



Bill Barrett Corporation

Bill Barrett Corp.

Weld Co., CO

Sec.15-T6N-R62W

Will 6-62-15-0362BH2

Wellbore #1

Plan: Design #2

Standard Planning Report

08 April, 2015

Archer



Bill Barrett Corp.
Project: Weld Co., CO
Site: Sec.15-T6N-R62W
Well: Will 6-62-15-0362BH2
Wellbore: Wellbore #1
Design: Design #2
Lat: 40° 29' 37.061 N
Long: 104° 18' 49.190 W
Pad GL: 4761.00
KB: Well @ 4777.00usft

Plan: Design #2 (Will 6-62-15-0362BH2/Wellbore #1)

Created By: Ricky Osburn Date: 11:25, April 08 2015

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	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
1237.22	6.74	57.43	1236.44	10.67	16.71	2.00	57.43	-10.73	Start 3973.15 hold at 1237.22 MD
5210.37	6.74	57.43	5182.10	261.87	409.93	0.00	0.00	-263.37	Start Drop -2.00
5547.59	0.00	0.00	5518.54	272.54	426.64	2.00	180.00	-274.10	Start 500.00 hold at 5547.59 MD
6047.59	0.00	0.00	6018.54	272.54	426.64	0.00	0.00	-274.10	Start Build 12.00
6800.10	90.30	180.21	6496.00	-207.43	424.90	12.00	180.21	205.87	Start 9515.66 hold at 6800.10 MD
16315.75	90.30	180.21	6446.00	-9722.89	390.36	0.00	0.00	9721.40	TD at 16315.76

WELL DETAILS: Will 6-62-15-0362BH2

+N/-S	+E/-W	Northing	Ground Level: Easting	4761.00 Latitude	Longitude	Slot
0.00	0.00	1424876.229	3329940.696	40° 29' 37.061 N	104° 18' 49.190 W	

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
Will 6-62-15-0362BH2 tgt	6446.00	-9722.89	390.36	40° 28' 0.980 N	104° 18' 44.140 W	

CASING DETAILS

TVD	MD	Name
6496.00	6800.10	7" Csg.

PROJECT DETAILS: Weld Co., CO

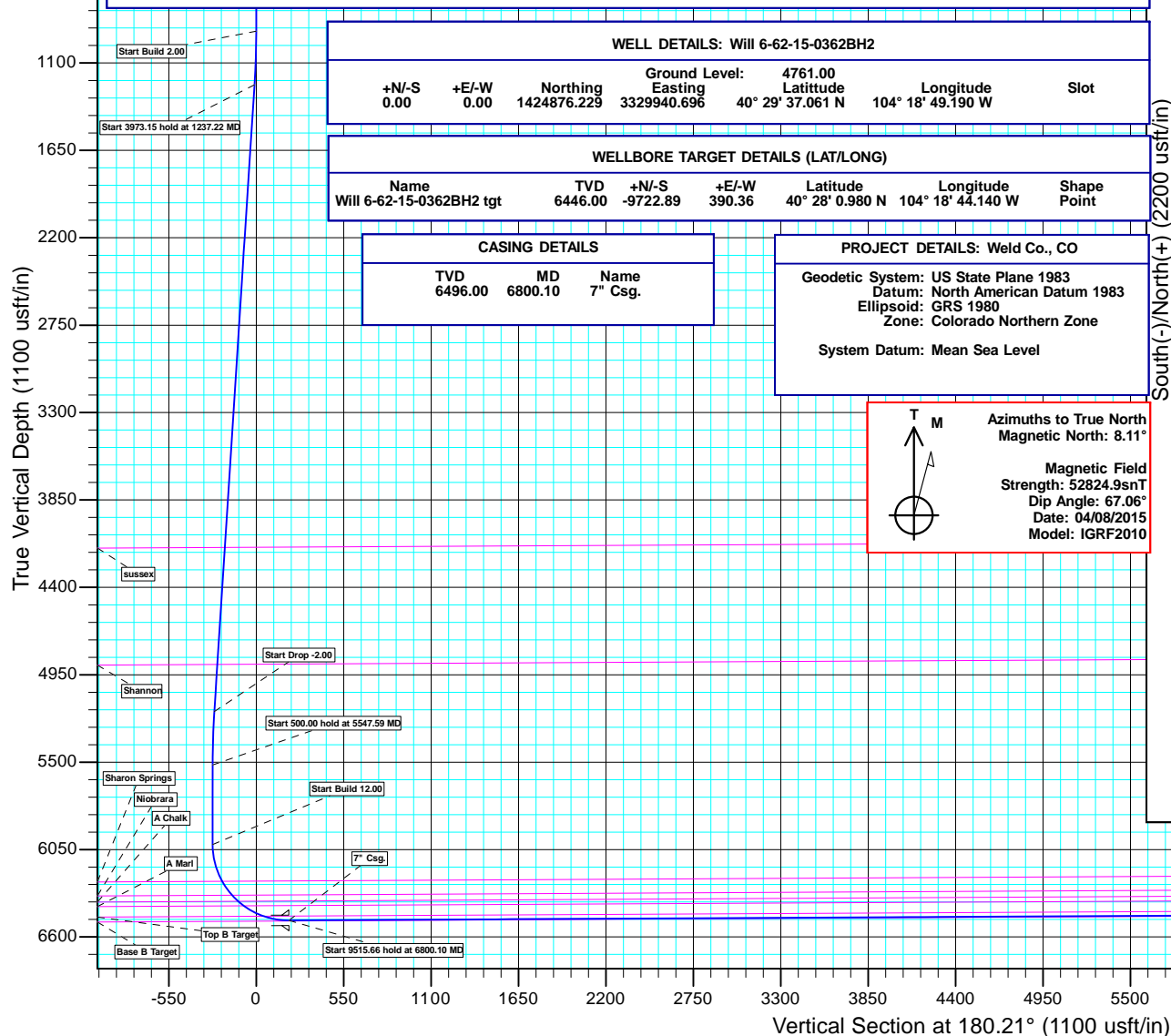
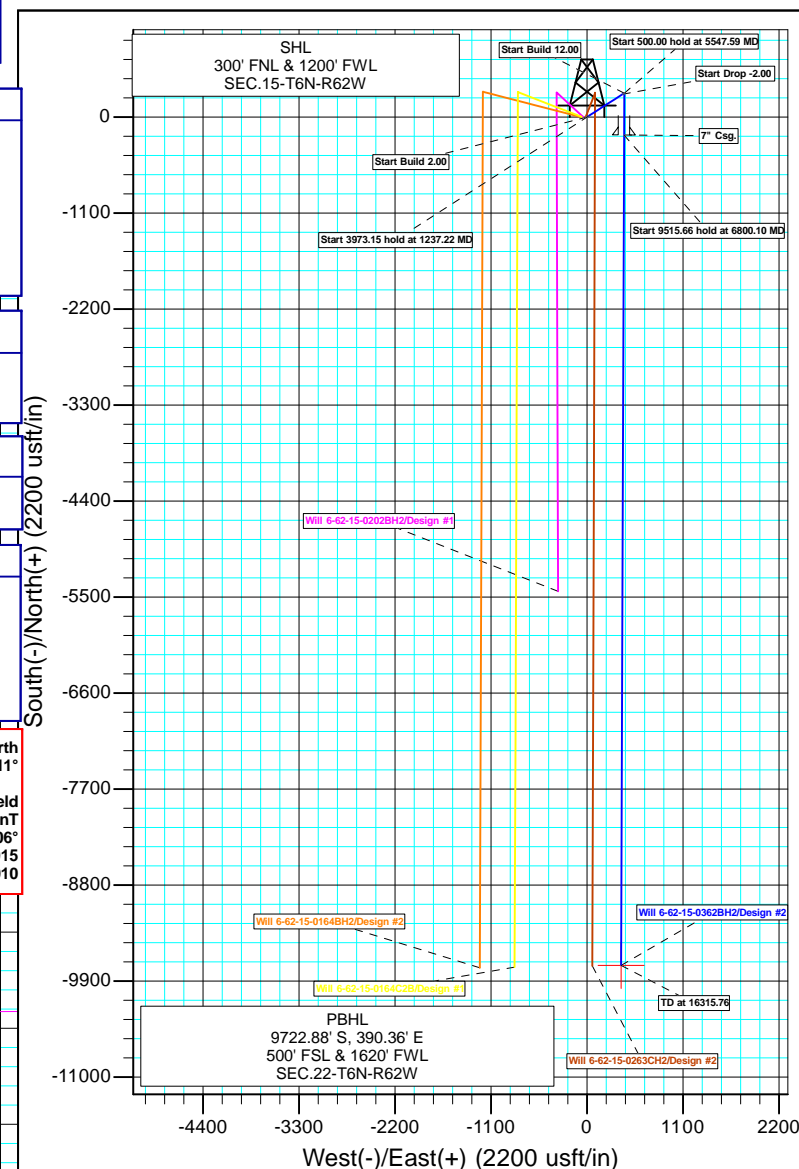
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level



Azimuths to True North
Magnetic North: 8.11°

Magnetic Field
Strength: 52824.9snT
Dip Angle: 67.06°
Date: 04/08/2015
Model: IGRF2010

Archer



Database:	EDMDBBW	Local Co-ordinate Reference:	Well Will 6-62-15-0362BH2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4777.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4777.00usft
Site:	Sec.15-T6N-R62W	North Reference:	True
Well:	Will 6-62-15-0362BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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.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	Will 6-62-15-0362BH2					
Well Position	+N/-S	0.00 usft	Northing:	1,424,876.233 usft	Latitude:	40° 29' 37.061 N
	+E/-W	74.82 usft	Easting:	3,329,940.696 usft	Longitude:	104° 18' 49.190 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,761.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2015/04/08	8.11	67.06	52,825

Design	Design #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.01	0.00	180.21

Plan Sections										
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	0.01	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.01	0.00	0.00	0.00	0.00	0.00	
1,237.22	6.74	57.43	1,236.44	10.68	16.71	2.00	2.00	0.00	57.43	
5,210.37	6.74	57.43	5,182.10	261.88	409.93	0.00	0.00	0.00	0.00	
5,547.59	0.00	0.00	5,518.54	272.55	426.64	2.00	-2.00	0.00	180.00	
6,047.59	0.00	0.00	6,018.54	272.55	426.64	0.00	0.00	0.00	0.00	
6,800.10	90.30	180.21	6,496.00	-207.42	424.90	12.00	12.00	0.00	180.21	Will 6-62-15-0362BH2
16,315.76	90.30	180.21	6,446.00	-9,722.88	390.36	0.00	0.00	0.00	0.00	Will 6-62-15-0362BH2

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Will 6-62-15-0362BH2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4777.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4777.00usft
Site:	Sec.15-T6N-R62W	North Reference:	True
Well:	Will 6-62-15-0362BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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	0.01	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.01	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.01	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.01	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.01	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.01	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.01	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.01	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.01	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
900.00	0.00	0.00	900.00	0.01	0.00	0.00	0.00	0.00	0.00
1,000.00	2.00	57.43	999.98	0.95	1.47	-0.94	2.00	2.00	0.00
1,100.00	4.00	57.43	1,099.84	3.77	5.88	-3.78	2.00	2.00	0.00
1,200.00	6.00	57.43	1,199.45	8.46	13.23	-8.50	2.00	2.00	0.00
Start 3973.15 hold at 1237.22 MD									
1,237.22	6.74	57.43	1,236.44	10.68	16.71	-10.73	2.00	2.00	0.00
1,300.00	6.74	57.43	1,298.79	14.65	22.92	-14.73	0.00	0.00	0.00
1,400.00	6.74	57.43	1,398.10	20.98	32.82	-21.08	0.00	0.00	0.00
1,500.00	6.74	57.43	1,497.40	27.30	42.71	-27.44	0.00	0.00	0.00
1,600.00	6.74	57.43	1,596.71	33.62	52.61	-33.80	0.00	0.00	0.00
1,700.00	6.74	57.43	1,696.02	39.94	62.51	-40.16	0.00	0.00	0.00
1,800.00	6.74	57.43	1,795.33	46.26	72.41	-46.52	0.00	0.00	0.00
1,900.00	6.74	57.43	1,894.64	52.59	82.30	-52.88	0.00	0.00	0.00
2,000.00	6.74	57.43	1,993.94	58.91	92.20	-59.23	0.00	0.00	0.00
2,100.00	6.74	57.43	2,093.25	65.23	102.10	-65.59	0.00	0.00	0.00
2,200.00	6.74	57.43	2,192.56	71.55	111.99	-71.95	0.00	0.00	0.00
2,300.00	6.74	57.43	2,291.87	77.88	121.89	-78.31	0.00	0.00	0.00
2,400.00	6.74	57.43	2,391.18	84.20	131.79	-84.67	0.00	0.00	0.00
2,500.00	6.74	57.43	2,490.48	90.52	141.69	-91.03	0.00	0.00	0.00
2,600.00	6.74	57.43	2,589.79	96.84	151.58	-97.39	0.00	0.00	0.00
2,700.00	6.74	57.43	2,689.10	103.17	161.48	-103.74	0.00	0.00	0.00
2,800.00	6.74	57.43	2,788.41	109.49	171.38	-110.10	0.00	0.00	0.00
2,900.00	6.74	57.43	2,887.72	115.81	181.27	-116.46	0.00	0.00	0.00
3,000.00	6.74	57.43	2,987.02	122.13	191.17	-122.82	0.00	0.00	0.00
3,100.00	6.74	57.43	3,086.33	128.45	201.07	-129.18	0.00	0.00	0.00
3,200.00	6.74	57.43	3,185.64	134.78	210.96	-135.54	0.00	0.00	0.00
3,300.00	6.74	57.43	3,284.95	141.10	220.86	-141.90	0.00	0.00	0.00
3,400.00	6.74	57.43	3,384.26	147.42	230.76	-148.25	0.00	0.00	0.00
3,500.00	6.74	57.43	3,483.56	153.74	240.66	-154.61	0.00	0.00	0.00
3,600.00	6.74	57.43	3,582.87	160.07	250.55	-160.97	0.00	0.00	0.00
3,700.00	6.74	57.43	3,682.18	166.39	260.45	-167.33	0.00	0.00	0.00
3,800.00	6.74	57.43	3,781.49	172.71	270.35	-173.69	0.00	0.00	0.00
3,900.00	6.74	57.43	3,880.80	179.03	280.24	-180.05	0.00	0.00	0.00
4,000.00	6.74	57.43	3,980.10	185.35	290.14	-186.40	0.00	0.00	0.00
4,100.00	6.74	57.43	4,079.41	191.68	300.04	-192.76	0.00	0.00	0.00
sussex									
4,170.11	6.74	57.43	4,149.03	196.11	306.98	-197.22	0.00	0.00	0.00
4,200.00	6.74	57.43	4,178.72	198.00	309.94	-199.12	0.00	0.00	0.00
4,300.00	6.74	57.43	4,278.03	204.32	319.83	-205.48	0.00	0.00	0.00
4,400.00	6.74	57.43	4,377.33	210.64	329.73	-211.84	0.00	0.00	0.00
4,500.00	6.74	57.43	4,476.64	216.97	339.63	-218.20	0.00	0.00	0.00
4,600.00	6.74	57.43	4,575.95	223.29	349.52	-224.56	0.00	0.00	0.00
4,700.00	6.74	57.43	4,675.26	229.61	359.42	-230.91	0.00	0.00	0.00

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Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4777.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4777.00usft
Site:	Sec.15-T6N-R62W	North Reference:	True
Well:	Will 6-62-15-0362BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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	6.74	57.43	4,774.57	235.93	369.32	-237.27	0.00	0.00	0.00
4,900.00	6.74	57.43	4,873.87	242.26	379.22	-243.63	0.00	0.00	0.00
Shannon									
4,911.48	6.74	57.43	4,885.28	242.98	380.35	-244.36	0.00	0.00	0.00
5,000.00	6.74	57.43	4,973.18	248.58	389.11	-249.99	0.00	0.00	0.00
5,100.00	6.74	57.43	5,072.49	254.90	399.01	-256.35	0.00	0.00	0.00
5,200.00	6.74	57.43	5,171.80	261.22	408.91	-262.71	0.00	0.00	0.00
Start Drop -2.00									
5,210.37	6.74	57.43	5,182.10	261.88	409.93	-263.37	0.00	0.00	0.00
5,300.00	4.95	57.43	5,271.26	266.79	417.63	-268.31	2.00	-2.00	0.00
5,400.00	2.95	57.43	5,371.01	270.50	423.44	-272.04	2.00	-2.00	0.00
5,500.00	0.95	57.43	5,470.95	272.34	426.31	-273.89	2.00	-2.00	0.00
Start 500.00 hold at 5547.59 MD									
5,547.59	0.00	0.00	5,518.54	272.55	426.64	-274.10	2.00	-2.00	0.00
5,600.00	0.00	0.00	5,570.95	272.55	426.64	-274.10	0.00	0.00	0.00
5,700.00	0.00	0.00	5,670.95	272.55	426.64	-274.10	0.00	0.00	0.00
5,800.00	0.00	0.00	5,770.95	272.55	426.64	-274.10	0.00	0.00	0.00
5,900.00	0.00	0.00	5,870.95	272.55	426.64	-274.10	0.00	0.00	0.00
6,000.00	0.00	0.00	5,970.95	272.55	426.64	-274.10	0.00	0.00	0.00
Start Build 12.00									
6,047.59	0.00	0.00	6,018.54	272.55	426.64	-274.10	0.00	0.00	0.00
6,050.00	0.29	180.21	6,020.95	272.54	426.64	-274.09	12.00	12.00	0.00
6,075.00	3.29	180.21	6,045.93	271.76	426.64	-273.31	12.00	12.00	0.00
6,100.00	6.29	180.21	6,070.84	269.68	426.63	-271.23	12.00	12.00	0.00
6,125.00	9.29	180.21	6,095.61	266.29	426.62	-267.84	12.00	12.00	0.00
6,150.00	12.29	180.21	6,120.17	261.61	426.60	-263.16	12.00	12.00	0.00
6,175.00	15.29	180.21	6,144.44	255.65	426.58	-257.20	12.00	12.00	0.00
6,200.00	18.29	180.21	6,168.37	248.43	426.55	-249.98	12.00	12.00	0.00
6,225.00	21.29	180.21	6,191.89	239.97	426.52	-241.52	12.00	12.00	0.00
6,250.00	24.29	180.21	6,214.94	230.29	426.49	-231.84	12.00	12.00	0.00
6,275.00	27.29	180.21	6,237.45	219.41	426.45	-220.96	12.00	12.00	0.00
Sharon Springs									
6,289.37	29.01	180.21	6,250.12	212.63	426.42	-214.18	12.00	12.00	0.00
6,300.00	30.29	180.21	6,259.36	207.37	426.40	-208.92	12.00	12.00	0.00
6,325.00	33.29	180.21	6,280.60	194.20	426.36	-195.75	12.00	12.00	0.00
6,350.00	36.29	180.21	6,301.13	179.94	426.30	-181.49	12.00	12.00	0.00
6,375.00	39.29	180.21	6,320.89	164.63	426.25	-166.17	12.00	12.00	0.00
Niobrara									
6,397.28	41.96	180.21	6,337.79	150.12	426.20	-151.67	12.00	12.00	0.00
6,400.00	42.29	180.21	6,339.81	148.30	426.19	-149.84	12.00	12.00	0.00
6,425.00	45.29	180.21	6,357.86	131.00	426.13	-132.55	12.00	12.00	0.00
6,450.00	48.29	180.21	6,374.97	112.78	426.06	-114.33	12.00	12.00	0.00
A Chalk									
6,450.94	48.40	180.21	6,375.59	112.08	426.06	-113.63	12.00	12.00	0.00
6,475.00	51.29	180.21	6,391.11	93.69	425.99	-95.24	12.00	12.00	0.00
A Marl									
6,496.90	53.92	180.21	6,404.41	76.30	425.93	-77.84	12.00	12.00	0.00
6,500.00	54.29	180.21	6,406.23	73.78	425.92	-75.33	12.00	12.00	0.00
6,525.00	57.29	180.21	6,420.28	53.11	425.84	-54.66	12.00	12.00	0.00
6,550.00	60.29	180.21	6,433.24	31.73	425.77	-33.28	12.00	12.00	0.00
6,575.00	63.29	180.21	6,445.05	9.70	425.69	-11.25	12.00	12.00	0.00
6,600.00	66.29	180.21	6,455.70	-12.91	425.60	11.37	12.00	12.00	0.00
6,625.00	69.29	180.21	6,465.15	-36.06	425.52	34.51	12.00	12.00	0.00

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Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4777.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4777.00usft
Site:	Sec.15-T6N-R62W	North Reference:	True
Well:	Will 6-62-15-0362BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
Top B Target									
6,638.52	70.91	180.21	6,469.75	-48.77	425.47	47.22	12.00	12.00	0.00
6,650.00	72.29	180.21	6,473.37	-59.66	425.43	58.11	12.00	12.00	0.00
6,675.00	75.29	180.21	6,480.35	-83.66	425.35	82.12	12.00	12.00	0.00
6,700.00	78.29	180.21	6,486.07	-108.00	425.26	106.45	12.00	12.00	0.00
6,725.00	81.29	180.21	6,490.50	-132.60	425.17	131.05	12.00	12.00	0.00
6,750.00	84.29	180.21	6,493.63	-157.40	425.08	155.85	12.00	12.00	0.00
6,775.00	87.29	180.21	6,495.47	-182.33	424.99	180.78	12.00	12.00	0.00
Start 9515.66 hold at 6800.10 MD - 7" Csg.									
6,800.10	90.30	180.21	6,496.00	-207.42	424.90	205.87	12.00	12.00	0.00
6,900.00	90.30	180.21	6,495.47	-307.32	424.54	305.77	0.00	0.00	0.00
7,000.00	90.30	180.21	6,494.95	-407.32	424.17	405.77	0.00	0.00	0.00
7,100.00	90.30	180.21	6,494.42	-507.31	423.81	505.77	0.00	0.00	0.00
7,200.00	90.30	180.21	6,493.90	-607.31	423.45	605.77	0.00	0.00	0.00
7,300.00	90.30	180.21	6,493.37	-707.31	423.08	705.77	0.00	0.00	0.00
7,400.00	90.30	180.21	6,492.85	-807.31	422.72	805.77	0.00	0.00	0.00
7,500.00	90.30	180.21	6,492.32	-907.31	422.36	905.76	0.00	0.00	0.00
7,600.00	90.30	180.21	6,491.80	-1,007.30	422.00	1,005.76	0.00	0.00	0.00
7,700.00	90.30	180.21	6,491.27	-1,107.30	421.63	1,105.76	0.00	0.00	0.00
7,800.00	90.30	180.21	6,490.74	-1,207.30	421.27	1,205.76	0.00	0.00	0.00
7,900.00	90.30	180.21	6,490.22	-1,307.30	420.91	1,305.76	0.00	0.00	0.00
8,000.00	90.30	180.21	6,489.69	-1,407.30	420.54	1,405.76	0.00	0.00	0.00
8,100.00	90.30	180.21	6,489.17	-1,507.29	420.18	1,505.76	0.00	0.00	0.00
8,200.00	90.30	180.21	6,488.64	-1,607.29	419.82	1,605.75	0.00	0.00	0.00
8,300.00	90.30	180.21	6,488.12	-1,707.29	419.45	1,705.75	0.00	0.00	0.00
8,400.00	90.30	180.21	6,487.59	-1,807.29	419.09	1,805.75	0.00	0.00	0.00
8,500.00	90.30	180.21	6,487.07	-1,907.29	418.73	1,905.75	0.00	0.00	0.00
8,600.00	90.30	180.21	6,486.54	-2,007.28	418.37	2,005.75	0.00	0.00	0.00
8,700.00	90.30	180.21	6,486.02	-2,107.28	418.00	2,105.75	0.00	0.00	0.00
8,800.00	90.30	180.21	6,485.49	-2,207.28	417.64	2,205.75	0.00	0.00	0.00
8,900.00	90.30	180.21	6,484.96	-2,307.28	417.28	2,305.74	0.00	0.00	0.00
9,000.00	90.30	180.21	6,484.44	-2,407.28	416.91	2,405.74	0.00	0.00	0.00
9,100.00	90.30	180.21	6,483.91	-2,507.27	416.55	2,505.74	0.00	0.00	0.00
9,200.00	90.30	180.21	6,483.39	-2,607.27	416.19	2,605.74	0.00	0.00	0.00
9,300.00	90.30	180.21	6,482.86	-2,707.27	415.83	2,705.74	0.00	0.00	0.00
9,400.00	90.30	180.21	6,482.34	-2,807.27	415.46	2,805.74	0.00	0.00	0.00
9,500.00	90.30	180.21	6,481.81	-2,907.27	415.10	2,905.74	0.00	0.00	0.00
9,600.00	90.30	180.21	6,481.29	-3,007.26	414.74	3,005.74	0.00	0.00	0.00
9,700.00	90.30	180.21	6,480.76	-3,107.26	414.37	3,105.73	0.00	0.00	0.00
9,800.00	90.30	180.21	6,480.24	-3,207.26	414.01	3,205.73	0.00	0.00	0.00
9,900.00	90.30	180.21	6,479.71	-3,307.26	413.65	3,305.73	0.00	0.00	0.00
10,000.00	90.30	180.21	6,479.19	-3,407.26	413.29	3,405.73	0.00	0.00	0.00
10,100.00	90.30	180.21	6,478.66	-3,507.25	412.92	3,505.73	0.00	0.00	0.00
10,200.00	90.30	180.21	6,478.13	-3,607.25	412.56	3,605.73	0.00	0.00	0.00
10,300.00	90.30	180.21	6,477.61	-3,707.25	412.20	3,705.73	0.00	0.00	0.00
10,400.00	90.30	180.21	6,477.08	-3,807.25	411.83	3,805.72	0.00	0.00	0.00
10,500.00	90.30	180.21	6,476.56	-3,907.25	411.47	3,905.72	0.00	0.00	0.00
10,600.00	90.30	180.21	6,476.03	-4,007.24	411.11	4,005.72	0.00	0.00	0.00
10,700.00	90.30	180.21	6,475.51	-4,107.24	410.74	4,105.72	0.00	0.00	0.00
10,800.00	90.30	180.21	6,474.98	-4,207.24	410.38	4,205.72	0.00	0.00	0.00
10,900.00	90.30	180.21	6,474.46	-4,307.24	410.02	4,305.72	0.00	0.00	0.00
11,000.00	90.30	180.21	6,473.93	-4,407.23	409.66	4,405.72	0.00	0.00	0.00
11,100.00	90.30	180.21	6,473.41	-4,507.23	409.29	4,505.71	0.00	0.00	0.00
11,200.00	90.30	180.21	6,472.88	-4,607.23	408.93	4,605.71	0.00	0.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Will 6-62-15-0362BH2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4777.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4777.00usft
Site:	Sec.15-T6N-R62W	North Reference:	True
Well:	Will 6-62-15-0362BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
11,300.00	90.30	180.21	6,472.35	-4,707.23	408.57	4,705.71	0.00	0.00	0.00
11,400.00	90.30	180.21	6,471.83	-4,807.23	408.20	4,805.71	0.00	0.00	0.00
11,500.00	90.30	180.21	6,471.30	-4,907.22	407.84	4,905.71	0.00	0.00	0.00
11,600.00	90.30	180.21	6,470.78	-5,007.22	407.48	5,005.71	0.00	0.00	0.00
11,700.00	90.30	180.21	6,470.25	-5,107.22	407.12	5,105.71	0.00	0.00	0.00
11,800.00	90.30	180.21	6,469.73	-5,207.22	406.75	5,205.70	0.00	0.00	0.00
11,900.00	90.30	180.21	6,469.20	-5,307.22	406.39	5,305.70	0.00	0.00	0.00
12,000.00	90.30	180.21	6,468.68	-5,407.21	406.03	5,405.70	0.00	0.00	0.00
12,100.00	90.30	180.21	6,468.15	-5,507.21	405.66	5,505.70	0.00	0.00	0.00
12,200.00	90.30	180.21	6,467.63	-5,607.21	405.30	5,605.70	0.00	0.00	0.00
12,300.00	90.30	180.21	6,467.10	-5,707.21	404.94	5,705.70	0.00	0.00	0.00
12,400.00	90.30	180.21	6,466.57	-5,807.21	404.58	5,805.70	0.00	0.00	0.00
12,500.00	90.30	180.21	6,466.05	-5,907.20	404.21	5,905.70	0.00	0.00	0.00
12,600.00	90.30	180.21	6,465.52	-6,007.20	403.85	6,005.69	0.00	0.00	0.00
12,700.00	90.30	180.21	6,465.00	-6,107.20	403.49	6,105.69	0.00	0.00	0.00
12,800.00	90.30	180.21	6,464.47	-6,207.20	403.12	6,205.69	0.00	0.00	0.00
12,900.00	90.30	180.21	6,463.95	-6,307.20	402.76	6,305.69	0.00	0.00	0.00
13,000.00	90.30	180.21	6,463.42	-6,407.19	402.40	6,405.69	0.00	0.00	0.00
13,100.00	90.30	180.21	6,462.90	-6,507.19	402.03	6,505.69	0.00	0.00	0.00
13,200.00	90.30	180.21	6,462.37	-6,607.19	401.67	6,605.69	0.00	0.00	0.00
13,300.00	90.30	180.21	6,461.85	-6,707.19	401.31	6,705.68	0.00	0.00	0.00
13,400.00	90.30	180.21	6,461.32	-6,807.19	400.95	6,805.68	0.00	0.00	0.00
13,500.00	90.30	180.21	6,460.80	-6,907.18	400.58	6,905.68	0.00	0.00	0.00
13,600.00	90.30	180.21	6,460.27	-7,007.18	400.22	7,005.68	0.00	0.00	0.00
13,700.00	90.30	180.21	6,459.74	-7,107.18	399.86	7,105.68	0.00	0.00	0.00
13,800.00	90.30	180.21	6,459.22	-7,207.18	399.49	7,205.68	0.00	0.00	0.00
13,900.00	90.30	180.21	6,458.69	-7,307.18	399.13	7,305.68	0.00	0.00	0.00
14,000.00	90.30	180.21	6,458.17	-7,407.17	398.77	7,405.67	0.00	0.00	0.00
14,100.00	90.30	180.21	6,457.64	-7,507.17	398.41	7,505.67	0.00	0.00	0.00
14,200.00	90.30	180.21	6,457.12	-7,607.17	398.04	7,605.67	0.00	0.00	0.00
14,300.00	90.30	180.21	6,456.59	-7,707.17	397.68	7,705.67	0.00	0.00	0.00
14,400.00	90.30	180.21	6,456.07	-7,807.17	397.32	7,805.67	0.00	0.00	0.00
14,500.00	90.30	180.21	6,455.54	-7,907.16	396.95	7,905.67	0.00	0.00	0.00
14,600.00	90.30	180.21	6,455.02	-8,007.16	396.59	8,005.67	0.00	0.00	0.00
14,700.00	90.30	180.21	6,454.49	-8,107.16	396.23	8,105.66	0.00	0.00	0.00
14,800.00	90.30	180.21	6,453.96	-8,207.16	395.87	8,205.66	0.00	0.00	0.00
14,900.00	90.30	180.21	6,453.44	-8,307.16	395.50	8,305.66	0.00	0.00	0.00
15,000.00	90.30	180.21	6,452.91	-8,407.15	395.14	8,405.66	0.00	0.00	0.00
15,100.00	90.30	180.21	6,452.39	-8,507.15	394.78	8,505.66	0.00	0.00	0.00
15,200.00	90.30	180.21	6,451.86	-8,607.15	394.41	8,605.66	0.00	0.00	0.00
15,300.00	90.30	180.21	6,451.34	-8,707.15	394.05	8,705.66	0.00	0.00	0.00
15,400.00	90.30	180.21	6,450.81	-8,807.15	393.69	8,805.66	0.00	0.00	0.00
15,500.00	90.30	180.21	6,450.29	-8,907.14	393.32	8,905.65	0.00	0.00	0.00
15,600.00	90.30	180.21	6,449.76	-9,007.14	392.96	9,005.65	0.00	0.00	0.00
15,700.00	90.30	180.21	6,449.24	-9,107.14	392.60	9,105.65	0.00	0.00	0.00
15,800.00	90.30	180.21	6,448.71	-9,207.14	392.24	9,205.65	0.00	0.00	0.00
15,900.00	90.30	180.21	6,448.18	-9,307.13	391.87	9,305.65	0.00	0.00	0.00
16,000.00	90.30	180.21	6,447.66	-9,407.13	391.51	9,405.65	0.00	0.00	0.00
16,100.00	90.30	180.21	6,447.13	-9,507.13	391.15	9,505.65	0.00	0.00	0.00
16,200.00	90.30	180.21	6,446.61	-9,607.13	390.78	9,605.64	0.00	0.00	0.00
16,300.00	90.30	180.21	6,446.08	-9,707.13	390.42	9,705.64	0.00	0.00	0.00
TD at 16315.76									
16,315.76	90.30	180.21	6,446.00	-9,722.88	390.36	9,721.40	0.00	0.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Will 6-62-15-0362BH2
Company:	Bill Barrett Corp.	TVD Reference:	Well @ 4777.00usft
Project:	Weld Co., CO	MD Reference:	Well @ 4777.00usft
Site:	Sec.15-T6N-R62W	North Reference:	True
Well:	Will 6-62-15-0362BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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									
Will 6-62-15-0362BH2 tc - plan hits target center - Point	0.00	0.00	6,446.00	-9,722.88	390.36	1,415,159.429	3,330,461.099	40° 28' 0.980 N	104° 18' 44.140 W

Casing Points				
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(usft)	(usft)		(")	(")
6,800.10	6,496.00	7" Csg.	7	8-3/4

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
4,170.11	4,148.00	sussex		-0.30	180.21	
4,911.48	4,884.00	Shannon		-0.30	180.21	
6,289.37	6,249.00	Sharon Springs		-0.30	180.21	
6,397.28	6,337.00	Niobrara		-0.30	180.21	
6,450.94	6,375.00	A Chalk		-0.30	180.21	
6,496.90	6,404.00	A Marl		-0.30	180.21	
6,638.52	6,470.00	Top B Target		-0.30	180.21	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)		
900.00	900.00	0.01	0.00	Start Build 2.00	
1,237.22	1,236.44	10.68	16.71	Start 3973.15 hold at 1237.22 MD	
5,210.37	5,182.10	261.88	409.93	Start Drop -2.00	
5,547.59	5,518.54	272.55	426.64	Start 500.00 hold at 5547.59 MD	
6,047.59	6,018.54	272.55	426.64	Start Build 12.00	
6,800.10	6,496.00	-207.42	424.90	Start 9515.66 hold at 6800.10 MD	
16,315.76	6,446.00	-9,722.88	390.36	TD at 16315.76	