



**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 Ruh 6-62-11-0659A2, True North  
Vertical (TVD) Reference: KB @ 4763.0ft (Original Well Elev)  
Section (VS) Reference: Slot - (0.0N, 0.0E)  
Measured Depth Reference: KB @ 4763.0ft (Original Well Elev)  
Calculation Method: Minimum Curvature

## WELL DETAILS: Ruh 6-62-11-0659A2

+N/-S +E/-W Northing Easting Latitude Longitude  
0.0 0.0 1430278.15 3337468.9240° 30' 29.430 N 104° 17' 10.799 W

## WELLBORE TARGET DETAILS

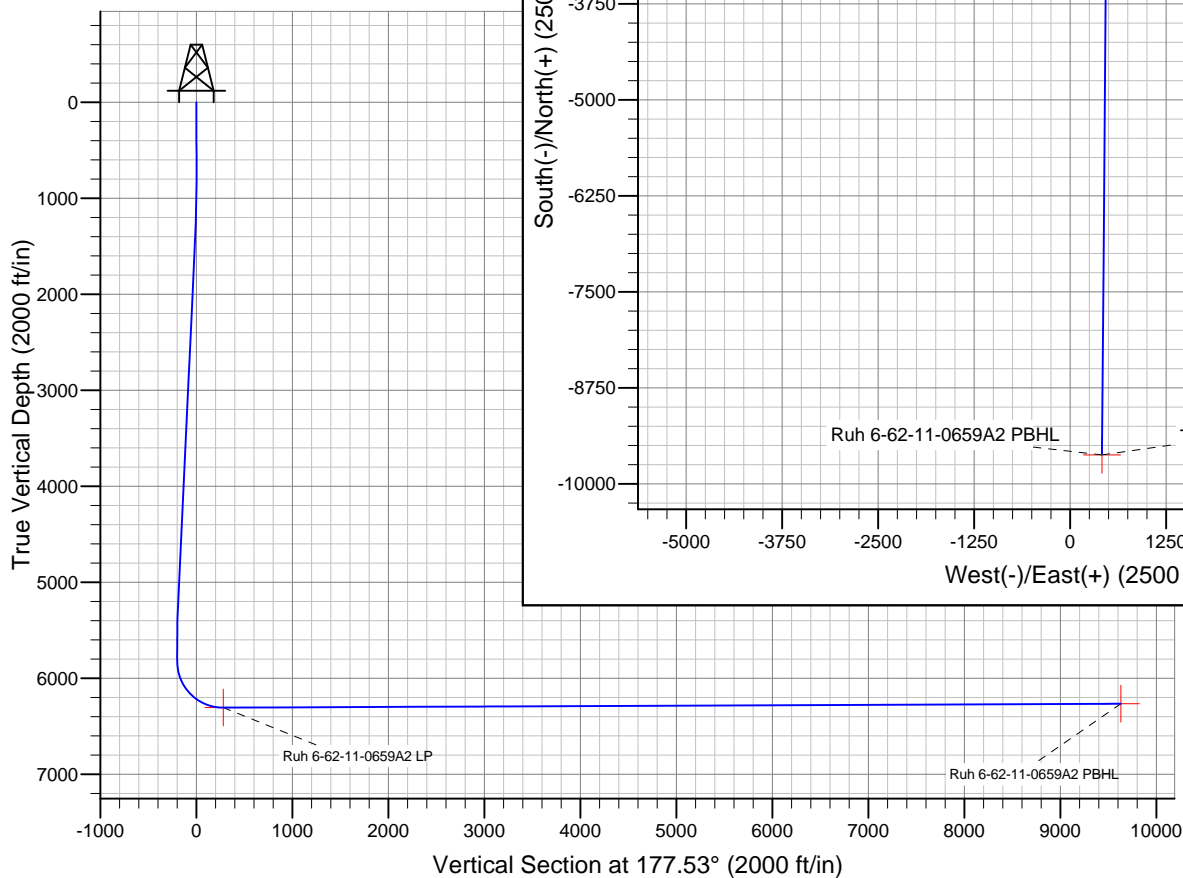
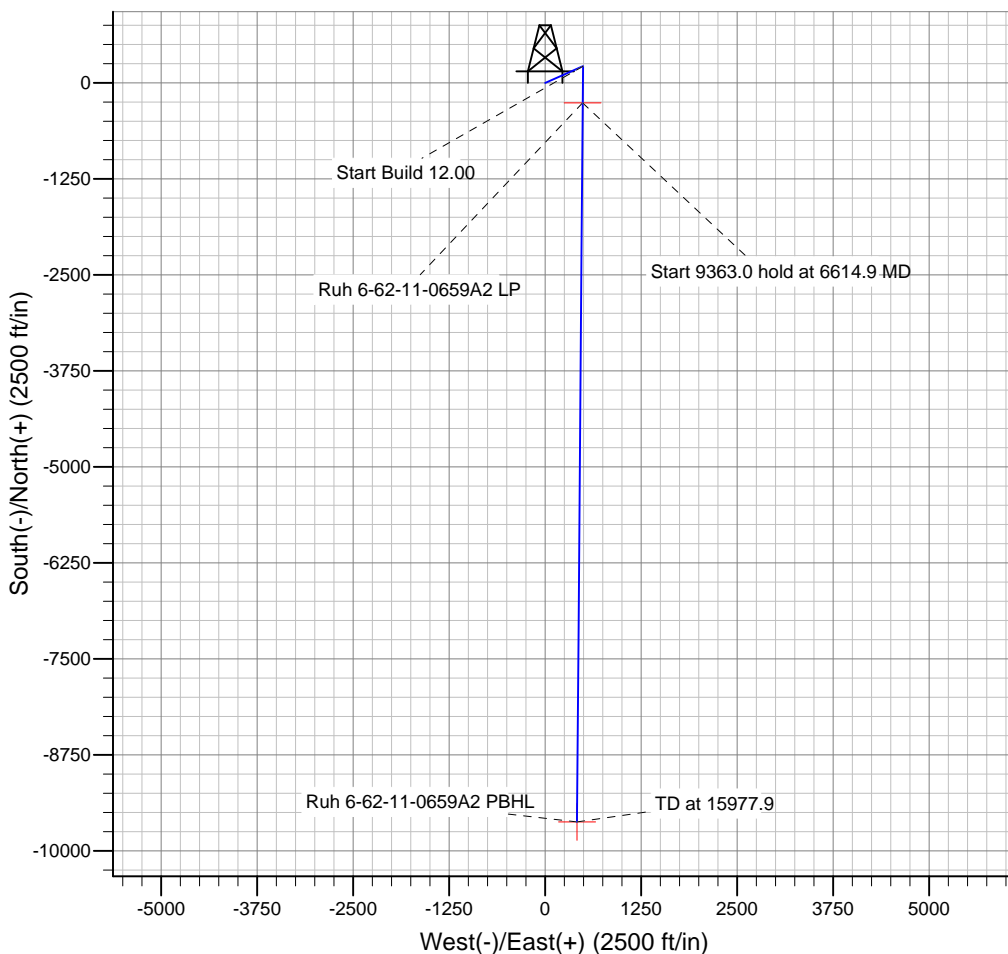
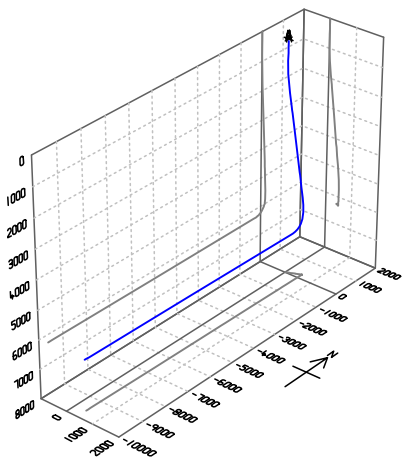
Name	TVD	+N/-S	+E/-W	Shape
Ruh 6-62-11-0659A2 PBHL 6267.0	6267.0	-9622.8	414.8	Point
Ruh 6-62-11-0659A2 LP 6307.0	6307.0	-260.1	488.0	Point

## PROJECT DETAILS: WELD COUNTY, COLORADO

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

## 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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1364.0	7.28	65.96	1363.0	9.4	21.1	2.00	65.96	-8.5	
4	5248.8	7.28	65.96	5216.5	210.0	470.7	0.00	0.00	-189.5	
5	5612.8	0.00	180.45	5579.5	219.4	491.8	2.00	180.00	-198.0	
6	5862.8	0.00	180.45	5829.5	219.4	491.8	0.00	180.45	-198.0	
7	6614.9	90.24	180.45	6307.0	-260.1	488.0	12.00	180.45	280.9	Ruh 6-62-11-0659A2 LP
8	15977.9	90.24	180.45	6267.0	-9622.8	414.8	0.00	0.00	9631.7	Ruh 6-62-11-0659A2 PBHL



Azimuths to True North  
Magnetic North: 8.13°

Magnetic Field  
Strength: 52863.7snT  
Dip Angle: 67.09°  
Date: 12/31/2014  
Model: IGRF2010

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Ruh 6-62-11-0659A2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Site:</b>	Ruh 6-62-11_14 NWNE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Ruh 6-62-11-0659A2	<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		Ruh 6-62-11_14 NWNE Pad				
Site Position:		Northing:	1,430,278.63ft	Latitude:	40° 30' 29.441 N	
From:	Lat/Long	Easting:	3,337,424.14ft	Longitude:	104° 17' 11.378 W	
Position Uncertainty:		0.0 ft	Slot Radius:	"	Grid Convergence:	0.78 °

Well	Ruh 6-62-11-0659A2					
Well Position	+N-S	-1.1 ft	Northing:	1,430,278.15 ft	Latitude:	40° 30' 29.430 N
	+E-W	44.8 ft	Easting:	3,337,468.92 ft	Longitude:	104° 17' 10.799 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,747.0 ft

<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	12/31/2014	8.13	67.09	52,864

<b>Design</b>	Design #1			
<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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	177.53

<b>Plan Sections</b>										
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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,364.0	7.28	65.96	1,363.0	9.4	21.1	2.00	2.00	0.00	65.96	
5,248.8	7.28	65.96	5,216.5	210.0	470.7	0.00	0.00	0.00	0.00	
5,612.8	0.00	180.45	5,579.5	219.4	491.8	2.00	-2.00	0.00	180.00	
5,862.8	0.00	180.45	5,829.5	219.4	491.8	0.00	0.00	0.00	180.45	
6,614.9	90.24	180.45	6,307.0	-260.1	488.0	12.00	12.00	0.00	180.45	Ruh 6-62-11-0659A
15,977.9	90.24	180.45	6,267.0	-9,622.8	414.8	0.00	0.00	0.00	0.00	Ruh 6-62-11-0659A

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## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Ruh 6-62-11-0659A2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Site:</b>	Ruh 6-62-11_14 NWNE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Ruh 6-62-11-0659A2	<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
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
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	2.00	65.96	1,100.0	0.7	1.6	-0.6	2.00	2.00	0.00
1,200.0	4.00	65.96	1,199.8	2.8	6.4	-2.6	2.00	2.00	0.00
1,300.0	6.00	65.96	1,299.5	6.4	14.3	-5.8	2.00	2.00	0.00
1,364.0	7.28	65.96	1,363.0	9.4	21.1	-8.5	2.00	2.00	0.00
1,400.0	7.28	65.96	1,398.7	11.3	25.3	-10.2	0.00	0.00	0.00
1,500.0	7.28	65.96	1,497.9	16.4	36.8	-14.8	0.00	0.00	0.00
1,600.0	7.28	65.96	1,597.1	21.6	48.4	-19.5	0.00	0.00	0.00
1,700.0	7.28	65.96	1,696.3	26.8	60.0	-24.1	0.00	0.00	0.00
1,800.0	7.28	65.96	1,795.5	31.9	71.5	-28.8	0.00	0.00	0.00
1,900.0	7.28	65.96	1,894.7	37.1	83.1	-33.5	0.00	0.00	0.00
2,000.0	7.28	65.96	1,993.9	42.2	94.7	-38.1	0.00	0.00	0.00
2,100.0	7.28	65.96	2,093.1	47.4	106.3	-42.8	0.00	0.00	0.00
2,200.0	7.28	65.96	2,192.3	52.6	117.8	-47.4	0.00	0.00	0.00
2,300.0	7.28	65.96	2,291.5	57.7	129.4	-52.1	0.00	0.00	0.00
2,400.0	7.28	65.96	2,390.7	62.9	141.0	-56.8	0.00	0.00	0.00
2,500.0	7.28	65.96	2,489.9	68.1	152.6	-61.4	0.00	0.00	0.00
2,600.0	7.28	65.96	2,589.1	73.2	164.1	-66.1	0.00	0.00	0.00
2,700.0	7.28	65.96	2,688.3	78.4	175.7	-70.7	0.00	0.00	0.00
2,800.0	7.28	65.96	2,787.4	83.5	187.3	-75.4	0.00	0.00	0.00
2,900.0	7.28	65.96	2,886.6	88.7	198.8	-80.1	0.00	0.00	0.00
3,000.0	7.28	65.96	2,985.8	93.9	210.4	-84.7	0.00	0.00	0.00
3,100.0	7.28	65.96	3,085.0	99.0	222.0	-89.4	0.00	0.00	0.00
3,200.0	7.28	65.96	3,184.2	104.2	233.6	-94.0	0.00	0.00	0.00
3,300.0	7.28	65.96	3,283.4	109.4	245.1	-98.7	0.00	0.00	0.00
3,400.0	7.28	65.96	3,382.6	114.5	256.7	-103.4	0.00	0.00	0.00
3,500.0	7.28	65.96	3,481.8	119.7	268.3	-108.0	0.00	0.00	0.00
3,600.0	7.28	65.96	3,581.0	124.9	279.9	-112.7	0.00	0.00	0.00
3,700.0	7.28	65.96	3,680.2	130.0	291.4	-117.3	0.00	0.00	0.00
3,800.0	7.28	65.96	3,779.4	135.2	303.0	-122.0	0.00	0.00	0.00
3,900.0	7.28	65.96	3,878.6	140.3	314.6	-126.7	0.00	0.00	0.00
4,000.0	7.28	65.96	3,977.8	145.5	326.2	-131.3	0.00	0.00	0.00
4,100.0	7.28	65.96	4,077.0	150.7	337.7	-136.0	0.00	0.00	0.00
4,200.0	7.28	65.96	4,176.2	155.8	349.3	-140.6	0.00	0.00	0.00
4,300.0	7.28	65.96	4,275.4	161.0	360.9	-145.3	0.00	0.00	0.00
4,400.0	7.28	65.96	4,374.5	166.2	372.4	-150.0	0.00	0.00	0.00
4,500.0	7.28	65.96	4,473.7	171.3	384.0	-154.6	0.00	0.00	0.00
4,600.0	7.28	65.96	4,572.9	176.5	395.6	-159.3	0.00	0.00	0.00
4,700.0	7.28	65.96	4,672.1	181.6	407.2	-163.9	0.00	0.00	0.00
4,800.0	7.28	65.96	4,771.3	186.8	418.7	-168.6	0.00	0.00	0.00
4,900.0	7.28	65.96	4,870.5	192.0	430.3	-173.3	0.00	0.00	0.00
5,000.0	7.28	65.96	4,969.7	197.1	441.9	-177.9	0.00	0.00	0.00
5,100.0	7.28	65.96	5,068.9	202.3	453.5	-182.6	0.00	0.00	0.00
5,200.0	7.28	65.96	5,168.1	207.5	465.0	-187.2	0.00	0.00	0.00

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## Planning Report

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<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Site:</b>	Ruh 6-62-11_14 NWNE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Ruh 6-62-11-0659A2	<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)
5,248.8	7.28	65.96	5,216.5	210.0	470.7	-189.5	0.00	0.00	0.00
5,300.0	6.26	65.96	5,267.3	212.4	476.2	-191.7	2.00	-2.00	0.00
5,400.0	4.26	65.96	5,366.9	216.2	484.5	-195.1	2.00	-2.00	0.00
5,500.0	2.26	65.96	5,466.8	218.5	489.7	-197.2	2.00	-2.00	0.00
5,600.0	0.26	65.96	5,566.7	219.4	491.7	-198.0	2.00	-2.00	0.00
5,612.8	0.00	180.45	5,579.5	219.4	491.8	-198.0	2.00	-2.00	0.00
5,700.0	0.00	180.45	5,666.7	219.4	491.8	-198.0	0.00	0.00	0.00
5,800.0	0.00	180.45	5,766.7	219.4	491.8	-198.0	0.00	0.00	0.00
5,862.8	0.00	180.45	5,829.5	219.4	491.8	-198.0	0.00	0.00	0.00
5,900.0	4.46	180.45	5,866.7	217.9	491.8	-196.6	12.00	12.00	0.00
6,000.0	16.46	180.45	5,964.8	199.8	491.6	-178.5	12.00	12.00	0.00
6,100.0	28.46	180.45	6,057.1	161.7	491.3	-140.4	12.00	12.00	0.00
6,200.0	40.46	180.45	6,139.4	105.2	490.9	-84.0	12.00	12.00	0.00
6,300.0	52.46	180.45	6,208.1	32.8	490.3	-11.7	12.00	12.00	0.00
6,400.0	64.46	180.45	6,260.4	-52.2	489.6	73.3	12.00	12.00	0.00
6,500.0	76.46	180.45	6,293.7	-146.3	488.9	167.2	12.00	12.00	0.00
6,600.0	88.46	180.45	6,306.8	-245.2	488.1	266.0	12.00	12.00	0.00
6,614.9	90.24	180.45	6,307.0	-260.1	488.0	280.9	12.00	12.00	0.00
<b>Ruh 6-62-11-0659A2 LP</b>									
6,700.0	90.24	180.45	6,306.6	-345.2	487.3	365.9	0.00	0.00	0.00
6,800.0	90.24	180.45	6,306.2	-445.2	486.6	465.8	0.00	0.00	0.00
6,900.0	90.24	180.45	6,305.8	-545.2	485.8	565.6	0.00	0.00	0.00
7,000.0	90.24	180.45	6,305.4	-645.2	485.0	665.5	0.00	0.00	0.00
7,100.0	90.24	180.45	6,304.9	-745.2	484.2	765.4	0.00	0.00	0.00
7,200.0	90.24	180.45	6,304.5	-845.2	483.4	865.3	0.00	0.00	0.00
7,300.0	90.24	180.45	6,304.1	-945.2	482.7	965.1	0.00	0.00	0.00
7,400.0	90.24	180.45	6,303.6	-1,045.2	481.9	1,065.0	0.00	0.00	0.00
7,500.0	90.24	180.45	6,303.2	-1,145.2	481.1	1,164.9	0.00	0.00	0.00
7,600.0	90.24	180.45	6,302.8	-1,245.2	480.3	1,264.7	0.00	0.00	0.00
7,700.0	90.24	180.45	6,302.4	-1,345.2	479.5	1,364.6	0.00	0.00	0.00
7,800.0	90.24	180.45	6,301.9	-1,445.2	478.7	1,464.5	0.00	0.00	0.00
7,900.0	90.24	180.45	6,301.5	-1,545.2	478.0	1,564.3	0.00	0.00	0.00
8,000.0	90.24	180.45	6,301.1	-1,645.2	477.2	1,664.2	0.00	0.00	0.00
8,100.0	90.24	180.45	6,300.7	-1,745.2	476.4	1,764.1	0.00	0.00	0.00
8,200.0	90.24	180.45	6,300.2	-1,845.2	475.6	1,864.0	0.00	0.00	0.00
8,300.0	90.24	180.45	6,299.8	-1,945.2	474.8	1,963.8	0.00	0.00	0.00
8,400.0	90.24	180.45	6,299.4	-2,045.2	474.0	2,063.7	0.00	0.00	0.00
8,500.0	90.24	180.45	6,298.9	-2,145.2	473.3	2,163.6	0.00	0.00	0.00
8,600.0	90.24	180.45	6,298.5	-2,245.2	472.5	2,263.4	0.00	0.00	0.00
8,700.0	90.24	180.45	6,298.1	-2,345.2	471.7	2,363.3	0.00	0.00	0.00
8,800.0	90.24	180.45	6,297.7	-2,445.2	470.9	2,463.2	0.00	0.00	0.00
8,900.0	90.24	180.45	6,297.2	-2,545.2	470.1	2,563.0	0.00	0.00	0.00
9,000.0	90.24	180.45	6,296.8	-2,645.2	469.4	2,662.9	0.00	0.00	0.00
9,100.0	90.24	180.45	6,296.4	-2,745.1	468.6	2,762.8	0.00	0.00	0.00
9,200.0	90.24	180.45	6,296.0	-2,845.1	467.8	2,862.6	0.00	0.00	0.00
9,300.0	90.24	180.45	6,295.5	-2,945.1	467.0	2,962.5	0.00	0.00	0.00
9,400.0	90.24	180.45	6,295.1	-3,045.1	466.2	3,062.4	0.00	0.00	0.00
9,500.0	90.24	180.45	6,294.7	-3,145.1	465.4	3,162.3	0.00	0.00	0.00
9,600.0	90.24	180.45	6,294.2	-3,245.1	464.7	3,262.1	0.00	0.00	0.00
9,700.0	90.24	180.45	6,293.8	-3,345.1	463.9	3,362.0	0.00	0.00	0.00
9,800.0	90.24	180.45	6,293.4	-3,445.1	463.1	3,461.9	0.00	0.00	0.00
9,900.0	90.24	180.45	6,293.0	-3,545.1	462.3	3,561.7	0.00	0.00	0.00
10,000.0	90.24	180.45	6,292.5	-3,645.1	461.5	3,661.6	0.00	0.00	0.00

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## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Ruh 6-62-11-0659A2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Site:</b>	Ruh 6-62-11_14 NWNE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Ruh 6-62-11-0659A2	<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)
10,100.0	90.24	180.45	6,292.1	-3,745.1	460.7	3,761.5	0.00	0.00	0.00
10,200.0	90.24	180.45	6,291.7	-3,845.1	460.0	3,861.3	0.00	0.00	0.00
10,300.0	90.24	180.45	6,291.3	-3,945.1	459.2	3,961.2	0.00	0.00	0.00
10,400.0	90.24	180.45	6,290.8	-4,045.1	458.4	4,061.1	0.00	0.00	0.00
10,500.0	90.24	180.45	6,290.4	-4,145.1	457.6	4,161.0	0.00	0.00	0.00
10,600.0	90.24	180.45	6,290.0	-4,245.1	456.8	4,260.8	0.00	0.00	0.00
10,700.0	90.24	180.45	6,289.5	-4,345.1	456.1	4,360.7	0.00	0.00	0.00
10,800.0	90.24	180.45	6,289.1	-4,445.1	455.3	4,460.6	0.00	0.00	0.00
10,900.0	90.24	180.45	6,288.7	-4,545.1	454.5	4,560.4	0.00	0.00	0.00
11,000.0	90.24	180.45	6,288.3	-4,645.1	453.7	4,660.3	0.00	0.00	0.00
11,100.0	90.24	180.45	6,287.8	-4,745.1	452.9	4,760.2	0.00	0.00	0.00
11,200.0	90.24	180.45	6,287.4	-4,845.1	452.1	4,860.0	0.00	0.00	0.00
11,300.0	90.24	180.45	6,287.0	-4,945.1	451.4	4,959.9	0.00	0.00	0.00
11,400.0	90.24	180.45	6,286.6	-5,045.1	450.6	5,059.8	0.00	0.00	0.00
11,500.0	90.24	180.45	6,286.1	-5,145.1	449.8	5,159.6	0.00	0.00	0.00
11,600.0	90.24	180.45	6,285.7	-5,245.0	449.0	5,259.5	0.00	0.00	0.00
11,700.0	90.24	180.45	6,285.3	-5,345.0	448.2	5,359.4	0.00	0.00	0.00
11,800.0	90.24	180.45	6,284.8	-5,445.0	447.4	5,459.3	0.00	0.00	0.00
11,900.0	90.24	180.45	6,284.4	-5,545.0	446.7	5,559.1	0.00	0.00	0.00
12,000.0	90.24	180.45	6,284.0	-5,645.0	445.9	5,659.0	0.00	0.00	0.00
12,100.0	90.24	180.45	6,283.6	-5,745.0	445.1	5,758.9	0.00	0.00	0.00
12,200.0	90.24	180.45	6,283.1	-5,845.0	444.3	5,858.7	0.00	0.00	0.00
12,300.0	90.24	180.45	6,282.7	-5,945.0	443.5	5,958.6	0.00	0.00	0.00
12,400.0	90.24	180.45	6,282.3	-6,045.0	442.8	6,058.5	0.00	0.00	0.00
12,500.0	90.24	180.45	6,281.9	-6,145.0	442.0	6,158.3	0.00	0.00	0.00
12,600.0	90.24	180.45	6,281.4	-6,245.0	441.2	6,258.2	0.00	0.00	0.00
12,700.0	90.24	180.45	6,281.0	-6,345.0	440.4	6,358.1	0.00	0.00	0.00
12,800.0	90.24	180.45	6,280.6	-6,445.0	439.6	6,458.0	0.00	0.00	0.00
12,900.0	90.24	180.45	6,280.1	-6,545.0	438.8	6,557.8	0.00	0.00	0.00
13,000.0	90.24	180.45	6,279.7	-6,645.0	438.1	6,657.7	0.00	0.00	0.00
13,100.0	90.24	180.45	6,279.3	-6,745.0	437.3	6,757.6	0.00	0.00	0.00
13,200.0	90.24	180.45	6,278.9	-6,845.0	436.5	6,857.4	0.00	0.00	0.00
13,300.0	90.24	180.45	6,278.4	-6,945.0	435.7	6,957.3	0.00	0.00	0.00
13,400.0	90.24	180.45	6,278.0	-7,045.0	434.9	7,057.2	0.00	0.00	0.00
13,500.0	90.24	180.45	6,277.6	-7,145.0	434.1	7,157.0	0.00	0.00	0.00
13,600.0	90.24	180.45	6,277.2	-7,245.0	433.4	7,256.9	0.00	0.00	0.00
13,700.0	90.24	180.45	6,276.7	-7,345.0	432.6	7,356.8	0.00	0.00	0.00
13,800.0	90.24	180.45	6,276.3	-7,445.0	431.8	7,456.6	0.00	0.00	0.00
13,900.0	90.24	180.45	6,275.9	-7,545.0	431.0	7,556.5	0.00	0.00	0.00
14,000.0	90.24	180.45	6,275.4	-7,645.0	430.2	7,656.4	0.00	0.00	0.00
14,100.0	90.24	180.45	6,275.0	-7,744.9	429.5	7,756.3	0.00	0.00	0.00
14,200.0	90.24	180.45	6,274.6	-7,844.9	428.7	7,856.1	0.00	0.00	0.00
14,300.0	90.24	180.45	6,274.2	-7,944.9	427.9	7,956.0	0.00	0.00	0.00
14,400.0	90.24	180.45	6,273.7	-8,044.9	427.1	8,055.9	0.00	0.00	0.00
14,500.0	90.24	180.45	6,273.3	-8,144.9	426.3	8,155.7	0.00	0.00	0.00
14,600.0	90.24	180.45	6,272.9	-8,244.9	425.5	8,255.6	0.00	0.00	0.00
14,700.0	90.24	180.45	6,272.5	-8,344.9	424.8	8,355.5	0.00	0.00	0.00
14,800.0	90.24	180.45	6,272.0	-8,444.9	424.0	8,455.3	0.00	0.00	0.00
14,900.0	90.24	180.45	6,271.6	-8,544.9	423.2	8,555.2	0.00	0.00	0.00
15,000.0	90.24	180.45	6,271.2	-8,644.9	422.4	8,655.1	0.00	0.00	0.00
15,100.0	90.24	180.45	6,270.8	-8,744.9	421.6	8,755.0	0.00	0.00	0.00
15,200.0	90.24	180.45	6,270.3	-8,844.9	420.8	8,854.8	0.00	0.00	0.00
15,300.0	90.24	180.45	6,269.9	-8,944.9	420.1	8,954.7	0.00	0.00	0.00
15,400.0	90.24	180.45	6,269.5	-9,044.9	419.3	9,054.6	0.00	0.00	0.00

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Ruh 6-62-11-0659A2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4763.0ft (Original Well Elev)
<b>Site:</b>	Ruh 6-62-11_14 NWNE Pad	<b>North Reference:</b>	True
<b>Well:</b>	Ruh 6-62-11-0659A2	<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)
15,500.0	90.24	180.45	6,269.0	-9,144.9	418.5	9,154.4	0.00	0.00	0.00
15,600.0	90.24	180.45	6,268.6	-9,244.9	417.7	9,254.3	0.00	0.00	0.00
15,700.0	90.24	180.45	6,268.2	-9,344.9	416.9	9,354.2	0.00	0.00	0.00
15,800.0	90.24	180.45	6,267.8	-9,444.9	416.2	9,454.0	0.00	0.00	0.00
15,900.0	90.24	180.45	6,267.3	-9,544.9	415.4	9,553.9	0.00	0.00	0.00
15,977.9	90.24	180.45	6,267.0	-9,622.8	414.8	9,631.7	0.00	0.00	0.00
Ruh 6-62-11-0659A2 PBHL									