15-T6N-R62W  
Well: Heath 6-62-15-0758BH2  
Wellbore: Wellbore #1  
Design: Design #1  
Lat: 40° 29' 37.079 N  
Long: 104° 18' 8.640 W  
Pad GL: 4732.00  
KB: Well @ 4748.00usft

# Archer

Plan: Design #1 (Heath 6-62-15-0758BH2/Wellbore #1)

Created By: Ricky Osburn Date: 14:26, April 17 2015

### 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
1138.52	4.77	321.22	1138.25	7.74	-6.22	2.00	321.22	-7.71	Start 4085.20 hold at 1138.52 MD
5223.72	4.77	321.22	5209.29	272.58	-219.00	0.00	0.00	-271.63	Start Drop -2.00
5462.24	0.00	0.00	5447.54	280.32	-225.22	2.00	180.00	-279.33	Start 500.00 hold at 5462.24 MD
5962.24	0.00	0.00	5947.54	280.32	-225.22	0.00	0.00	-279.33	Start Build 12.00
6714.61	90.28	180.25	6425.00	-199.51	-227.33	12.00	180.25	200.50	Start 9484.98 hold at 6714.61 MD
16199.58	90.28	180.25	6378.00	-9684.27	-269.05	0.00	0.00	9685.36	TD at 16199.58

### WELL DETAILS: Heath 6-62-15-0758BH2

+N/-S	+E/-W	Northing	Ground Level: Easting	4732.00 Latitude	Longitude	Slot
0.00	0.00	1424920.156	3333073.196	40° 29' 37.079 N	104° 18' 8.640 W	

### WELLBORE TARGET DETAILS (LAT/LONG)

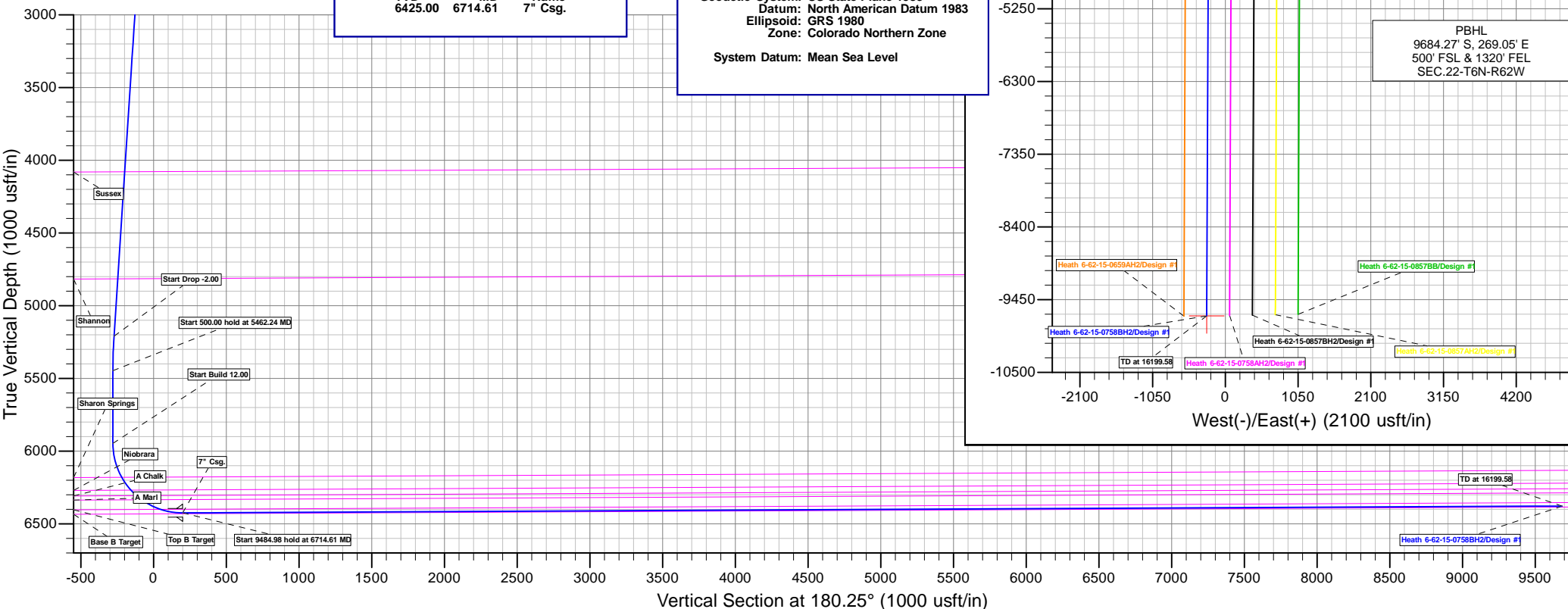
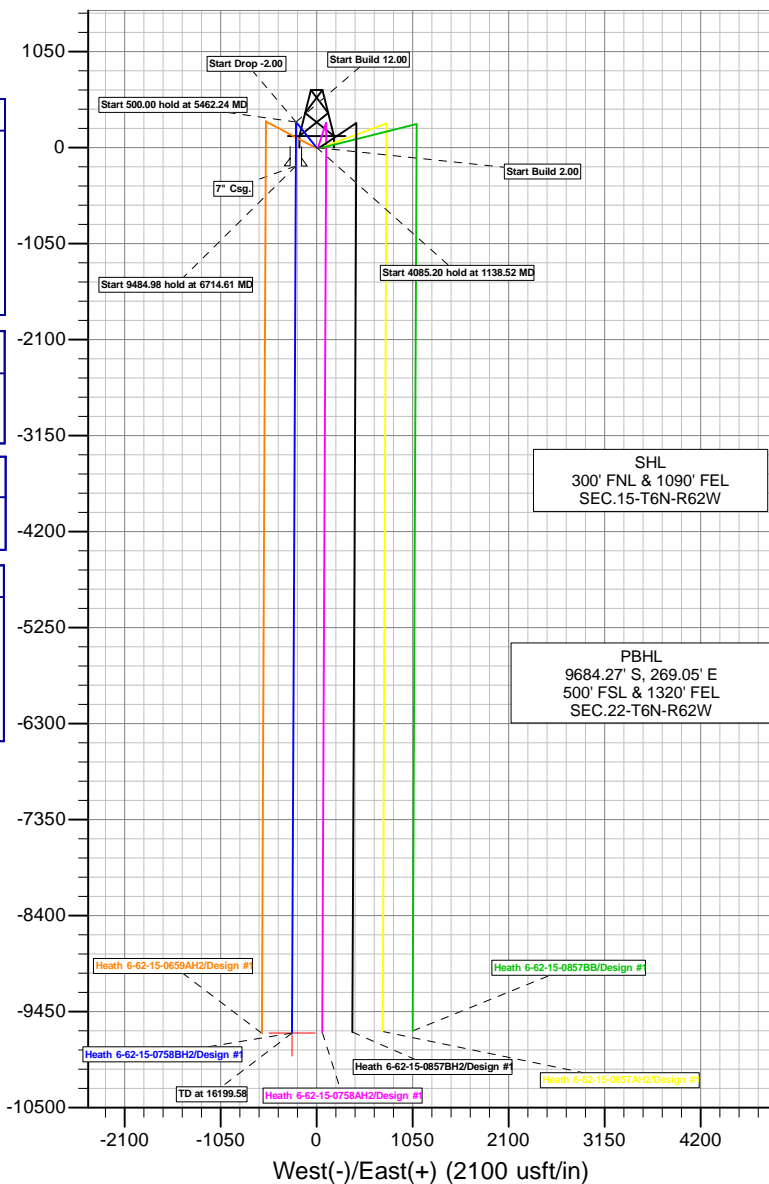
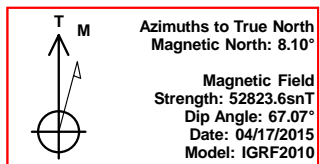
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
Heath 6-62-15-0758BH2 tgt	6378.00	-9684.27	-269.05	40° 28' 1.380 N	104° 18' 12.121 W	

### CASING DETAILS

TVD	MD	Name
6425.00	6714.61	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



<b>Database:</b>	EDMDBBW	<b>Local Co-ordinate Reference:</b>	Well Heath 6-62-15-0758BH2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	Well @ 4748.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	Well @ 4748.00usft
<b>Site:</b>	Sec.15-T6N-R62W	<b>North Reference:</b>	True
<b>Well:</b>	Heath 6-62-15-0758BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<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.15-T6N-R62W				
Site Position:		Northing:	1,424,875.232 usft	Latitude:	40° 29' 37.061 N
From:	Lat/Long	Easting:	3,329,865.887 usft	Longitude:	104° 18' 50.159 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.77 °

Well	Heath 6-62-15-0758BH2					
Well Position	+N/-S	2.02 usft	Northing:	1,424,920.156 usft	Latitude:	40° 29' 37.079 N
	+E/-W	3,207.62 usft	Easting:	3,333,073.196 usft	Longitude:	104° 18' 8.640 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,732.00 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	2015/04/17	8.10	67.07	52,824

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<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	180.25

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	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	0.00	
1,138.52	4.77	321.22	1,138.25	7.74	-6.22	2.00	2.00	0.00	321.22	
5,223.72	4.77	321.22	5,209.29	272.58	-219.00	0.00	0.00	0.00	0.00	
5,462.24	0.00	0.00	5,447.54	280.32	-225.22	2.00	-2.00	0.00	180.00	
5,962.24	0.00	0.00	5,947.54	280.32	-225.22	0.00	0.00	0.00	0.00	
6,714.61	90.28	180.25	6,425.00	-199.51	-227.33	12.00	12.00	0.00	180.25	Heath 6-62-15-0758B
16,199.58	90.28	180.25	6,378.00	-9,684.27	-269.05	0.00	0.00	0.00	0.00	Heath 6-62-15-0758B

<b>Database:</b>	EDMDBBW	<b>Local Co-ordinate Reference:</b>	Well Heath 6-62-15-0758BH2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	Well @ 4748.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	Well @ 4748.00usft
<b>Site:</b>	Sec.15-T6N-R62W	<b>North Reference:</b>	True
<b>Well:</b>	Heath 6-62-15-0758BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	2.00	321.22	999.98	1.36	-1.09	-1.36	2.00	2.00	0.00
1,100.00	4.00	321.22	1,099.84	5.44	-4.37	-5.42	2.00	2.00	0.00
<b>Start 4085.20 hold at 1138.52 MD</b>									
1,138.52	4.77	321.22	1,138.25	7.74	-6.22	-7.71	2.00	2.00	0.00
1,200.00	4.77	321.22	1,199.51	11.72	-9.42	-11.68	0.00	0.00	0.00
1,300.00	4.77	321.22	1,299.17	18.21	-14.63	-18.14	0.00	0.00	0.00
1,400.00	4.77	321.22	1,398.82	24.69	-19.84	-24.60	0.00	0.00	0.00
1,500.00	4.77	321.22	1,498.47	31.17	-25.04	-31.06	0.00	0.00	0.00
1,600.00	4.77	321.22	1,598.13	37.65	-30.25	-37.52	0.00	0.00	0.00
1,700.00	4.77	321.22	1,697.78	44.14	-35.46	-43.98	0.00	0.00	0.00
1,800.00	4.77	321.22	1,797.43	50.62	-40.67	-50.44	0.00	0.00	0.00
1,900.00	4.77	321.22	1,897.09	57.10	-45.88	-56.90	0.00	0.00	0.00
2,000.00	4.77	321.22	1,996.74	63.59	-51.09	-63.36	0.00	0.00	0.00
2,100.00	4.77	321.22	2,096.39	70.07	-56.30	-69.82	0.00	0.00	0.00
2,200.00	4.77	321.22	2,196.05	76.55	-61.51	-76.28	0.00	0.00	0.00
2,300.00	4.77	321.22	2,295.70	83.04	-66.71	-82.74	0.00	0.00	0.00
2,400.00	4.77	321.22	2,395.35	89.52	-71.92	-89.20	0.00	0.00	0.00
2,500.00	4.77	321.22	2,495.01	96.00	-77.13	-95.66	0.00	0.00	0.00
2,600.00	4.77	321.22	2,594.66	102.49	-82.34	-102.13	0.00	0.00	0.00
2,700.00	4.77	321.22	2,694.32	108.97	-87.55	-108.59	0.00	0.00	0.00
2,800.00	4.77	321.22	2,793.97	115.45	-92.76	-115.05	0.00	0.00	0.00
2,900.00	4.77	321.22	2,893.62	121.93	-97.97	-121.51	0.00	0.00	0.00
3,000.00	4.77	321.22	2,993.28	128.42	-103.18	-127.97	0.00	0.00	0.00
3,100.00	4.77	321.22	3,092.93	134.90	-108.38	-134.43	0.00	0.00	0.00
3,200.00	4.77	321.22	3,192.58	141.38	-113.59	-140.89	0.00	0.00	0.00
3,300.00	4.77	321.22	3,292.24	147.87	-118.80	-147.35	0.00	0.00	0.00
3,400.00	4.77	321.22	3,391.89	154.35	-124.01	-153.81	0.00	0.00	0.00
3,500.00	4.77	321.22	3,491.54	160.83	-129.22	-160.27	0.00	0.00	0.00
3,600.00	4.77	321.22	3,591.20	167.32	-134.43	-166.73	0.00	0.00	0.00
3,700.00	4.77	321.22	3,690.85	173.80	-139.64	-173.19	0.00	0.00	0.00
3,800.00	4.77	321.22	3,790.50	180.28	-144.85	-179.65	0.00	0.00	0.00
3,900.00	4.77	321.22	3,890.16	186.77	-150.05	-186.11	0.00	0.00	0.00
4,000.00	4.77	321.22	3,989.81	193.25	-155.26	-192.57	0.00	0.00	0.00
<b>Sussex</b>									
4,090.47	4.77	321.22	4,079.97	199.11	-159.98	-198.41	0.00	0.00	0.00
4,100.00	4.77	321.22	4,089.47	199.73	-160.47	-199.03	0.00	0.00	0.00
4,200.00	4.77	321.22	4,189.12	206.21	-165.68	-205.49	0.00	0.00	0.00
4,300.00	4.77	321.22	4,288.77	212.70	-170.89	-211.95	0.00	0.00	0.00
4,400.00	4.77	321.22	4,388.43	219.18	-176.10	-218.41	0.00	0.00	0.00
4,500.00	4.77	321.22	4,488.08	225.66	-181.31	-224.87	0.00	0.00	0.00
4,600.00	4.77	321.22	4,587.73	232.15	-186.52	-231.33	0.00	0.00	0.00
4,700.00	4.77	321.22	4,687.39	238.63	-191.72	-237.79	0.00	0.00	0.00

<b>Database:</b>	EDMDBBW	<b>Local Co-ordinate Reference:</b>	Well Heath 6-62-15-0758BH2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	Well @ 4748.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	Well @ 4748.00usft
<b>Site:</b>	Sec.15-T6N-R62W	<b>North Reference:</b>	True
<b>Well:</b>	Heath 6-62-15-0758BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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)	
4,800.00	4.77	321.22	4,787.04	245.11	-196.93	-244.25	0.00	0.00	0.00	
<b>Shannon</b>										
4,829.26	4.77	321.22	4,816.20	247.01	-198.46	-246.14	0.00	0.00	0.00	
4,900.00	4.77	321.22	4,886.69	251.60	-202.14	-250.71	0.00	0.00	0.00	
5,000.00	4.77	321.22	4,986.35	258.08	-207.35	-257.17	0.00	0.00	0.00	
5,100.00	4.77	321.22	5,086.00	264.56	-212.56	-263.63	0.00	0.00	0.00	
5,200.00	4.77	321.22	5,185.66	271.05	-217.77	-270.09	0.00	0.00	0.00	
<b>Start Drop -2.00</b>										
5,223.72	4.77	321.22	5,209.29	272.58	-219.00	-271.63	0.00	0.00	0.00	
5,300.00	3.24	321.22	5,285.38	276.74	-222.34	-275.77	2.00	-2.00	0.00	
5,400.00	1.24	321.22	5,385.30	279.79	-224.80	-278.81	2.00	-2.00	0.00	
<b>Start 500.00 hold at 5462.24 MD</b>										
5,462.24	0.00	0.00	5,447.54	280.32	-225.22	-279.33	2.00	-2.00	0.00	
5,500.00	0.00	0.00	5,485.30	280.32	-225.22	-279.33	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,585.30	280.32	-225.22	-279.33	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,685.30	280.32	-225.22	-279.33	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,785.30	280.32	-225.22	-279.33	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,885.30	280.32	-225.22	-279.33	0.00	0.00	0.00	
<b>Start Build 12.00</b>										
5,962.24	0.00	0.00	5,947.54	280.32	-225.22	-279.33	0.00	0.00	0.00	
5,975.00	1.53	180.25	5,960.30	280.15	-225.22	-279.16	12.00	12.00	0.00	
6,000.00	4.53	180.25	5,985.26	278.83	-225.23	-277.84	12.00	12.00	0.00	
6,025.00	7.53	180.25	6,010.12	276.20	-225.24	-275.22	12.00	12.00	0.00	
6,050.00	10.53	180.25	6,034.80	272.28	-225.26	-271.29	12.00	12.00	0.00	
6,075.00	13.53	180.25	6,059.25	267.07	-225.28	-266.08	12.00	12.00	0.00	
6,100.00	16.53	180.25	6,083.39	260.58	-225.31	-259.60	12.00	12.00	0.00	
6,125.00	19.53	180.25	6,107.16	252.85	-225.34	-251.86	12.00	12.00	0.00	
6,150.00	22.53	180.25	6,130.50	243.88	-225.38	-242.89	12.00	12.00	0.00	
6,175.00	25.53	180.25	6,153.33	233.70	-225.43	-232.71	12.00	12.00	0.00	
6,200.00	28.53	180.25	6,175.59	222.34	-225.48	-221.35	12.00	12.00	0.00	
<b>Sharon Springs</b>										
6,206.25	29.28	180.25	6,181.07	219.31	-225.49	-218.33	12.00	12.00	0.00	
6,225.00	31.53	180.25	6,197.23	209.83	-225.53	-208.84	12.00	12.00	0.00	
6,250.00	34.53	180.25	6,218.19	196.20	-225.59	-195.22	12.00	12.00	0.00	
6,275.00	37.53	180.25	6,238.41	181.50	-225.65	-180.51	12.00	12.00	0.00	
6,300.00	40.53	180.25	6,257.82	165.76	-225.72	-164.77	12.00	12.00	0.00	
<b>Niobrara</b>										
6,314.58	42.28	180.25	6,268.76	156.11	-225.77	-155.13	12.00	12.00	0.00	
6,325.00	43.53	180.25	6,276.39	149.02	-225.80	-148.03	12.00	12.00	0.00	
6,350.00	46.53	180.25	6,294.06	131.33	-225.88	-130.35	12.00	12.00	0.00	
<b>A Chalk</b>										
6,368.57	48.76	180.25	6,306.57	117.61	-225.94	-116.62	12.00	12.00	0.00	
6,375.00	49.53	180.25	6,310.77	112.75	-225.96	-111.76	12.00	12.00	0.00	
6,400.00	52.53	180.25	6,326.50	93.31	-226.04	-92.33	12.00	12.00	0.00	
<b>A Marl</b>										
6,414.93	54.32	180.25	6,335.39	81.32	-226.10	-80.34	12.00	12.00	0.00	
6,425.00	55.53	180.25	6,341.18	73.08	-226.13	-72.10	12.00	12.00	0.00	
6,450.00	58.53	180.25	6,354.78	52.11	-226.22	-51.12	12.00	12.00	0.00	
6,475.00	61.53	180.25	6,367.27	30.46	-226.32	-29.47	12.00	12.00	0.00	
6,500.00	64.53	180.25	6,378.60	8.18	-226.42	-7.19	12.00	12.00	0.00	
6,525.00	67.53	180.25	6,388.76	-14.66	-226.52	15.65	12.00	12.00	0.00	
6,550.00	70.53	180.25	6,397.70	-38.00	-226.62	38.99	12.00	12.00	0.00	
<b>Top B Target</b>										

<b>Database:</b>	EDMDBBW	<b>Local Co-ordinate Reference:</b>	Well Heath 6-62-15-0758BH2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	Well @ 4748.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	Well @ 4748.00usft
<b>Site:</b>	Sec.15-T6N-R62W	<b>North Reference:</b>	True
<b>Well:</b>	Heath 6-62-15-0758BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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)	
6,559.45	71.67	180.25	6,400.77	-46.94	-226.66	47.93	12.00	12.00	0.00	
6,575.00	73.53	180.25	6,405.42	-61.78	-226.72	62.77	12.00	12.00	0.00	
6,600.00	76.53	180.25	6,411.87	-85.93	-226.83	86.92	12.00	12.00	0.00	
6,625.00	79.53	180.25	6,417.06	-110.38	-226.94	111.37	12.00	12.00	0.00	
6,650.00	82.53	180.25	6,420.95	-135.07	-227.05	136.06	12.00	12.00	0.00	
6,675.00	85.53	180.25	6,423.55	-159.94	-227.16	160.93	12.00	12.00	0.00	
6,700.00	88.53	180.25	6,424.85	-184.90	-227.27	185.89	12.00	12.00	0.00	
Start 9484.98 hold at 6714.61 MD - 7" Csg.										
6,714.61	90.28	180.25	6,425.00	-199.51	-227.33	200.50	12.00	12.00	0.00	
6,800.00	90.28	180.25	6,424.58	-284.90	-227.71	285.89	0.00	0.00	0.00	
6,900.00	90.28	180.25	6,424.08	-384.89	-228.15	385.89	0.00	0.00	0.00	
7,000.00	90.28	180.25	6,423.58	-484.89	-228.59	485.88	0.00	0.00	0.00	
7,100.00	90.28	180.25	6,423.09	-584.89	-229.03	585.88	0.00	0.00	0.00	
7,200.00	90.28	180.25	6,422.59	-684.89	-229.47	685.88	0.00	0.00	0.00	
7,300.00	90.28	180.25	6,422.10	-784.88	-229.91	785.88	0.00	0.00	0.00	
7,400.00	90.28	180.25	6,421.60	-884.88	-230.35	885.88	0.00	0.00	0.00	
7,500.00	90.28	180.25	6,421.11	-984.88	-230.79	985.88	0.00	0.00	0.00	
7,600.00	90.28	180.25	6,420.61	-1,084.88	-231.23	1,085.88	0.00	0.00	0.00	
7,700.00	90.28	180.25	6,420.12	-1,184.88	-231.67	1,185.88	0.00	0.00	0.00	
7,800.00	90.28	180.25	6,419.62	-1,284.87	-232.11	1,285.87	0.00	0.00	0.00	
7,900.00	90.28	180.25	6,419.13	-1,384.87	-232.54	1,385.87	0.00	0.00	0.00	
8,000.00	90.28	180.25	6,418.63	-1,484.87	-232.98	1,485.87	0.00	0.00	0.00	
8,100.00	90.28	180.25	6,418.13	-1,584.87	-233.42	1,585.87	0.00	0.00	0.00	
8,200.00	90.28	180.25	6,417.64	-1,684.87	-233.86	1,685.87	0.00	0.00	0.00	
8,300.00	90.28	180.25	6,417.14	-1,784.86	-234.30	1,785.87	0.00	0.00	0.00	
8,400.00	90.28	180.25	6,416.65	-1,884.86	-234.74	1,885.87	0.00	0.00	0.00	
8,500.00	90.28	180.25	6,416.15	-1,984.86	-235.18	1,985.87	0.00	0.00	0.00	
8,600.00	90.28	180.25	6,415.66	-2,084.86	-235.62	2,085.86	0.00	0.00	0.00	
8,700.00	90.28	180.25	6,415.16	-2,184.85	-236.06	2,185.86	0.00	0.00	0.00	
8,800.00	90.28	180.25	6,414.67	-2,284.85	-236.50	2,285.86	0.00	0.00	0.00	
8,900.00	90.28	180.25	6,414.17	-2,384.85	-236.94	2,385.86	0.00	0.00	0.00	
9,000.00	90.28	180.25	6,413.67	-2,484.85	-237.38	2,485.86	0.00	0.00	0.00	
9,100.00	90.28	180.25	6,413.18	-2,584.85	-237.82	2,585.86	0.00	0.00	0.00	
9,200.00	90.28	180.25	6,412.68	-2,684.84	-238.26	2,685.86	0.00	0.00	0.00	
9,300.00	90.28	180.25	6,412.19	-2,784.84	-238.70	2,785.86	0.00	0.00	0.00	
9,400.00	90.28	180.25	6,411.69	-2,884.84	-239.14	2,885.85	0.00	0.00	0.00	
9,500.00	90.28	180.25	6,411.20	-2,984.84	-239.58	2,985.85	0.00	0.00	0.00	
9,600.00	90.28	180.25	6,410.70	-3,084.83	-240.02	3,085.85	0.00	0.00	0.00	
9,700.00	90.28	180.25	6,410.21	-3,184.83	-240.46	3,185.85	0.00	0.00	0.00	
9,800.00	90.28	180.25	6,409.71	-3,284.83	-240.90	3,285.85	0.00	0.00	0.00	
9,900.00	90.28	180.25	6,409.22	-3,384.83	-241.34	3,385.85	0.00	0.00	0.00	
10,000.00	90.28	180.25	6,408.72	-3,484.83	-241.78	3,485.85	0.00	0.00	0.00	
10,100.00	90.28	180.25	6,408.22	-3,584.82	-242.22	3,585.85	0.00	0.00	0.00	
10,200.00	90.28	180.25	6,407.73	-3,684.82	-242.66	3,685.84	0.00	0.00	0.00	
10,300.00	90.28	180.25	6,407.23	-3,784.82	-243.10	3,785.84	0.00	0.00	0.00	
10,400.00	90.28	180.25	6,406.74	-3,884.82	-243.54	3,885.84	0.00	0.00	0.00	
10,500.00	90.28	180.25	6,406.24	-3,984.81	-243.98	3,985.84	0.00	0.00	0.00	
10,600.00	90.28	180.25	6,405.75	-4,084.81	-244.42	4,085.84	0.00	0.00	0.00	
10,700.00	90.28	180.25	6,405.25	-4,184.81	-244.86	4,185.84	0.00	0.00	0.00	
10,800.00	90.28	180.25	6,404.76	-4,284.81	-245.30	4,285.84	0.00	0.00	0.00	
10,900.00	90.28	180.25	6,404.26	-4,384.81	-245.74	4,385.84	0.00	0.00	0.00	
11,000.00	90.28	180.25	6,403.76	-4,484.80	-246.18	4,485.84	0.00	0.00	0.00	
11,100.00	90.28	180.25	6,403.27	-4,584.80	-246.62	4,585.83	0.00	0.00	0.00	

<b>Database:</b>	EDMDBBW	<b>Local Co-ordinate Reference:</b>	Well Heath 6-62-15-0758BH2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	Well @ 4748.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	Well @ 4748.00usft
<b>Site:</b>	Sec.15-T6N-R62W	<b>North Reference:</b>	True
<b>Well:</b>	Heath 6-62-15-0758BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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)
11,200.00	90.28	180.25	6,402.77	-4,684.80	-247.06	4,685.83	0.00	0.00	0.00
11,300.00	90.28	180.25	6,402.28	-4,784.80	-247.50	4,785.83	0.00	0.00	0.00
11,400.00	90.28	180.25	6,401.78	-4,884.79	-247.94	4,885.83	0.00	0.00	0.00
11,500.00	90.28	180.25	6,401.29	-4,984.79	-248.38	4,985.83	0.00	0.00	0.00
11,600.00	90.28	180.25	6,400.79	-5,084.79	-248.82	5,085.83	0.00	0.00	0.00
11,700.00	90.28	180.25	6,400.30	-5,184.79	-249.26	5,185.83	0.00	0.00	0.00
11,800.00	90.28	180.25	6,399.80	-5,284.79	-249.70	5,285.83	0.00	0.00	0.00
11,900.00	90.28	180.25	6,399.31	-5,384.78	-250.14	5,385.82	0.00	0.00	0.00
12,000.00	90.28	180.25	6,398.81	-5,484.78	-250.58	5,485.82	0.00	0.00	0.00
12,100.00	90.28	180.25	6,398.31	-5,584.78	-251.02	5,585.82	0.00	0.00	0.00
12,200.00	90.28	180.25	6,397.82	-5,684.78	-251.46	5,685.82	0.00	0.00	0.00
12,300.00	90.28	180.25	6,397.32	-5,784.78	-251.90	5,785.82	0.00	0.00	0.00
12,400.00	90.28	180.25	6,396.83	-5,884.77	-252.34	5,885.82	0.00	0.00	0.00
12,500.00	90.28	180.25	6,396.33	-5,984.77	-252.78	5,985.82	0.00	0.00	0.00
12,600.00	90.28	180.25	6,395.84	-6,084.77	-253.22	6,085.82	0.00	0.00	0.00
12,700.00	90.28	180.25	6,395.34	-6,184.77	-253.66	6,185.81	0.00	0.00	0.00
12,800.00	90.28	180.25	6,394.85	-6,284.76	-254.10	6,285.81	0.00	0.00	0.00
12,900.00	90.28	180.25	6,394.35	-6,384.76	-254.54	6,385.81	0.00	0.00	0.00
13,000.00	90.28	180.25	6,393.86	-6,484.76	-254.98	6,485.81	0.00	0.00	0.00
13,100.00	90.28	180.25	6,393.36	-6,584.76	-255.42	6,585.81	0.00	0.00	0.00
13,200.00	90.28	180.25	6,392.86	-6,684.76	-255.86	6,685.81	0.00	0.00	0.00
13,300.00	90.28	180.25	6,392.37	-6,784.75	-256.30	6,785.81	0.00	0.00	0.00
13,400.00	90.28	180.25	6,391.87	-6,884.75	-256.74	6,885.81	0.00	0.00	0.00
13,500.00	90.28	180.25	6,391.38	-6,984.75	-257.18	6,985.80	0.00	0.00	0.00
13,600.00	90.28	180.25	6,390.88	-7,084.75	-257.62	7,085.80	0.00	0.00	0.00
13,700.00	90.28	180.25	6,390.39	-7,184.74	-258.06	7,185.80	0.00	0.00	0.00
13,800.00	90.28	180.25	6,389.89	-7,284.74	-258.50	7,285.80	0.00	0.00	0.00
13,900.00	90.28	180.25	6,389.40	-7,384.74	-258.94	7,385.80	0.00	0.00	0.00
14,000.00	90.28	180.25	6,388.90	-7,484.74	-259.38	7,485.80	0.00	0.00	0.00
14,100.00	90.28	180.25	6,388.40	-7,584.74	-259.82	7,585.80	0.00	0.00	0.00
14,200.00	90.28	180.25	6,387.91	-7,684.73	-260.26	7,685.80	0.00	0.00	0.00
14,300.00	90.28	180.25	6,387.41	-7,784.73	-260.70	7,785.79	0.00	0.00	0.00
14,400.00	90.28	180.25	6,386.92	-7,884.73	-261.14	7,885.79	0.00	0.00	0.00
14,500.00	90.28	180.25	6,386.42	-7,984.73	-261.58	7,985.79	0.00	0.00	0.00
14,600.00	90.28	180.25	6,385.93	-8,084.72	-262.02	8,085.79	0.00	0.00	0.00
14,700.00	90.28	180.25	6,385.43	-8,184.72	-262.46	8,185.79	0.00	0.00	0.00
14,800.00	90.28	180.25	6,384.94	-8,284.72	-262.90	8,285.79	0.00	0.00	0.00
14,900.00	90.28	180.25	6,384.44	-8,384.72	-263.34	8,385.79	0.00	0.00	0.00
15,000.00	90.28	180.25	6,383.95	-8,484.72	-263.78	8,485.79	0.00	0.00	0.00
15,100.00	90.28	180.25	6,383.45	-8,584.71	-264.22	8,585.78	0.00	0.00	0.00
15,200.00	90.28	180.25	6,382.95	-8,684.71	-264.66	8,685.78	0.00	0.00	0.00
15,300.00	90.28	180.25	6,382.46	-8,784.71	-265.10	8,785.78	0.00	0.00	0.00
15,400.00	90.28	180.25	6,381.96	-8,884.71	-265.54	8,885.78	0.00	0.00	0.00
15,500.00	90.28	180.25	6,381.47	-8,984.70	-265.98	8,985.78	0.00	0.00	0.00
15,600.00	90.28	180.25	6,380.97	-9,084.70	-266.42	9,085.78	0.00	0.00	0.00
15,700.00	90.28	180.25	6,380.48	-9,184.70	-266.86	9,185.78	0.00	0.00	0.00
15,800.00	90.28	180.25	6,379.98	-9,284.70	-267.30	9,285.78	0.00	0.00	0.00
15,900.00	90.28	180.25	6,379.49	-9,384.70	-267.74	9,385.77	0.00	0.00	0.00
16,000.00	90.28	180.25	6,378.99	-9,484.69	-268.18	9,485.77	0.00	0.00	0.00
16,100.00	90.28	180.25	6,378.49	-9,584.69	-268.62	9,585.77	0.00	0.00	0.00
<b>TD at 16199.58</b>									
16,199.58	90.28	180.25	6,378.00	-9,684.27	-269.05	9,685.36	0.00	0.00	0.00

<b>Database:</b>	EDMDBBW	<b>Local Co-ordinate Reference:</b>	Well Heath 6-62-15-0758BH2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	Well @ 4748.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	Well @ 4748.00usft
<b>Site:</b>	Sec.15-T6N-R62W	<b>North Reference:</b>	True
<b>Well:</b>	Heath 6-62-15-0758BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Heath 6-62-15-0758BH2	0.00	0.00	6,378.00	-9,684.27	-269.05	1,415,233.132	3,332,934.955	40° 28' 1.380 N	104° 18' 12.121 W
- plan hits target center									
- Point									

Casing Points				
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(usft)	(usft)		(")	(")
6,714.61	6,425.00	7" Csg.	7	8-3/4

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
4,090.47	4,079.00	Sussex		-0.28	180.25	
4,829.26	4,815.00	Shannon		-0.28	180.25	
6,206.25	6,180.00	Sharon Springs		-0.28	180.25	
6,314.58	6,268.00	Niobrara		-0.28	180.25	
6,368.57	6,306.00	A Chalk		-0.28	180.25	
6,414.93	6,335.00	A Marl		-0.28	180.25	
6,559.45	6,401.00	Top B Target		-0.28	180.25	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)		
900.00	900.00	0.00	0.00	Start Build 2.00	
1,138.52	1,138.25	7.74	-6.22	Start 4085.20 hold at 1138.52 MD	
5,223.72	5,209.29	272.58	-219.00	Start Drop -2.00	
5,462.24	5,447.54	280.32	-225.22	Start 500.00 hold at 5462.24 MD	
5,962.24	5,947.54	280.32	-225.22	Start Build 12.00	
6,714.61	6,425.00	-199.51	-227.33	Start 9484.98 hold at 6714.61 MD	
16,199.58	6,378.00	-9,684.27	-269.05	TD at 16199.58	