

BILL BARRETT CORP

WELD COUNTY, COLORADO

CB RUDD 6-61-18_19

CB RUDD 6-61-18-0263BH2

Wellbore #1

Plan: Design #1

Standard Planning Report

04 August, 2014



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 CB RUDD 6-61-18-0263BH2, True North
Vertical (TVD) Reference: KB @ 4742.9ft (Original Well Elev)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: KB @ 4742.9ft (Original Well Elev)
Calculation Method: Minimum Curvature

WELL DETAILS: CB RUDD 6-61-18-0263BH2

+N/-S +E/-W Northing Easting Latitude Longitude
0.0 0.0 1425870.48 3345266.9140° 29' 44.812 N 104° 15' 30.650 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	1340.3	6.81	121.95	1339.5	-10.7	17.1	2.00	121.95	11.6	
4	5276.4	6.81	121.95	5247.9	-257.5	413.0	0.00	0.00	280.5	
5	5616.8	0.00	179.15	5587.4	-268.2	430.1	2.00	180.00	292.1	
6	5866.8	0.00	179.15	5837.4	-268.2	430.1	0.00	179.15	292.1	
7	6617.2	90.05	179.15	6314.9	-746.1	437.2	12.00	179.15	769.6	CBR 18-0263BH2 LP
8	16095.3	90.05	179.15	6305.9	-10223.1	578.2	0.00	0.00	10239.4	CBR 18-0263BH2 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

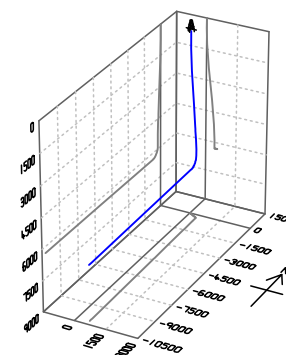
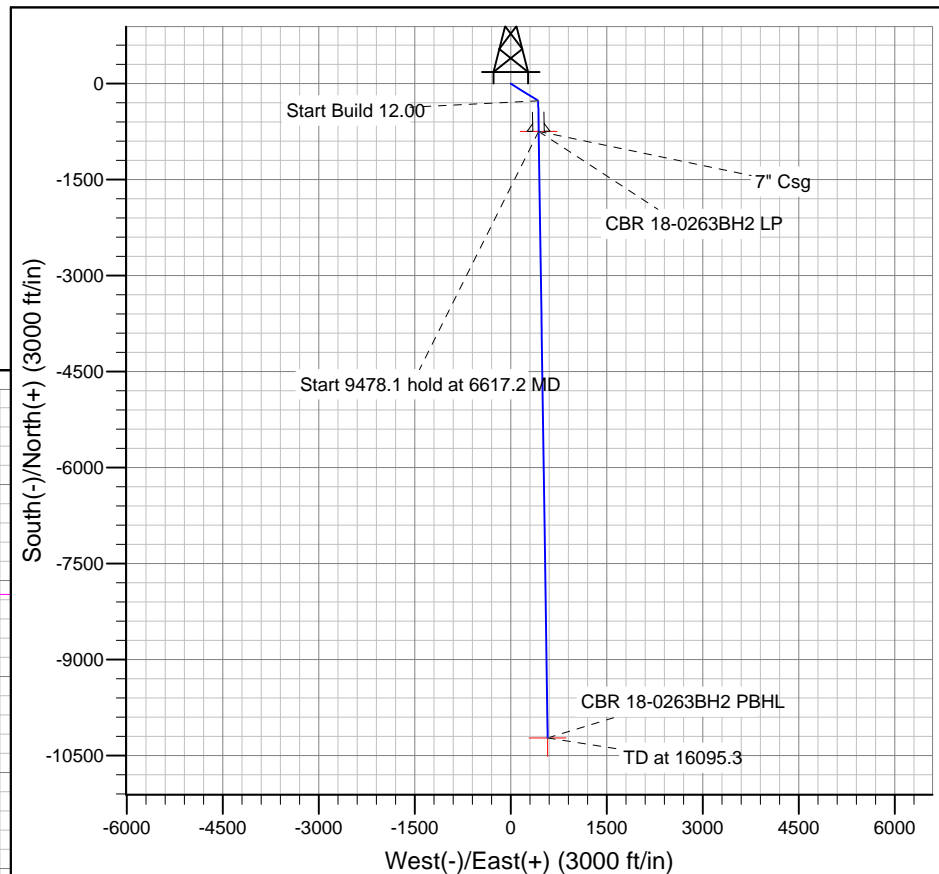
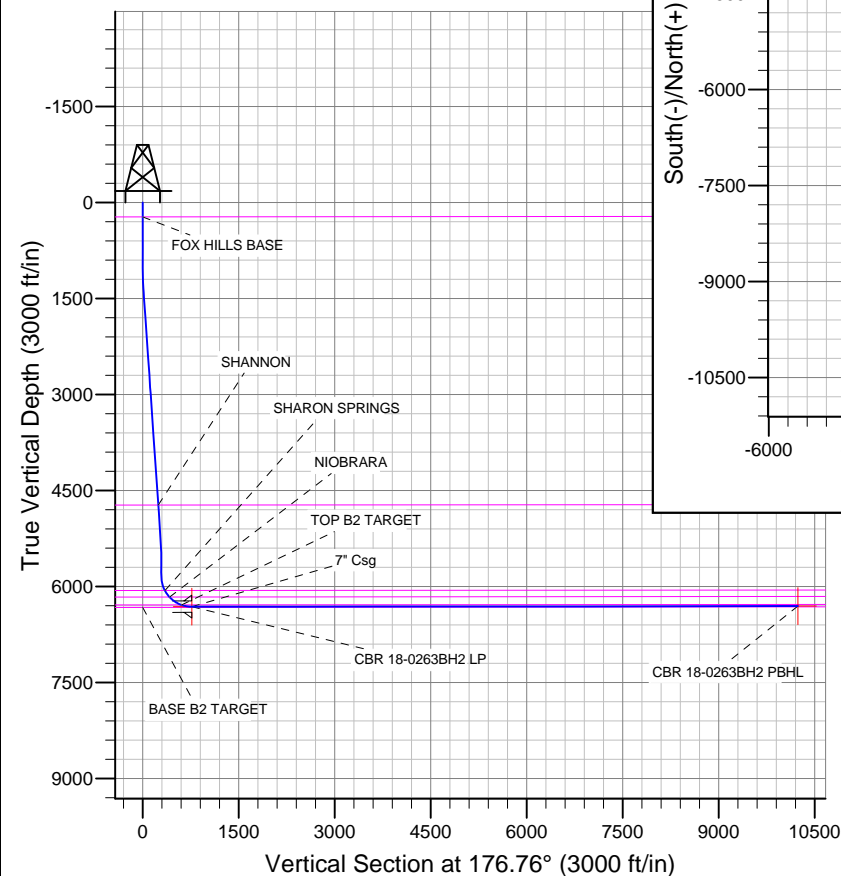
TVDPath	MDPath	Formation
222.9	222.9	BASE B2 TARGET
4727.9	4752.8	FOX HILLS BASE
6061.9	6100.5	SHANNON
6163.9	6226.3	SHARON SPRINGS
6286.9	6452.5	NIOBRARA
		TOP B2 TARGET

CASING DETAILS

TVD	MD	Name	Size
6314.9	6617.2	7" Csg	7

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
CBR 18-0263BH2 PBHL	6305.9	-10223.1	578.2	Point
CBR 18-0263BH2 LP	6314.9	-746.1	437.2	Point



Azimuths to True North
Magnetic North: 8.17°

Magnetic Field
Strength: 52903.5snT
Dip Angle: 67.10°
Date: 8/4/2014
Model: IGRF2010

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well CB RUDD 6-61-18-0263BH2
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4742.9ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4742.9ft (Original Well Elev)
Site:	CB RUDD 6-61-18_19	North Reference:	True
Well:	CB RUDD 6-61-18-0263BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	WELD COUNTY, COLORADO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		CB RUDD 6-61-18_19			
Site Position: From:	Lat/Long	Northing:	1,425,870.48 ft	Latitude:	40° 29' 44.812 N
		Easting:	3,345,266.91 ft	Longitude:	104° 15' 30.650 W
	Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:

Well		CB RUDD 6-61-18-0263BH2				
Well Position	+N-S	0.0 ft	Northing:	1,425,870.48 ft	Latitude:	40° 29' 44.812 N
	+E-W	0.0 ft	Easting:	3,345,266.91 ft	Longitude:	104° 15' 30.650 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,720.9 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/4/2014	8.17	67.10	52,903

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	176.76

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,340.3	6.81	121.95	1,339.5	-10.7	17.1	2.00	2.00	0.00	121.95	
5,276.4	6.81	121.95	5,247.9	-257.5	413.0	0.00	0.00	0.00	0.00	
5,616.8	0.00	179.15	5,587.4	-268.2	430.1	2.00	-2.00	0.00	180.00	
5,866.8	0.00	179.15	5,837.4	-268.2	430.1	0.00	0.00	0.00	179.15	
6,617.2	90.05	179.15	6,314.9	-746.1	437.2	12.00	12.00	0.00	179.15	CBR 18-0263BH2 L
16,095.3	90.05	179.15	6,305.9	-10,223.1	578.2	0.00	0.00	0.00	0.00	CBR 18-0263BH2 F

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Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well CB RUDD 6-61-18-0263BH2
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4742.9ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4742.9ft (Original Well Elev)
Site:	CB RUDD 6-61-18_19	North Reference:	True
Well:	CB RUDD 6-61-18-0263BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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
222.9	0.00	0.00	222.9	0.0	0.0	0.0	0.00	0.00	0.00
FOX HILLS BASE									
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	121.95	1,100.0	-0.9	1.5	1.0	2.00	2.00	0.00
1,200.0	4.00	121.95	1,199.8	-3.7	5.9	4.0	2.00	2.00	0.00
1,300.0	6.00	121.95	1,299.5	-8.3	13.3	9.0	2.00	2.00	0.00
1,340.3	6.81	121.95	1,339.5	-10.7	17.1	11.6	2.00	2.00	0.00
1,400.0	6.81	121.95	1,398.8	-14.4	23.1	15.7	0.00	0.00	0.00
1,500.0	6.81	121.95	1,498.1	-20.7	33.2	22.5	0.00	0.00	0.00
1,600.0	6.81	121.95	1,597.4	-27.0	43.2	29.4	0.00	0.00	0.00
1,700.0	6.81	121.95	1,696.7	-33.2	53.3	36.2	0.00	0.00	0.00
1,800.0	6.81	121.95	1,796.0	-39.5	63.4	43.0	0.00	0.00	0.00
1,900.0	6.81	121.95	1,895.3	-45.8	73.4	49.9	0.00	0.00	0.00
2,000.0	6.81	121.95	1,994.6	-52.1	83.5	56.7	0.00	0.00	0.00
2,100.0	6.81	121.95	2,093.8	-58.3	93.5	63.5	0.00	0.00	0.00
2,200.0	6.81	121.95	2,193.1	-64.6	103.6	70.3	0.00	0.00	0.00
2,300.0	6.81	121.95	2,292.4	-70.9	113.6	77.2	0.00	0.00	0.00
2,400.0	6.81	121.95	2,391.7	-77.1	123.7	84.0	0.00	0.00	0.00
2,500.0	6.81	121.95	2,491.0	-83.4	133.8	90.8	0.00	0.00	0.00
2,600.0	6.81	121.95	2,590.3	-89.7	143.8	97.7	0.00	0.00	0.00
2,700.0	6.81	121.95	2,689.6	-96.0	153.9	104.5	0.00	0.00	0.00
2,800.0	6.81	121.95	2,788.9	-102.2	163.9	111.3	0.00	0.00	0.00
2,900.0	6.81	121.95	2,888.2	-108.5	174.0	118.2	0.00	0.00	0.00
3,000.0	6.81	121.95	2,987.5	-114.8	184.0	125.0	0.00	0.00	0.00
3,100.0	6.81	121.95	3,086.8	-121.0	194.1	131.8	0.00	0.00	0.00
3,200.0	6.81	121.95	3,186.1	-127.3	204.2	138.6	0.00	0.00	0.00
3,300.0	6.81	121.95	3,285.4	-133.6	214.2	145.5	0.00	0.00	0.00
3,400.0	6.81	121.95	3,384.7	-139.9	224.3	152.3	0.00	0.00	0.00
3,500.0	6.81	121.95	3,484.0	-146.1	234.3	159.1	0.00	0.00	0.00
3,600.0	6.81	121.95	3,583.3	-152.4	244.4	166.0	0.00	0.00	0.00
3,700.0	6.81	121.95	3,682.6	-158.7	254.4	172.8	0.00	0.00	0.00
3,800.0	6.81	121.95	3,781.9	-164.9	264.5	179.6	0.00	0.00	0.00
3,900.0	6.81	121.95	3,881.2	-171.2	274.5	186.4	0.00	0.00	0.00
4,000.0	6.81	121.95	3,980.5	-177.5	284.6	193.3	0.00	0.00	0.00
4,100.0	6.81	121.95	4,079.7	-183.8	294.7	200.1	0.00	0.00	0.00
4,200.0	6.81	121.95	4,179.0	-190.0	304.7	206.9	0.00	0.00	0.00
4,300.0	6.81	121.95	4,278.3	-196.3	314.8	213.8	0.00	0.00	0.00
4,400.0	6.81	121.95	4,377.6	-202.6	324.8	220.6	0.00	0.00	0.00
4,500.0	6.81	121.95	4,476.9	-208.8	334.9	227.4	0.00	0.00	0.00
4,600.0	6.81	121.95	4,576.2	-215.1	344.9	234.3	0.00	0.00	0.00
4,700.0	6.81	121.95	4,675.5	-221.4	355.0	241.1	0.00	0.00	0.00
4,752.8	6.81	121.95	4,727.9	-224.7	360.3	244.7	0.00	0.00	0.00
SHANNON									
4,800.0	6.81	121.95	4,774.8	-227.7	365.1	247.9	0.00	0.00	0.00

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Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well CB RUDD 6-61-18-0263BH2
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4742.9ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4742.9ft (Original Well Elev)
Site:	CB RUDD 6-61-18_19	North Reference:	True
Well:	CB RUDD 6-61-18-0263BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
4,900.0	6.81	121.95	4,874.1	-233.9	375.1	254.7	0.00	0.00	0.00
5,000.0	6.81	121.95	4,973.4	-240.2	385.2	261.6	0.00	0.00	0.00
5,100.0	6.81	121.95	5,072.7	-246.5	395.2	268.4	0.00	0.00	0.00
5,200.0	6.81	121.95	5,172.0	-252.7	405.3	275.2	0.00	0.00	0.00
5,276.4	6.81	121.95	5,247.9	-257.5	413.0	280.5	0.00	0.00	0.00
5,300.0	6.34	121.95	5,271.3	-259.0	415.3	282.0	2.00	-2.00	0.00
5,400.0	4.34	121.95	5,370.9	-263.9	423.2	287.4	2.00	-2.00	0.00
5,500.0	2.34	121.95	5,470.7	-267.0	428.1	290.7	2.00	-2.00	0.00
5,600.0	0.34	121.95	5,570.7	-268.2	430.1	292.1	2.00	-2.00	0.00
5,616.8	0.00	179.15	5,587.4	-268.2	430.1	292.1	2.00	-2.00	0.00
5,700.0	0.00	179.15	5,670.7	-268.2	430.1	292.1	0.00	0.00	0.00
5,800.0	0.00	179.15	5,770.7	-268.2	430.1	292.1	0.00	0.00	0.00
5,866.8	0.00	179.15	5,837.4	-268.2	430.1	292.1	0.00	0.00	0.00
5,900.0	3.99	179.15	5,870.6	-269.4	430.1	293.2	12.00	12.00	0.00
6,000.0	15.99	179.15	5,968.9	-286.7	430.4	310.5	12.00	12.00	0.00
6,100.0	27.99	179.15	6,061.5	-324.1	430.9	347.9	12.00	12.00	0.00
6,100.5	28.04	179.15	6,061.9	-324.3	430.9	348.1	12.00	12.00	0.00
SHARON SPRINGS									
6,200.0	39.99	179.15	6,144.3	-379.8	431.8	403.6	12.00	12.00	0.00
6,226.3	43.14	179.15	6,163.9	-397.3	432.0	421.0	12.00	12.00	0.00
NIOBRARA									
6,300.0	51.99	179.15	6,213.6	-451.6	432.8	475.3	12.00	12.00	0.00
6,400.0	63.99	179.15	6,266.5	-536.3	434.1	559.9	12.00	12.00	0.00
6,452.5	70.28	179.15	6,286.9	-584.6	434.8	608.2	12.00	12.00	0.00
TOP B2 TARGET									
6,500.0	75.99	179.15	6,300.7	-630.0	435.5	653.6	12.00	12.00	0.00
6,600.0	87.99	179.15	6,314.6	-728.9	437.0	752.4	12.00	12.00	0.00
6,617.2	90.05	179.15	6,314.9	-746.1	437.2	769.6	11.98	11.98	0.00
7" Csg - CBR 18-0263BH2 LP									
6,700.0	90.05	179.15	6,314.8	-828.9	438.4	852.3	0.00	0.00	0.00
6,800.0	90.05	179.15	6,314.7	-928.8	439.9	952.2	0.00	0.00	0.00
6,900.0	90.05	179.15	6,314.6	-1,028.8	441.4	1,052.1	0.00	0.00	0.00
7,000.0	90.05	179.15	6,314.5	-1,128.8	442.9	1,152.0	0.00	0.00	0.00
7,100.0	90.05	179.15	6,314.4	-1,228.8	444.4	1,251.9	0.00	0.00	0.00
7,200.0	90.05	179.15	6,314.3	-1,328.8	445.9	1,351.9	0.00	0.00	0.00
7,300.0	90.05	179.15	6,314.3	-1,428.8	447.4	1,451.8	0.00	0.00	0.00
7,400.0	90.05	179.15	6,314.2	-1,528.8	448.9	1,551.7	0.00	0.00	0.00
7,500.0	90.05	179.15	6,314.1	-1,628.8	450.3	1,651.6	0.00	0.00	0.00
7,600.0	90.05	179.15	6,314.0	-1,728.8	451.8	1,751.5	0.00	0.00	0.00
7,700.0	90.05	179.15	6,313.9	-1,828.7	453.3	1,851.4	0.00	0.00	0.00
7,800.0	90.05	179.15	6,313.8	-1,928.7	454.8	1,951.3	0.00	0.00	0.00
7,900.0	90.05	179.15	6,313.7	-2,028.7	456.3	2,051.2	0.00	0.00	0.00
8,000.0	90.05	179.15	6,313.6	-2,128.7	457.8	2,151.2	0.00	0.00	0.00
8,100.0	90.05	179.15	6,313.5	-2,228.7	459.3	2,251.1	0.00	0.00	0.00
8,200.0	90.05	179.15	6,313.4	-2,328.7	460.8	2,351.0	0.00	0.00	0.00
8,300.0	90.05	179.15	6,313.3	-2,428.7	462.2	2,450.9	0.00	0.00	0.00
8,400.0	90.05	179.15	6,313.2	-2,528.7	463.7	2,550.8	0.00	0.00	0.00
8,500.0	90.05	179.15	6,313.1	-2,628.7	465.2	2,650.7	0.00	0.00	0.00
8,600.0	90.05	179.15	6,313.0	-2,728.6	466.7	2,750.6	0.00	0.00	0.00
8,700.0	90.05	179.15	6,312.9	-2,828.6	468.2	2,850.6	0.00	0.00	0.00
8,800.0	90.05	179.15	6,312.8	-2,928.6	469.7	2,950.5	0.00	0.00	0.00
8,900.0	90.05	179.15	6,312.7	-3,028.6	471.2	3,050.4	0.00	0.00	0.00
9,000.0	90.05	179.15	6,312.6	-3,128.6	472.6	3,150.3	0.00	0.00	0.00

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Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4742.9ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4742.9ft (Original Well Elev)
Site:	CB RUDD 6-61-18_19	North Reference:	True
Well:	CB RUDD 6-61-18-0263BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	90.05	179.15	6,312.5	-3,228.6	474.1	3,250.2	0.00	0.00	0.00
9,200.0	90.05	179.15	6,312.4	-3,328.6	475.6	3,350.1	0.00	0.00	0.00
9,300.0	90.05	179.15	6,312.4	-3,428.6	477.1	3,450.0	0.00	0.00	0.00
9,400.0	90.05	179.15	6,312.3	-3,528.6	478.6	3,549.9	0.00	0.00	0.00
9,500.0	90.05	179.15	6,312.2	-3,628.5	480.1	3,649.9	0.00	0.00	0.00
9,600.0	90.05	179.15	6,312.1	-3,728.5	481.6	3,749.8	0.00	0.00	0.00
9,700.0	90.05	179.15	6,312.0	-3,828.5	483.1	3,849.7	0.00	0.00	0.00
9,800.0	90.05	179.15	6,311.9	-3,928.5	484.5	3,949.6	0.00	0.00	0.00
9,900.0	90.05	179.15	6,311.8	-4,028.5	486.0	4,049.5	0.00	0.00	0.00
10,000.0	90.05	179.15	6,311.7	-4,128.5	487.5	4,149.4	0.00	0.00	0.00
10,100.0	90.05	179.15	6,311.6	-4,228.5	489.0	4,249.3	0.00	0.00	0.00
10,200.0	90.05	179.15	6,311.5	-4,328.5	490.5	4,349.3	0.00	0.00	0.00
10,300.0	90.05	179.15	6,311.4	-4,428.5	492.0	4,449.2	0.00	0.00	0.00
10,400.0	90.05	179.15	6,311.3	-4,528.4	493.5	4,549.1	0.00	0.00	0.00
10,500.0	90.05	179.15	6,311.2	-4,628.4	495.0	4,649.0	0.00	0.00	0.00
10,600.0	90.05	179.15	6,311.1	-4,728.4	496.4	4,748.9	0.00	0.00	0.00
10,700.0	90.05	179.15	6,311.0	-4,828.4	497.9	4,848.8	0.00	0.00	0.00
10,800.0	90.05	179.15	6,310.9	-4,928.4	499.4	4,948.7	0.00	0.00	0.00
10,900.0	90.05	179.15	6,310.8	-5,028.4	500.9	5,048.6	0.00	0.00	0.00
11,000.0	90.05	179.15	6,310.7	-5,128.4	502.4	5,148.6	0.00	0.00	0.00
11,100.0	90.05	179.15	6,310.6	-5,228.4	503.9	5,248.5	0.00	0.00	0.00
11,200.0	90.05	179.15	6,310.5	-5,328.4	505.4	5,348.4	0.00	0.00	0.00
11,300.0	90.05	179.15	6,310.5	-5,428.3	506.9	5,448.3	0.00	0.00	0.00
11,400.0	90.05	179.15	6,310.4	-5,528.3	508.3	5,548.2	0.00	0.00	0.00
11,500.0	90.05	179.15	6,310.3	-5,628.3	509.8	5,648.1	0.00	0.00	0.00
11,600.0	90.05	179.15	6,310.2	-5,728.3	511.3	5,748.0	0.00	0.00	0.00
11,700.0	90.05	179.15	6,310.1	-5,828.3	512.8	5,848.0	0.00	0.00	0.00
11,800.0	90.05	179.15	6,310.0	-5,928.3	514.3	5,947.9	0.00	0.00	0.00
11,900.0	90.05	179.15	6,309.9	-6,028.3	515.8	6,047.8	0.00	0.00	0.00
12,000.0	90.05	179.15	6,309.8	-6,128.3	517.3	6,147.7	0.00	0.00	0.00
12,100.0	90.05	179.15	6,309.7	-6,228.3	518.8	6,247.6	0.00	0.00	0.00
12,200.0	90.05	179.15	6,309.6	-6,328.2	520.2	6,347.5	0.00	0.00	0.00
12,300.0	90.05	179.15	6,309.5	-6,428.2	521.7	6,447.4	0.00	0.00	0.00
12,400.0	90.05	179.15	6,309.4	-6,528.2	523.2	6,547.3	0.00	0.00	0.00
12,500.0	90.05	179.15	6,309.3	-6,628.2	524.7	6,647.3	0.00	0.00	0.00
12,600.0	90.05	179.15	6,309.2	-6,728.2	526.2	6,747.2	0.00	0.00	0.00
12,700.0	90.05	179.15	6,309.1	-6,828.2	527.7	6,847.1	0.00	0.00	0.00
12,800.0	90.05	179.15	6,309.0	-6,928.2	529.2	6,947.0	0.00	0.00	0.00
12,900.0	90.05	179.15	6,308.9	-7,028.2	530.6	7,046.9	0.00	0.00	0.00
13,000.0	90.05	179.15	6,308.8	-7,128.2	532.1	7,146.8	0.00	0.00	0.00
13,100.0	90.05	179.15	6,308.7	-7,228.1	533.6	7,246.7	0.00	0.00	0.00
13,200.0	90.05	179.15	6,308.6	-7,328.1	535.1	7,346.7	0.00	0.00	0.00
13,300.0	90.05	179.15	6,308.6	-7,428.1	536.6	7,446.6	0.00	0.00	0.00
13,400.0	90.05	179.15	6,308.5	-7,528.1	538.1	7,546.5	0.00	0.00	0.00
13,500.0	90.05	179.15	6,308.4	-7,628.1	539.6	7,646.4	0.00	0.00	0.00
13,600.0	90.05	179.15	6,308.3	-7,728.1	541.1	7,746.3	0.00	0.00	0.00
13,700.0	90.05	179.15	6,308.2	-7,828.1	542.5	7,846.2	0.00	0.00	0.00
13,800.0	90.05	179.15	6,308.1	-7,928.1	544.0	7,946.1	0.00	0.00	0.00
13,900.0	90.05	179.15	6,308.0	-8,028.1	545.5	8,046.0	0.00	0.00	0.00
14,000.0	90.05	179.15	6,307.9	-8,128.0	547.0	8,146.0	0.00	0.00	0.00
14,100.0	90.05	179.15	6,307.8	-8,228.0	548.5	8,245.9	0.00	0.00	0.00
14,200.0	90.05	179.15	6,307.7	-8,328.0	550.0	8,345.8	0.00	0.00	0.00
14,300.0	90.05	179.15	6,307.6	-8,428.0	551.5	8,445.7	0.00	0.00	0.00
14,400.0	90.05	179.15	6,307.5	-8,528.0	553.0	8,545.6	0.00	0.00	0.00

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well CB RUDD 6-61-18-0263BH2
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4742.9ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4742.9ft (Original Well Elev)
Site:	CB RUDD 6-61-18_19	North Reference:	True
Well:	CB RUDD 6-61-18-0263BH2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	90.05	179.15	6,307.4	-8,628.0	554.4	8,645.5	0.00	0.00	0.00
14,600.0	90.05	179.15	6,307.3	-8,728.0	555.9	8,745.4	0.00	0.00	0.00
14,700.0	90.05	179.15	6,307.2	-8,828.0	557.4	8,845.4	0.00	0.00	0.00
14,800.0	90.05	179.15	6,307.1	-8,928.0	558.9	8,945.3	0.00	0.00	0.00
14,900.0	90.05	179.15	6,307.0	-9,027.9	560.4	9,045.2	0.00	0.00	0.00
15,000.0	90.05	179.15	6,306.9	-9,127.9	561.9	9,145.1	0.00	0.00	0.00
15,100.0	90.05	179.15	6,306.8	-9,227.9	563.4	9,245.0	0.00	0.00	0.00
15,200.0	90.05	179.15	6,306.8	-9,327.9	564.9	9,344.9	0.00	0.00	0.00
15,300.0	90.05	179.15	6,306.7	-9,427.9	566.3	9,444.8	0.00	0.00	0.00
15,400.0	90.05	179.15	6,306.6	-9,527.9	567.8	9,544.7	0.00	0.00	0.00
15,500.0	90.05	179.15	6,306.5	-9,627.9	569.3	9,644.7	0.00	0.00	0.00
15,600.0	90.05	179.15	6,306.4	-9,727.9	570.8	9,744.6	0.00	0.00	0.00
15,700.0	90.05	179.15	6,306.3	-9,827.9	572.3	9,844.5	0.00	0.00	0.00
15,800.0	90.05	179.15	6,306.2	-9,927.8	573.8	9,944.4	0.00	0.00	0.00
15,900.0	90.05	179.15	6,306.1	-10,027.8	575.3	10,044.3	0.00	0.00	0.00
16,000.0	90.05	179.15	6,306.0	-10,127.8	576.8	10,144.2	0.00	0.00	0.00
16,095.3	90.05	179.15	6,305.9	-10,223.1	578.2	10,239.4	0.00	0.00	0.00
CBR 18-0263BH2 PBHL									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,617.2	6,314.9	7" Csg	7	8-3/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
222.9	222.9	FOX HILLS BASE		-0.05	179.15
4,752.8	4,727.9	SHANNON		-0.05	179.15
6,100.5	6,061.9	SHARON SPRINGS		-0.05	179.15
6,226.3	6,163.9	NIOBRARA		-0.05	179.15
6,452.5	6,286.9	TOP B2 TARGET		-0.05	179.15
	6,324.9	BASE B2 TARGET		-0.05	179.15