

# **BILL BARRETT CORP**

**WELD COUNTY, COLORADO**

**Will 6-62-15 NENW**

**Will 6-62-15-0461BH2**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**12 March, 2015**



**Bill Barrett Corporation**

## COMPANY DETAILS: BILL BARRETT CORP

Calculation Method: Minimum Curvature  
Error System: ISCWSA  
Scan Method: Closest Approach 3D  
Error Surface: Elliptical Conic  
Warning Method: Error Ratio

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Will 6-62-15-0461BH2, True North  
Vertical (TVD) Reference: WELL @ 4766.0ft (Original Well Elev)  
Section (VS) Reference: Slot - (0.0N, 0.0E)  
Measured Depth Reference: WELL @ 4766.0ft (Original Well Elev)  
Calculation Method: Minimum Curvature

## WELL DETAILS: Will 6-62-15-0461BH2

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1424895.92	3331029.95	40° 29' 37.111 N	104° 18' 35.089 W

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	958.8	3.18	358.55	958.8	4.4	-0.1	2.00	358.55	-4.4	
4	5844.4	3.18	358.55	5836.8	275.1	-7.0	0.00	0.00	-275.0	
5	6003.2	0.00	180.19	5995.5	279.5	-7.1	2.00	180.00	-279.4	
6	6003.2	0.00	180.19	5995.5	279.5	-7.1	0.00	180.19	-279.4	
7	6755.6	90.28	180.19	6473.0	-200.4	-8.6	12.00	180.19	200.4	Will 6-6215-0461BH2_LP
8	16272.5	90.28	180.19	6426.0	-9717.1	-39.5	0.00	0.00	9717.2	Will 6-6215-0461BH2_PBHL

## PROJECT DETAILS: WELD COUNTY, COLORADO

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

## FORMATION TOP DETAILS

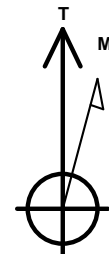
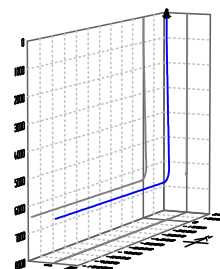
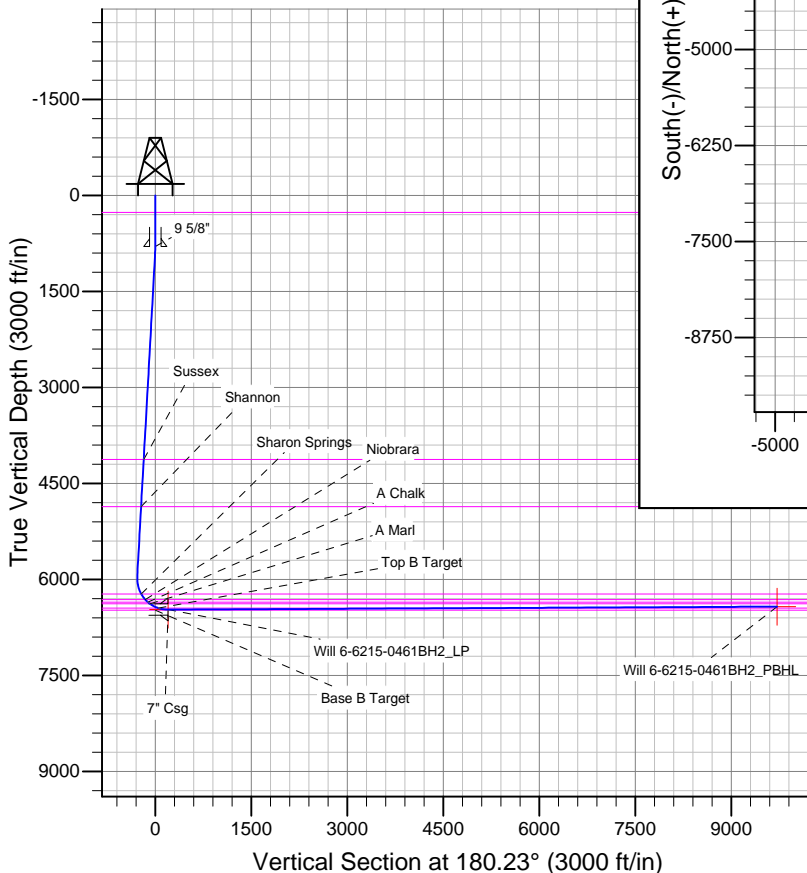
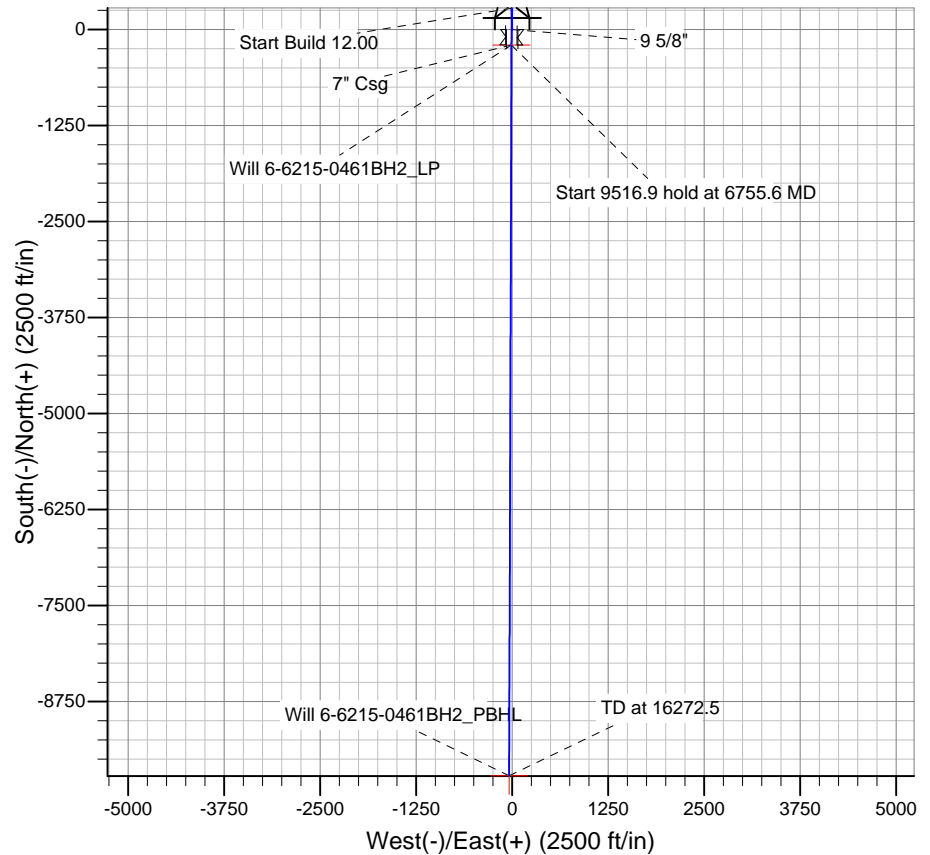
TVDPath	MDPath	Formation
266.0	266.0	Base B Target
4127.0	4132.0	Base of Fox Hills
4863.0	4869.1	Sussex
6228.0	6246.0	Shannon
6316.0	6354.5	Sharon Springs
6354.0	6408.7	Niobrara
6383.0	6455.2	A Chalk
6449.0	6601.2	A Marl
		Top B Target

## CASING DETAILS

TVD	MD	Name	Size
800.0	800.0	9 5/8"	9-5/8
6473.0	6755.6	7" Csg	7

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Will 6-6215-0461BH2_PBHL	6426.0	-9717.1	-39.5	Point
Will 6-6215-0461BH2_LP	6473.0	-200.4	-8.6	Point



Azimuths to True North  
Magnetic North: 8.15°  
Magnetic Field  
Strength: 52853.8snT  
Dip Angle: 67.07°  
Date: 12/31/2014  
Model: IGRF2010

**Bill Barrett Corp**  
Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Will 6-62-15-0461BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Site:</b>	Will 6-62-15 NENW	<b>North Reference:</b>	True
<b>Well:</b>	Will 6-62-15-0461BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	WELD COUNTY, COLORADO		
<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		Will 6-62-15 NENW				
Site Position:		Northing:	1,424,895.52 ft	Latitude:	40° 29' 37.111 N	
From:	Lat/Long	Easting:	3,330,999.60 ft	Longitude:	104° 18' 35.482 W	
Position Uncertainty:		0.0 ft	Slot Radius:	"	Grid Convergence:	0.77 °

Well	Will 6-62-15-0461BH2					
Well Position	+N-S	0.0 ft	Northing:	1,424,895.92 ft	Latitude:	40° 29' 37.111 N
	+E-W	30.3 ft	Easting:	3,331,029.95 ft	Longitude:	104° 18' 35.089 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,750.0ft

<b>Wellbore</b>	Wellbore #1				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	8.15	67.07	52,854

<b>Design</b>	Design #1				
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<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0	
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	180.23	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
958.8	3.18	358.55	958.8	4.4	-0.1	2.00	2.00	0.00	358.55	
5,844.4	3.18	358.55	5,836.8	275.1	-7.0	0.00	0.00	0.00	0.00	
6,003.2	0.00	180.19	5,995.5	279.5	-7.1	2.00	-2.00	0.00	180.00	
6,003.2	0.00	180.19	5,995.5	279.5	-7.1	0.00	0.00	0.00	180.19	
6,755.6	90.28	180.19	6,473.0	-200.4	-8.6	12.00	12.00	0.00	180.19	Will 6-6215-0461BH
16,272.5	90.28	180.19	6,426.0	-9,717.1	-39.5	0.00	0.00	0.00	0.00	Will 6-6215-0461BH

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Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Will 6-62-15-0461BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Site:</b>	Will 6-62-15 NENW	<b>North Reference:</b>	True
<b>Well:</b>	Will 6-62-15-0461BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
266.0	0.00	0.00	266.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Base of Fox Hills</b>									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>9 5/8"</b>									
900.0	2.00	358.55	900.0	1.7	0.0	-1.7	2.00	2.00	0.00
958.8	3.18	358.55	958.8	4.4	-0.1	-4.4	2.00	2.00	0.00
1,000.0	3.18	358.55	999.9	6.7	-0.2	-6.7	0.00	0.00	0.00
1,100.0	3.18	358.55	1,099.7	12.2	-0.3	-12.2	0.00	0.00	0.00
1,200.0	3.18	358.55	1,199.5	17.8	-0.4	-17.8	0.00	0.00	0.00
1,300.0	3.18	358.55	1,299.4	23.3	-0.6	-23.3	0.00	0.00	0.00
1,400.0	3.18	358.55	1,399.2	28.8	-0.7	-28.8	0.00	0.00	0.00
1,500.0	3.18	358.55	1,499.1	34.4	-0.9	-34.4	0.00	0.00	0.00
1,600.0	3.18	358.55	1,598.9	39.9	-1.0	-39.9	0.00	0.00	0.00
1,700.0	3.18	358.55	1,698.8	45.5	-1.1	-45.5	0.00	0.00	0.00
1,800.0	3.18	358.55	1,798.6	51.0	-1.3	-51.0	0.00	0.00	0.00
1,900.0	3.18	358.55	1,898.5	56.5	-1.4	-56.5	0.00	0.00	0.00
2,000.0	3.18	358.55	1,998.3	62.1	-1.6	-62.1	0.00	0.00	0.00
2,100.0	3.18	358.55	2,098.2	67.6	-1.7	-67.6	0.00	0.00	0.00
2,200.0	3.18	358.55	2,198.0	73.2	-1.8	-73.2	0.00	0.00	0.00
2,300.0	3.18	358.55	2,297.9	78.7	-2.0	-78.7	0.00	0.00	0.00
2,400.0	3.18	358.55	2,397.7	84.2	-2.1	-84.2	0.00	0.00	0.00
2,500.0	3.18	358.55	2,497.6	89.8	-2.3	-89.8	0.00	0.00	0.00
2,600.0	3.18	358.55	2,597.4	95.3	-2.4	-95.3	0.00	0.00	0.00
2,700.0	3.18	358.55	2,697.2	100.9	-2.5	-100.9	0.00	0.00	0.00
2,800.0	3.18	358.55	2,797.1	106.4	-2.7	-106.4	0.00	0.00	0.00
2,900.0	3.18	358.55	2,896.9	111.9	-2.8	-111.9	0.00	0.00	0.00
3,000.0	3.18	358.55	2,996.8	117.5	-3.0	-117.5	0.00	0.00	0.00
3,100.0	3.18	358.55	3,096.6	123.0	-3.1	-123.0	0.00	0.00	0.00
3,200.0	3.18	358.55	3,196.5	128.6	-3.2	-128.5	0.00	0.00	0.00
3,300.0	3.18	358.55	3,296.3	134.1	-3.4	-134.1	0.00	0.00	0.00
3,400.0	3.18	358.55	3,396.2	139.6	-3.5	-139.6	0.00	0.00	0.00
3,500.0	3.18	358.55	3,496.0	145.2	-3.7	-145.2	0.00	0.00	0.00
3,600.0	3.18	358.55	3,595.9	150.7	-3.8	-150.7	0.00	0.00	0.00
3,700.0	3.18	358.55	3,695.7	156.3	-4.0	-156.2	0.00	0.00	0.00
3,800.0	3.18	358.55	3,795.6	161.8	-4.1	-161.8	0.00	0.00	0.00
3,900.0	3.18	358.55	3,895.4	167.3	-4.2	-167.3	0.00	0.00	0.00
4,000.0	3.18	358.55	3,995.2	172.9	-4.4	-172.9	0.00	0.00	0.00
4,100.0	3.18	358.55	4,095.1	178.4	-4.5	-178.4	0.00	0.00	0.00
4,132.0	3.18	358.55	4,127.0	180.2	-4.6	-180.2	0.00	0.00	0.00
<b>Sussex</b>									
4,200.0	3.18	358.55	4,194.9	184.0	-4.7	-183.9	0.00	0.00	0.00
4,300.0	3.18	358.55	4,294.8	189.5	-4.8	-189.5	0.00	0.00	0.00
4,400.0	3.18	358.55	4,394.6	195.0	-4.9	-195.0	0.00	0.00	0.00
4,500.0	3.18	358.55	4,494.5	200.6	-5.1	-200.6	0.00	0.00	0.00
4,600.0	3.18	358.55	4,594.3	206.1	-5.2	-206.1	0.00	0.00	0.00

**Bill Barrett Corp**  
Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Will 6-62-15-0461BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Site:</b>	Will 6-62-15 NENW	<b>North Reference:</b>	True
<b>Well:</b>	Will 6-62-15-0461BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.0	3.18	358.55	4,694.2	211.7	-5.4	-211.6	0.00	0.00	0.00
4,800.0	3.18	358.55	4,794.0	217.2	-5.5	-217.2	0.00	0.00	0.00
4,869.1	3.18	358.55	4,863.0	221.0	-5.6	-221.0	0.00	0.00	0.00
<b>Shannon</b>									
4,900.0	3.18	358.55	4,893.9	222.7	-5.6	-222.7	0.00	0.00	0.00
5,000.0	3.18	358.55	4,993.7	228.3	-5.8	-228.3	0.00	0.00	0.00
5,100.0	3.18	358.55	5,093.6	233.8	-5.9	-233.8	0.00	0.00	0.00
5,200.0	3.18	358.55	5,193.4	239.4	-6.1	-239.3	0.00	0.00	0.00
5,300.0	3.18	358.55	5,293.2	244.9	-6.2	-244.9	0.00	0.00	0.00
5,400.0	3.18	358.55	5,393.1	250.4	-6.3	-250.4	0.00	0.00	0.00
5,500.0	3.18	358.55	5,492.9	256.0	-6.5	-256.0	0.00	0.00	0.00
5,600.0	3.18	358.55	5,592.8	261.5	-6.6	-261.5	0.00	0.00	0.00
5,700.0	3.18	358.55	5,692.6	267.1	-6.8	-267.0	0.00	0.00	0.00
5,800.0	3.18	358.55	5,792.5	272.6	-6.9	-272.6	0.00	0.00	0.00
5,844.4	3.18	358.55	5,836.8	275.1	-7.0	-275.0	0.00	0.00	0.00
5,900.0	2.06	358.55	5,892.4	277.6	-7.0	-277.6	2.00	-2.00	0.00
6,000.0	0.06	358.55	5,992.3	279.5	-7.1	-279.4	2.00	-2.00	0.00
6,003.2	0.00	180.19	5,995.5	279.5	-7.1	-279.4	2.00	-2.00	0.00
6,100.0	11.61	180.19	6,091.7	269.7	-7.1	-269.7	12.00	12.00	0.00
6,200.0	23.61	180.19	6,186.8	239.5	-7.2	-239.4	12.00	12.00	0.00
6,246.0	29.13	180.19	6,228.0	219.1	-7.3	-219.0	12.00	12.00	0.00
<b>Sharon Springs</b>									
6,300.0	35.61	180.19	6,273.6	190.2	-7.4	-190.1	12.00	12.00	0.00
6,354.5	42.16	180.19	6,316.0	155.9	-7.5	-155.9	12.00	12.00	0.00
<b>Niobrara</b>									
6,400.0	47.61	180.19	6,348.2	123.9	-7.6	-123.8	12.00	12.00	0.00
6,408.7	48.66	180.19	6,354.0	117.4	-7.6	-117.4	12.00	12.00	0.00
<b>A Chalk</b>									
6,455.2	54.24	180.19	6,383.0	81.0	-7.7	-81.0	12.00	12.00	0.00
<b>A Marl</b>									
6,500.0	59.61	180.19	6,407.4	43.5	-7.8	-43.5	12.00	12.00	0.00
6,600.0	71.61	180.19	6,448.6	-47.4	-8.1	47.4	12.00	12.00	0.00
6,601.2	71.75	180.19	6,449.0	-48.5	-8.1	48.5	12.00	12.00	0.00
<b>Top B Target</b>									
6,700.0	83.61	180.19	6,470.0	-144.9	-8.4	144.9	12.00	12.00	0.00
6,755.6	90.28	180.19	6,473.0	-200.4	-8.6	200.4	11.99	11.99	0.00
<b>7" Csg</b>									
6,800.0	90.28	180.19	6,472.8	-244.8	-8.8	244.8	0.00	0.00	0.00
6,900.0	90.28	180.19	6,472.3	-344.8	-9.1	344.8	0.00	0.00	0.00
7,000.0	90.28	180.19	6,471.8	-444.8	-9.4	444.8	0.00	0.00	0.00
7,100.0	90.28	180.19	6,471.3	-544.8	-9.7	544.8	0.00	0.00	0.00
7,200.0	90.28	180.19	6,470.8	-644.8	-10.1	644.8	0.00	0.00	0.00
7,300.0	90.28	180.19	6,470.3	-744.8	-10.4	744.8	0.00	0.00	0.00
7,400.0	90.28	180.19	6,469.8	-844.8	-10.7	844.8	0.00	0.00	0.00
7,500.0	90.28	180.19	6,469.3	-944.8	-11.0	944.8	0.00	0.00	0.00
7,600.0	90.28	180.19	6,468.8	-1,044.8	-11.4	1,044.8	0.00	0.00	0.00
7,700.0	90.28	180.19	6,468.3	-1,144.8	-11.7	1,144.8	0.00	0.00	0.00
7,800.0	90.28	180.19	6,467.8	-1,244.8	-12.0	1,244.8	0.00	0.00	0.00
7,900.0	90.28	180.19	6,467.3	-1,344.8	-12.3	1,344.8	0.00	0.00	0.00
8,000.0	90.28	180.19	6,466.9	-1,444.8	-12.7	1,444.8	0.00	0.00	0.00
8,100.0	90.28	180.19	6,466.4	-1,544.8	-13.0	1,544.8	0.00	0.00	0.00
8,200.0	90.28	180.19	6,465.9	-1,644.8	-13.3	1,644.8	0.00	0.00	0.00
8,300.0	90.28	180.19	6,465.4	-1,744.8	-13.6	1,744.8	0.00	0.00	0.00

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Will 6-62-15-0461BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Site:</b>	Will 6-62-15 NENW	<b>North Reference:</b>	True
<b>Well:</b>	Will 6-62-15-0461BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,400.0	90.28	180.19	6,464.9	-1,844.8	-14.0	1,844.8	0.00	0.00	0.00	
8,500.0	90.28	180.19	6,464.4	-1,944.8	-14.3	1,944.8	0.00	0.00	0.00	
8,600.0	90.28	180.19	6,463.9	-2,044.8	-14.6	2,044.8	0.00	0.00	0.00	
8,700.0	90.28	180.19	6,463.4	-2,144.8	-14.9	2,144.8	0.00	0.00	0.00	
8,800.0	90.28	180.19	6,462.9	-2,244.8	-15.3	2,244.8	0.00	0.00	0.00	
8,900.0	90.28	180.19	6,462.4	-2,344.8	-15.6	2,344.8	0.00	0.00	0.00	
9,000.0	90.28	180.19	6,461.9	-2,444.8	-15.9	2,444.8	0.00	0.00	0.00	
9,100.0	90.28	180.19	6,461.4	-2,544.7	-16.2	2,544.8	0.00	0.00	0.00	
9,200.0	90.28	180.19	6,460.9	-2,644.7	-16.6	2,644.8	0.00	0.00	0.00	
9,300.0	90.28	180.19	6,460.4	-2,744.7	-16.9	2,744.8	0.00	0.00	0.00	
9,400.0	90.28	180.19	6,459.9	-2,844.7	-17.2	2,844.8	0.00	0.00	0.00	
9,500.0	90.28	180.19	6,459.4	-2,944.7	-17.5	2,944.8	0.00	0.00	0.00	
9,600.0	90.28	180.19	6,459.0	-3,044.7	-17.9	3,044.8	0.00	0.00	0.00	
9,700.0	90.28	180.19	6,458.5	-3,144.7	-18.2	3,144.8	0.00	0.00	0.00	
9,800.0	90.28	180.19	6,458.0	-3,244.7	-18.5	3,244.8	0.00	0.00	0.00	
9,900.0	90.28	180.19	6,457.5	-3,344.7	-18.8	3,344.8	0.00	0.00	0.00	
10,000.0	90.28	180.19	6,457.0	-3,444.7	-19.2	3,444.8	0.00	0.00	0.00	
10,100.0	90.28	180.19	6,456.5	-3,544.7	-19.5	3,544.8	0.00	0.00	0.00	
10,200.0	90.28	180.19	6,456.0	-3,644.7	-19.8	3,644.8	0.00	0.00	0.00	
10,300.0	90.28	180.19	6,455.5	-3,744.7	-20.1	3,744.8	0.00	0.00	0.00	
10,400.0	90.28	180.19	6,455.0	-3,844.7	-20.5	3,844.8	0.00	0.00	0.00	
10,500.0	90.28	180.19	6,454.5	-3,944.7	-20.8	3,944.8	0.00	0.00	0.00	
10,600.0	90.28	180.19	6,454.0	-4,044.7	-21.1	4,044.8	0.00	0.00	0.00	
10,700.0	90.28	180.19	6,453.5	-4,144.7	-21.4	4,144.8	0.00	0.00	0.00	
10,800.0	90.28	180.19	6,453.0	-4,244.7	-21.7	4,244.8	0.00	0.00	0.00	
10,900.0	90.28	180.19	6,452.5	-4,344.7	-22.1	4,344.8	0.00	0.00	0.00	
11,000.0	90.28	180.19	6,452.0	-4,444.7	-22.4	4,444.8	0.00	0.00	0.00	
11,100.0	90.28	180.19	6,451.5	-4,544.7	-22.7	4,544.8	0.00	0.00	0.00	
11,200.0	90.28	180.19	6,451.1	-4,644.7	-23.0	4,644.8	0.00	0.00	0.00	
11,300.0	90.28	180.19	6,450.6	-4,744.7	-23.4	4,744.8	0.00	0.00	0.00	
11,400.0	90.28	180.19	6,450.1	-4,844.7	-23.7	4,844.8	0.00	0.00	0.00	
11,500.0	90.28	180.19	6,449.6	-4,944.7	-24.0	4,944.8	0.00	0.00	0.00	
11,600.0	90.28	180.19	6,449.1	-5,044.7	-24.3	5,044.8	0.00	0.00	0.00	
11,700.0	90.28	180.19	6,448.6	-5,144.7	-24.7	5,144.8	0.00	0.00	0.00	
11,800.0	90.28	180.19	6,448.1	-5,244.7	-25.0	5,244.8	0.00	0.00	0.00	
11,900.0	90.28	180.19	6,447.6	-5,344.7	-25.3	5,344.8	0.00	0.00	0.00	
12,000.0	90.28	180.19	6,447.1	-5,444.7	-25.6	5,444.8	0.00	0.00	0.00	
12,100.0	90.28	180.19	6,446.6	-5,544.7	-26.0	5,544.8	0.00	0.00	0.00	
12,200.0	90.28	180.19	6,446.1	-5,644.7	-26.3	5,644.8	0.00	0.00	0.00	
12,300.0	90.28	180.19	6,445.6	-5,744.7	-26.6	5,744.8	0.00	0.00	0.00	
12,400.0	90.28	180.19	6,445.1	-5,844.7	-26.9	5,844.8	0.00	0.00	0.00	
12,500.0	90.28	180.19	6,444.6	-5,944.7	-27.3	5,944.8	0.00	0.00	0.00	
12,600.0	90.28	180.19	6,444.1	-6,044.7	-27.6	6,044.7	0.00	0.00	0.00	
12,700.0	90.28	180.19	6,443.6	-6,144.7	-27.9	6,144.7	0.00	0.00	0.00	
12,800.0	90.28	180.19	6,443.1	-6,244.7	-28.2	6,244.7	0.00	0.00	0.00	
12,900.0	90.28	180.19	6,442.7	-6,344.7	-28.6	6,344.7	0.00	0.00	0.00	
13,000.0	90.28	180.19	6,442.2	-6,444.7	-28.9	6,444.7	0.00	0.00	0.00	
13,100.0	90.28	180.19	6,441.7	-6,544.7	-29.2	6,544.7	0.00	0.00	0.00	
13,200.0	90.28	180.19	6,441.2	-6,644.7	-29.5	6,644.7	0.00	0.00	0.00	
13,300.0	90.28	180.19	6,440.7	-6,744.7	-29.9	6,744.7	0.00	0.00	0.00	
13,400.0	90.28	180.19	6,440.2	-6,844.7	-30.2	6,844.7	0.00	0.00	0.00	
13,500.0	90.28	180.19	6,439.7	-6,944.7	-30.5	6,944.7	0.00	0.00	0.00	
13,600.0	90.28	180.19	6,439.2	-7,044.7	-30.8	7,044.7	0.00	0.00	0.00	
13,700.0	90.28	180.19	6,438.7	-7,144.7	-31.2	7,144.7	0.00	0.00	0.00	

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Will 6-62-15-0461BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Site:</b>	Will 6-62-15 NENW	<b>North Reference:</b>	True
<b>Well:</b>	Will 6-62-15-0461BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13,800.0	90.28	180.19	6,438.2	-7,244.7	-31.5	7,244.7	0.00	0.00	0.00
13,900.0	90.28	180.19	6,437.7	-7,344.7	-31.8	7,344.7	0.00	0.00	0.00
14,000.0	90.28	180.19	6,437.2	-7,444.7	-32.1	7,444.7	0.00	0.00	0.00
14,100.0	90.28	180.19	6,436.7	-7,544.7	-32.5	7,544.7	0.00	0.00	0.00
14,200.0	90.28	180.19	6,436.2	-7,644.7	-32.8	7,644.7	0.00	0.00	0.00
14,300.0	90.28	180.19	6,435.7	-7,744.7	-33.1	7,744.7	0.00	0.00	0.00
14,400.0	90.28	180.19	6,435.2	-7,844.7	-33.4	7,844.7	0.00	0.00	0.00
14,500.0	90.28	180.19	6,434.8	-7,944.7	-33.8	7,944.7	0.00	0.00	0.00
14,600.0	90.28	180.19	6,434.3	-8,044.7	-34.1	8,044.7	0.00	0.00	0.00
14,700.0	90.28	180.19	6,433.8	-8,144.7	-34.4	8,144.7	0.00	0.00	0.00
14,800.0	90.28	180.19	6,433.3	-8,244.6	-34.7	8,244.7	0.00	0.00	0.00
14,900.0	90.28	180.19	6,432.8	-8,344.6	-35.1	8,344.7	0.00	0.00	0.00
15,000.0	90.28	180.19	6,432.3	-8,444.6	-35.4	8,444.7	0.00	0.00	0.00
15,100.0	90.28	180.19	6,431.8	-8,544.6	-35.7	8,544.7	0.00	0.00	0.00
15,200.0	90.28	180.19	6,431.3	-8,644.6	-36.0	8,644.7	0.00	0.00	0.00
15,300.0	90.28	180.19	6,430.8	-8,744.6	-36.4	8,744.7	0.00	0.00	0.00
15,400.0	90.28	180.19	6,430.3	-8,844.6	-36.7	8,844.7	0.00	0.00	0.00
15,500.0	90.28	180.19	6,429.8	-8,944.6	-37.0	8,944.7	0.00	0.00	0.00
15,600.0	90.28	180.19	6,429.3	-9,044.6	-37.3	9,044.7	0.00	0.00	0.00
15,700.0	90.28	180.19	6,428.8	-9,144.6	-37.7	9,144.7	0.00	0.00	0.00
15,800.0	90.28	180.19	6,428.3	-9,244.6	-38.0	9,244.7	0.00	0.00	0.00
15,900.0	90.28	180.19	6,427.8	-9,344.6	-38.3	9,344.7	0.00	0.00	0.00
16,000.0	90.28	180.19	6,427.3	-9,444.6	-38.6	9,444.7	0.00	0.00	0.00
16,100.0	90.28	180.19	6,426.9	-9,544.6	-38.9	9,544.7	0.00	0.00	0.00
16,200.0	90.28	180.19	6,426.4	-9,644.6	-39.3	9,644.7	0.00	0.00	0.00
16,272.5	90.28	180.19	6,426.0	-9,717.1	-39.5	9,717.2	0.00	0.00	0.00

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,755.6	6,473.0	7" Csg	7	8-3/4
800.0	800.0	9 5/8"	9-5/8	13-1/32

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
266.0	266.0	Base of Fox Hills		0.00	
4,132.0	4,127.0	Sussex		0.00	
4,869.1	4,863.0	Shannon		0.00	
6,246.0	6,228.0	Sharon Springs		0.00	
6,354.5	6,316.0	Niobrara		0.00	
6,408.7	6,354.0	A Chalk		0.00	
6,455.2	6,383.0	A Marl		0.00	
6,601.2	6,449.0	Top B Target		0.00	
	6,480.0	Base B Target		0.00	

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Will 6-62-15-0461BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	WELL @ 4766.0ft (Original Well Elev)
<b>Site:</b>	Will 6-62-15 NENW	<b>North Reference:</b>	True
<b>Well:</b>	Will 6-62-15-0461BH2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		