



**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 Pappenheim 6-62-27-3225BH2 , True North  
Vertical (TVD) Reference: KB @ 4749.0ft (Original Well Elev)  
Section (VS) Reference: Slot - (0.0N, 0.0E)  
Measured Depth Reference: KB @ 4749.0ft (Original Well Elev)  
Calculation Method: Minimum Curvature

## WELL DETAILS: Pappenheim 6-62-27-3225BH2

+N/-S +E/-W Northing Easting Latitude Longitude  
0.0 0.0 1411909.27 3329049.4240° 27' 29.052 N 104° 19' 2.964 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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1290.3	5.81	335.62	1289.8	13.4	-6.1	2.00	335.62	-5.3	
4	5399.3	5.81	335.62	5377.7	392.0	-177.7	0.00	0.00	-155.9	
5	5689.6	0.00	89.26	5667.6	405.4	-183.7	2.00	180.00	-161.2	
6	5939.6	0.00	89.26	5917.6	405.4	-183.7	0.00	89.26	-161.2	
7	6693.7	90.49	89.26	6395.0	411.7	297.7	12.00	89.26	319.9	P 27-3225BH2 LP
8	16111.3	90.49	89.26	6315.0	533.8	9714.3	0.00	0.00	9728.9	P 27-3225BH2 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

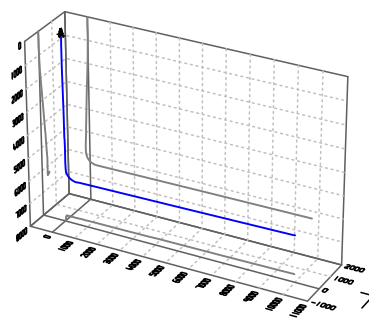
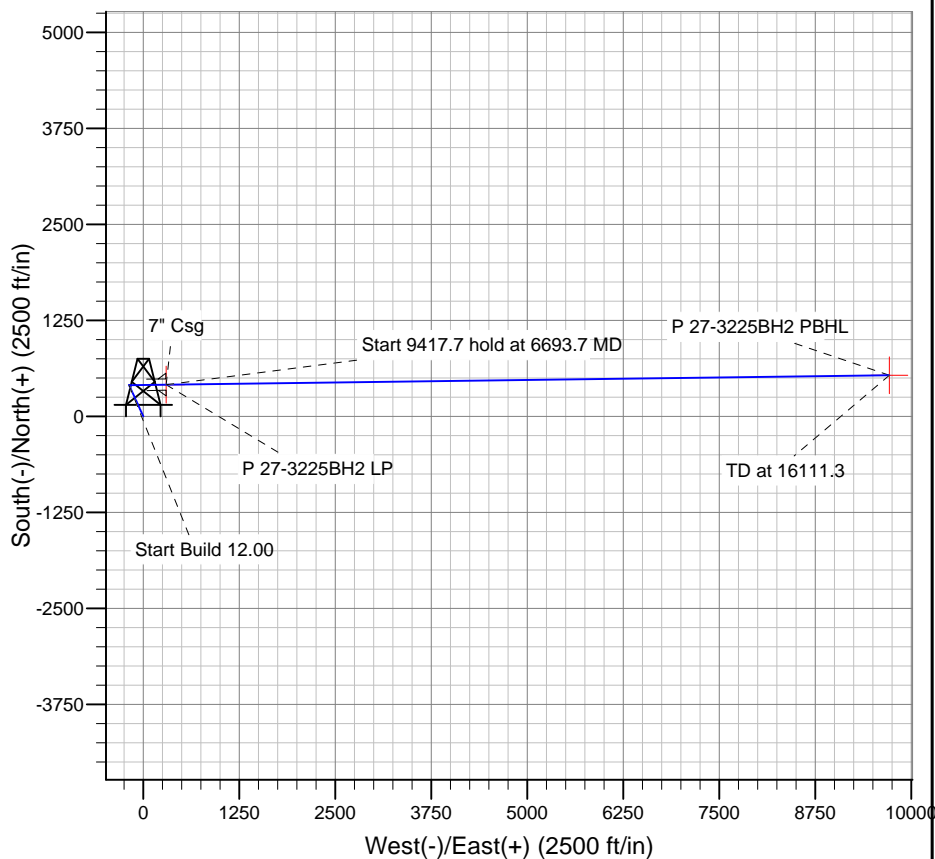
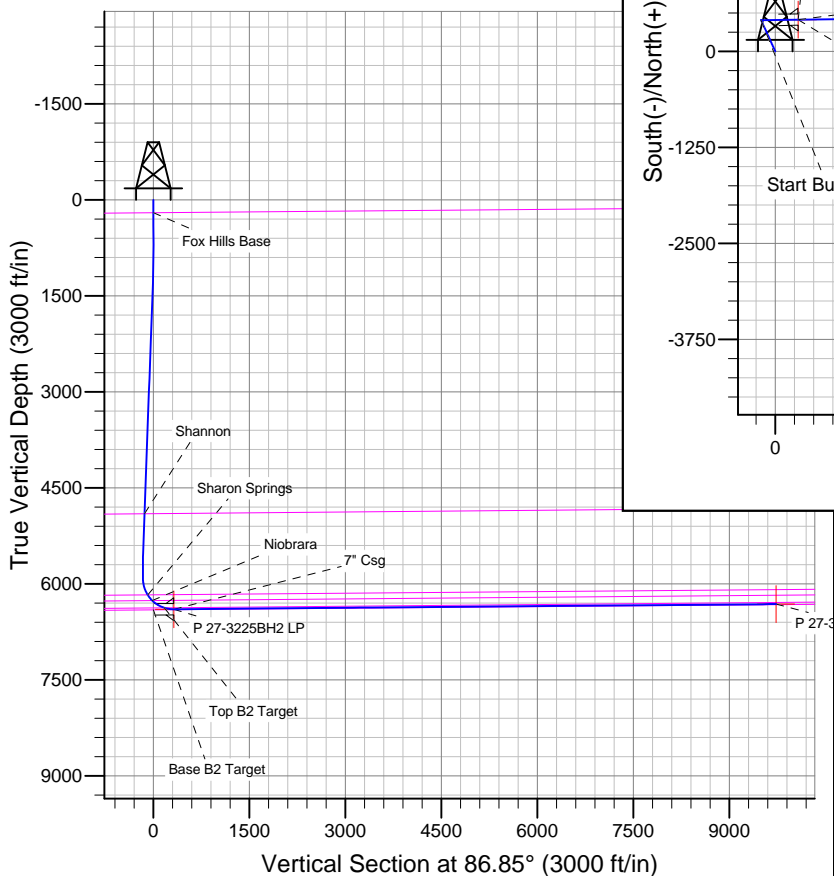
TVDPath	MDPath	Formation
199.0	199.0	Base B2 Target
4901.3	4920.4	Fox Hills Base
6171.9	6207.9	Shannon Springs
6259.3	6320.5	Niobrara
6372.7	6543.0	Top B2 Target

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
P 27-3225BH2 PBHL	6315.0	533.8	9714.3	Point
P 27-3225BH2 LP	6395.0	411.7	297.7	Point

## CASING DETAILS

TVD	MD	Name	Size
6395.0	6693.7	7" Csg	7



Azimuths to True North  
Magnetic North: 8.26°  
Magnetic Field  
Strength: 52922.5snT  
Dip Angle: 67.07°  
Date: 3/3/2014  
Model: IGRF2010

# **BILL BARRETT CORP**

**WELD COUNTY, COLORADO  
Pappenheim 6-62-27 W1/2 Pad  
Pappenheim 6-62-27-3225BH2**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**03 March, 2014**

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Pappenheim 6-62-27-3225BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Site:</b>	Pappenheim 6-62-27 W1/2 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Pappenheim 6-62-27-3225BH2	<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	Pappenheim 6-62-27 W1/2 Pad				
Site Position:		Northing:	1,411,909.28ft	Latitude:	40° 27' 29.052 N
From:	Lat/Long	Easting:	3,329,049.42ft	Longitude:	104° 19' 2.964 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.76 °

Well	Pappenheim 6-62-27-3225BH2					
Well Position	+N-S	0.0 ft	Northing:	1,411,909.27 ft	Latitude:	40° 27' 29.052 N
	+E-W	0.0 ft	Easting:	3,329,049.42 ft	Longitude:	104° 19' 2.964 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,733.0 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	3/3/2014	8.26	67.07	52,923

<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	86.85	

<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	
1,290.3	5.81	335.62	1,289.8	13.4	-6.1	2.00	2.00	0.00	335.62	
5,399.3	5.81	335.62	5,377.7	392.0	-177.7	0.00	0.00	0.00	0.00	
5,689.6	0.00	89.26	5,667.6	405.4	-183.7	2.00	-2.00	0.00	180.00	
5,939.6	0.00	89.26	5,917.6	405.4	-183.7	0.00	0.00	0.00	89.26	
6,693.7	90.49	89.26	6,395.0	411.7	297.7	12.00	12.00	0.00	89.26	P 27-3225BH2 LP
16,111.3	90.49	89.26	6,315.0	533.8	9,714.3	0.00	0.00	0.00	0.00	P 27-3225BH2 PB

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## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Pappenheim 6-62-27-3225BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Site:</b>	Pappenheim 6-62-27 W1/2 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Pappenheim 6-62-27-3225BH2	<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
199.0	0.00	0.00	199.0	0.0	0.0	0.0	0.00	0.00	0.00
Fox Hills Base									
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	335.62	1,100.0	1.6	-0.7	-0.6	2.00	2.00	0.00
1,200.0	4.00	335.62	1,199.8	6.4	-2.9	-2.5	2.00	2.00	0.00
1,290.3	5.81	335.62	1,289.8	13.4	-6.1	-5.3	2.00	2.00	0.00
1,300.0	5.81	335.62	1,299.5	14.3	-6.5	-5.7	0.00	0.00	0.00
1,400.0	5.81	335.62	1,398.9	23.5	-10.6	-9.3	0.00	0.00	0.00
1,500.0	5.81	335.62	1,498.4	32.7	-14.8	-13.0	0.00	0.00	0.00
1,600.0	5.81	335.62	1,597.9	41.9	-19.0	-16.7	0.00	0.00	0.00
1,700.0	5.81	335.62	1,697.4	51.1	-23.2	-20.3	0.00	0.00	0.00
1,800.0	5.81	335.62	1,796.9	60.4	-27.4	-24.0	0.00	0.00	0.00
1,900.0	5.81	335.62	1,896.4	69.6	-31.5	-27.7	0.00	0.00	0.00
2,000.0	5.81	335.62	1,995.9	78.8	-35.7	-31.3	0.00	0.00	0.00
2,100.0	5.81	335.62	2,095.3	88.0	-39.9	-35.0	0.00	0.00	0.00
2,200.0	5.81	335.62	2,194.8	97.2	-44.1	-38.7	0.00	0.00	0.00
2,300.0	5.81	335.62	2,294.3	106.4	-48.2	-42.3	0.00	0.00	0.00
2,400.0	5.81	335.62	2,393.8	115.6	-52.4	-46.0	0.00	0.00	0.00
2,500.0	5.81	335.62	2,493.3	124.9	-56.6	-49.6	0.00	0.00	0.00
2,600.0	5.81	335.62	2,592.8	134.1	-60.8	-53.3	0.00	0.00	0.00
2,700.0	5.81	335.62	2,692.3	143.3	-64.9	-57.0	0.00	0.00	0.00
2,800.0	5.81	335.62	2,791.8	152.5	-69.1	-60.6	0.00	0.00	0.00
2,900.0	5.81	335.62	2,891.2	161.7	-73.3	-64.3	0.00	0.00	0.00
3,000.0	5.81	335.62	2,990.7	170.9	-77.5	-68.0	0.00	0.00	0.00
3,100.0	5.81	335.62	3,090.2	180.2	-81.6	-71.6	0.00	0.00	0.00
3,200.0	5.81	335.62	3,189.7	189.4	-85.8	-75.3	0.00	0.00	0.00
3,300.0	5.81	335.62	3,289.2	198.6	-90.0	-79.0	0.00	0.00	0.00
3,400.0	5.81	335.62	3,388.7	207.8	-94.2	-82.6	0.00	0.00	0.00
3,500.0	5.81	335.62	3,488.2	217.0	-98.3	-86.3	0.00	0.00	0.00
3,600.0	5.81	335.62	3,587.7	226.2	-102.5	-90.0	0.00	0.00	0.00
3,700.0	5.81	335.62	3,687.1	235.4	-106.7	-93.6	0.00	0.00	0.00
3,800.0	5.81	335.62	3,786.6	244.7	-110.9	-97.3	0.00	0.00	0.00
3,900.0	5.81	335.62	3,886.1	253.9	-115.1	-101.0	0.00	0.00	0.00
4,000.0	5.81	335.62	3,985.6	263.1	-119.2	-104.6	0.00	0.00	0.00
4,100.0	5.81	335.62	4,085.1	272.3	-123.4	-108.3	0.00	0.00	0.00
4,200.0	5.81	335.62	4,184.6	281.5	-127.6	-111.9	0.00	0.00	0.00
4,300.0	5.81	335.62	4,284.1	290.7	-131.8	-115.6	0.00	0.00	0.00
4,400.0	5.81	335.62	4,383.5	300.0	-135.9	-119.3	0.00	0.00	0.00
4,500.0	5.81	335.62	4,483.0	309.2	-140.1	-122.9	0.00	0.00	0.00
4,600.0	5.81	335.62	4,582.5	318.4	-144.3	-126.6	0.00	0.00	0.00
4,700.0	5.81	335.62	4,682.0	327.6	-148.5	-130.3	0.00	0.00	0.00
4,800.0	5.81	335.62	4,781.5	336.8	-152.6	-133.9	0.00	0.00	0.00
4,900.0	5.81	335.62	4,881.0	346.0	-156.8	-137.6	0.00	0.00	0.00
4,920.4	5.81	335.62	4,901.3	347.9	-157.7	-138.3	0.00	0.00	0.00

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## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Pappenheim 6-62-27-3225BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Site:</b>	Pappenheim 6-62-27 W1/2 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Pappenheim 6-62-27-3225BH2	<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)	
<b>Shannon</b>										
5,000.0	5.81	335.62	4,980.5	355.2	-161.0	-141.3	0.00	0.00	0.00	
5,100.0	5.81	335.62	5,080.0	364.5	-165.2	-144.9	0.00	0.00	0.00	
5,200.0	5.81	335.62	5,179.4	373.7	-169.3	-148.6	0.00	0.00	0.00	
5,300.0	5.81	335.62	5,278.9	382.9	-173.5	-152.3	0.00	0.00	0.00	
5,399.3	5.81	335.62	5,377.7	392.0	-177.7	-155.9	0.00	0.00	0.00	
5,400.0	5.79	335.62	5,378.4	392.1	-177.7	-155.9	2.00	-2.00	0.00	
5,500.0	3.79	335.62	5,478.1	399.7	-181.1	-158.9	2.00	-2.00	0.00	
5,600.0	1.79	335.62	5,577.9	404.2	-183.2	-160.7	2.00	-2.00	0.00	
5,689.6	0.00	89.26	5,667.6	405.4	-183.7	-161.2	2.00	-2.00	0.00	
5,700.0	0.00	89.26	5,677.9	405.4	-183.7	-161.2	0.00	0.00	0.00	
5,800.0	0.00	89.26	5,777.9	405.4	-183.7	-161.2	0.00	0.00	0.00	
5,900.0	0.00	89.26	5,877.9	405.4	-183.7	-161.2	0.00	0.00	0.00	
5,939.6	0.00	89.26	5,917.6	405.4	-183.7	-161.2	0.00	0.00	0.00	
6,000.0	7.24	89.26	5,977.8	405.5	-179.9	-157.4	12.00	12.00	0.00	
6,100.0	19.24	89.26	6,074.9	405.8	-157.1	-134.6	12.00	12.00	0.00	
6,200.0	31.24	89.26	6,165.2	406.3	-114.5	-92.0	12.00	12.00	0.00	
6,207.9	32.19	89.26	6,171.9	406.4	-110.4	-87.9	12.00	12.00	0.00	
<b>Sharon Springs</b>										
6,300.0	43.24	89.26	6,244.7	407.1	-54.1	-31.7	12.00	12.00	0.00	
6,320.5	45.70	89.26	6,259.3	407.3	-39.7	-17.3	12.00	12.00	0.00	
<b>Niobrara</b>										
6,400.0	55.24	89.26	6,309.8	408.1	21.5	43.9	12.00	12.00	0.00	
6,500.0	67.24	89.26	6,357.9	409.2	109.0	131.3	12.00	12.00	0.00	
6,543.0	72.40	89.26	6,372.7	409.7	149.4	171.6	12.00	12.00	0.00	
<b>Top B2 Target</b>										
6,600.0	79.24	89.26	6,386.6	410.5	204.6	226.8	12.00	12.00	0.00	
6,693.7	90.49	89.26	6,395.0	411.7	297.7	319.9	12.00	12.00	0.00	
<b>7" Csg - P 27-3225BH2 LP</b>										
6,700.0	90.49	89.26	6,394.9	411.8	304.1	326.2	0.03	0.03	0.00	
6,800.0	90.49	89.26	6,394.1	413.1	404.0	426.1	0.00	0.00	0.00	
6,900.0	90.49	89.26	6,393.2	414.3	504.0	526.0	0.00	0.00	0.00	
7,000.0	90.49	89.26	6,392.4	415.6	604.0	625.9	0.00	0.00	0.00	
7,100.0	90.49	89.26	6,391.5	416.9	704.0	725.8	0.00	0.00	0.00	
7,200.0	90.49	89.26	6,390.7	418.2	804.0	825.7	0.00	0.00	0.00	
7,300.0	90.49	89.26	6,389.8	419.5	904.0	925.6	0.00	0.00	0.00	
7,400.0	90.49	89.26	6,389.0	420.8	1,004.0	1,025.6	0.00	0.00	0.00	
7,500.0	90.49	89.26	6,388.2	422.1	1,104.0	1,125.5	0.00	0.00	0.00	
7,600.0	90.49	89.26	6,387.3	423.4	1,204.0	1,225.4	0.00	0.00	0.00	
7,700.0	90.49	89.26	6,386.5	424.7	1,303.9	1,325.3	0.00	0.00	0.00	
7,800.0	90.49	89.26	6,385.6	426.0	1,403.9	1,425.2	0.00	0.00	0.00	
7,900.0	90.49	89.26	6,384.8	427.3	1,503.9	1,525.1	0.00	0.00	0.00	
8,000.0	90.49	89.26	6,383.9	428.6	1,603.9	1,625.0	0.00	0.00	0.00	
8,100.0	90.49	89.26	6,383.1	429.9	1,703.9	1,724.9	0.00	0.00	0.00	
8,200.0	90.49	89.26	6,382.2	431.2	1,803.9	1,824.8	0.00	0.00	0.00	
8,300.0	90.49	89.26	6,381.4	432.5	1,903.9	1,924.7	0.00	0.00	0.00	
8,400.0	90.49	89.26	6,380.5	433.8	2,003.9	2,024.6	0.00	0.00	0.00	
8,500.0	90.49	89.26	6,379.7	435.1	2,103.8	2,124.5	0.00	0.00	0.00	
8,600.0	90.49	89.26	6,378.8	436.4	2,203.8	2,224.5	0.00	0.00	0.00	
8,700.0	90.49	89.26	6,378.0	437.7	2,303.8	2,324.4	0.00	0.00	0.00	
8,800.0	90.49	89.26	6,377.1	439.0	2,403.8	2,424.3	0.00	0.00	0.00	
8,900.0	90.49	89.26	6,376.3	440.3	2,503.8	2,524.2	0.00	0.00	0.00	
9,000.0	90.49	89.26	6,375.4	441.6	2,603.8	2,624.1	0.00	0.00	0.00	

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Pappenheim 6-62-27-3225BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Site:</b>	Pappenheim 6-62-27 W1/2 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Pappenheim 6-62-27-3225BH2	<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)
9,100.0	90.49	89.26	6,374.6	442.9	2,703.8	2,724.0	0.00	0.00	0.00
9,200.0	90.49	89.26	6,373.7	444.2	2,803.8	2,823.9	0.00	0.00	0.00
9,300.0	90.49	89.26	6,372.9	445.5	2,903.7	2,923.8	0.00	0.00	0.00
9,400.0	90.49	89.26	6,372.0	446.8	3,003.7	3,023.7	0.00	0.00	0.00
9,500.0	90.49	89.26	6,371.2	448.1	3,103.7	3,123.6	0.00	0.00	0.00
9,600.0	90.49	89.26	6,370.3	449.4	3,203.7	3,223.5	0.00	0.00	0.00
9,700.0	90.49	89.26	6,369.5	450.7	3,303.7	3,323.4	0.00	0.00	0.00
9,800.0	90.49	89.26	6,368.6	452.0	3,403.7	3,423.4	0.00	0.00	0.00
9,900.0	90.49	89.26	6,367.8	453.3	3,503.7	3,523.3	0.00	0.00	0.00
10,000.0	90.49	89.26	6,366.9	454.5	3,603.7	3,623.2	0.00	0.00	0.00
10,100.0	90.49	89.26	6,366.1	455.8	3,703.7	3,723.1	0.00	0.00	0.00
10,200.0	90.49	89.26	6,365.2	457.1	3,803.6	3,823.0	0.00	0.00	0.00
10,300.0	90.49	89.26	6,364.4	458.4	3,903.6	3,922.9	0.00	0.00	0.00
10,400.0	90.49	89.26	6,363.5	459.7	4,003.6	4,022.8	0.00	0.00	0.00
10,500.0	90.49	89.26	6,362.7	461.0	4,103.6	4,122.7	0.00	0.00	0.00
10,600.0	90.49	89.26	6,361.8	462.3	4,203.6	4,222.6	0.00	0.00	0.00
10,700.0	90.49	89.26	6,361.0	463.6	4,303.6	4,322.5	0.00	0.00	0.00
10,800.0	90.49	89.26	6,360.1	464.9	4,403.6	4,422.4	0.00	0.00	0.00
10,900.0	90.49	89.26	6,359.3	466.2	4,503.6	4,522.4	0.00	0.00	0.00
11,000.0	90.49	89.26	6,358.4	467.5	4,603.5	4,622.3	0.00	0.00	0.00
11,100.0	90.49	89.26	6,357.6	468.8	4,703.5	4,722.2	0.00	0.00	0.00
11,200.0	90.49	89.26	6,356.7	470.1	4,803.5	4,822.1	0.00	0.00	0.00
11,300.0	90.49	89.26	6,355.9	471.4	4,903.5	4,922.0	0.00	0.00	0.00
11,400.0	90.49	89.26	6,355.0	472.7	5,003.5	5,021.9	0.00	0.00	0.00
11,500.0	90.49	89.26	6,354.2	474.0	5,103.5	5,121.8	0.00	0.00	0.00
11,600.0	90.49	89.26	6,353.3	475.3	5,203.5	5,221.7	0.00	0.00	0.00
11,700.0	90.49	89.26	6,352.5	476.6	5,303.5	5,321.6	0.00	0.00	0.00
11,800.0	90.49	89.26	6,351.6	477.9	5,403.4	5,421.5	0.00	0.00	0.00
11,900.0	90.49	89.26	6,350.8	479.2	5,503.4	5,521.4	0.00	0.00	0.00
12,000.0	90.49	89.26	6,349.9	480.5	5,603.4	5,621.3	0.00	0.00	0.00
12,100.0	90.49	89.26	6,349.1	481.8	5,703.4	5,721.3	0.00	0.00	0.00
12,200.0	90.49	89.26	6,348.2	483.1	5,803.4	5,821.2	0.00	0.00	0.00
12,300.0	90.49	89.26	6,347.4	484.4	5,903.4	5,921.1	0.00	0.00	0.00
12,400.0	90.49	89.26	6,346.5	485.7	6,003.4	6,021.0	0.00	0.00	0.00
12,500.0	90.49	89.26	6,345.7	487.0	6,103.4	6,120.9	0.00	0.00	0.00
12,600.0	90.49	89.26	6,344.8	488.3	6,203.4	6,220.8	0.00	0.00	0.00
12,700.0	90.49	89.26	6,344.0	489.6	6,303.3	6,320.7	0.00	0.00	0.00
12,800.0	90.49	89.26	6,343.1	490.9	6,403.3	6,420.6	0.00	0.00	0.00
12,900.0	90.49	89.26	6,342.3	492.2	6,503.3	6,520.5	0.00	0.00	0.00
13,000.0	90.49	89.26	6,341.4	493.5	6,603.3	6,620.4	0.00	0.00	0.00
13,100.0	90.49	89.26	6,340.6	494.8	6,703.3	6,720.3	0.00	0.00	0.00
13,200.0	90.49	89.26	6,339.7	496.0	6,803.3	6,820.2	0.00	0.00	0.00
13,300.0	90.49	89.26	6,338.9	497.3	6,903.3	6,920.2	0.00	0.00	0.00
13,400.0	90.49	89.26	6,338.0	498.6	7,003.3	7,020.1	0.00	0.00	0.00
13,500.0	90.49	89.26	6,337.2	499.9	7,103.2	7,120.0	0.00	0.00	0.00
13,600.0	90.49	89.26	6,336.3	501.2	7,203.2	7,219.9	0.00	0.00	0.00
13,700.0	90.49	89.26	6,335.5	502.5	7,303.2	7,319.8	0.00	0.00	0.00
13,800.0	90.49	89.26	6,334.6	503.8	7,403.2	7,419.7	0.00	0.00	0.00
13,900.0	90.49	89.26	6,333.8	505.1	7,503.2	7,519.6	0.00	0.00	0.00
14,000.0	90.49	89.26	6,332.9	506.4	7,603.2	7,619.5	0.00	0.00	0.00
14,100.0	90.49	89.26	6,332.1	507.7	7,703.2	7,719.4	0.00	0.00	0.00
14,200.0	90.49	89.26	6,331.2	509.0	7,803.2	7,819.3	0.00	0.00	0.00
14,300.0	90.49	89.26	6,330.4	510.3	7,903.1	7,919.2	0.00	0.00	0.00
14,400.0	90.49	89.26	6,329.5	511.6	8,003.1	8,019.1	0.00	0.00	0.00

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Pappenheim 6-62-27-3225BH2
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB @ 4749.0ft (Original Well Elev)
<b>Site:</b>	Pappenheim 6-62-27 W1/2 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Pappenheim 6-62-27-3225BH2	<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)	
14,500.0	90.49	89.26	6,328.7	512.9	8,103.1	8,119.1	0.00	0.00	0.00	
14,600.0	90.49	89.26	6,327.8	514.2	8,203.1	8,219.0	0.00	0.00	0.00	
14,700.0	90.49	89.26	6,327.0	515.5	8,303.1	8,318.9	0.00	0.00	0.00	
14,800.0	90.49	89.26	6,326.1	516.8	8,403.1	8,418.8	0.00	0.00	0.00	
14,900.0	90.49	89.26	6,325.3	518.1	8,503.1	8,518.7	0.00	0.00	0.00	
15,000.0	90.49	89.26	6,324.4	519.4	8,603.1	8,618.6	0.00	0.00	0.00	
15,100.0	90.49	89.26	6,323.6	520.7	8,703.0	8,718.5	0.00	0.00	0.00	
15,200.0	90.49	89.26	6,322.7	522.0	8,803.0	8,818.4	0.00	0.00	0.00	
15,300.0	90.49	89.26	6,321.9	523.3	8,903.0	8,918.3	0.00	0.00	0.00	
15,400.0	90.49	89.26	6,321.0	524.6	9,003.0	9,018.2	0.00	0.00	0.00	
15,500.0	90.49	89.26	6,320.2	525.9	9,103.0	9,118.1	0.00	0.00	0.00	
15,600.0	90.49	89.26	6,319.3	527.2	9,203.0	9,218.1	0.00	0.00	0.00	
15,700.0	90.49	89.26	6,318.5	528.5	9,303.0	9,318.0	0.00	0.00	0.00	
15,800.0	90.49	89.26	6,317.6	529.8	9,403.0	9,417.9	0.00	0.00	0.00	
15,900.0	90.49	89.26	6,316.8	531.1	9,503.0	9,517.8	0.00	0.00	0.00	
16,000.0	90.49	89.26	6,315.9	532.4	9,602.9	9,617.7	0.00	0.00	0.00	
16,100.0	90.49	89.26	6,315.1	533.7	9,702.9	9,717.6	0.00	0.00	0.00	
16,111.3	90.49	89.26	6,315.0	533.8	9,714.3	9,728.9	0.00	0.00	0.00	
P 27-3225BH2 PBHL										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,693.7	6,395.0	7" Csg	7	8-3/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
199.0	199.0	Fox Hills Base		-0.49	89.26	
4,920.4	4,900.0	Shannon		-0.49	89.26	
6,207.9	6,171.0	Sharon Springs		-0.49	89.26	
6,320.5	6,259.0	Niobrara		-0.49	89.26	
6,543.0	6,374.0	Top B2 Target		-0.49	89.26	
	6,405.0	Base B2 Target		-0.49	89.26	