

BILL BARRETT CORP

WELD COUNTY, COLORADO

Ruh 6-62-11_14 NWNE Pad

Ruh 6-62-11-0560CH

Wellbore #1

Plan: Design #1

Standard Planning Report

26 March, 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 Ruh 6-62-11-0560CH, True North
Vertical (TVD) Reference: KB @ 4770.0ft (Original Well Elev)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: KB @ 4770.0ft (Original Well Elev)
Calculation Method: Minimum Curvature

WELL DETAILS: Ruh 6-62-11-0560CH

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1430278.63	3337424.14	40° 30' 29.441 N	104° 17' 11.378 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	1426.0	8.52	291.78	1424.4	11.7	-29.4	2.00	291.78	-9.6	
4	5380.3	8.52	291.78	5335.1	229.2	-573.4	0.00	0.00	-188.2	
5	5806.3	0.00	180.45	5759.5	240.9	-602.7	2.00	180.00	-197.9	
6	6056.3	0.00	180.45	6009.5	240.9	-602.7	0.00	180.45	-197.9	
7	6807.6	90.16	180.45	6487.0	-237.9	-606.5	12.00	180.45	280.0	R 11-0560CH LP
8	16212.1	90.16	180.45	6461.0	-9642.1	-680.1	0.00	0.00	9666.0	R 11-0560CH 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

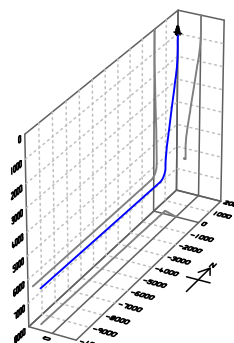
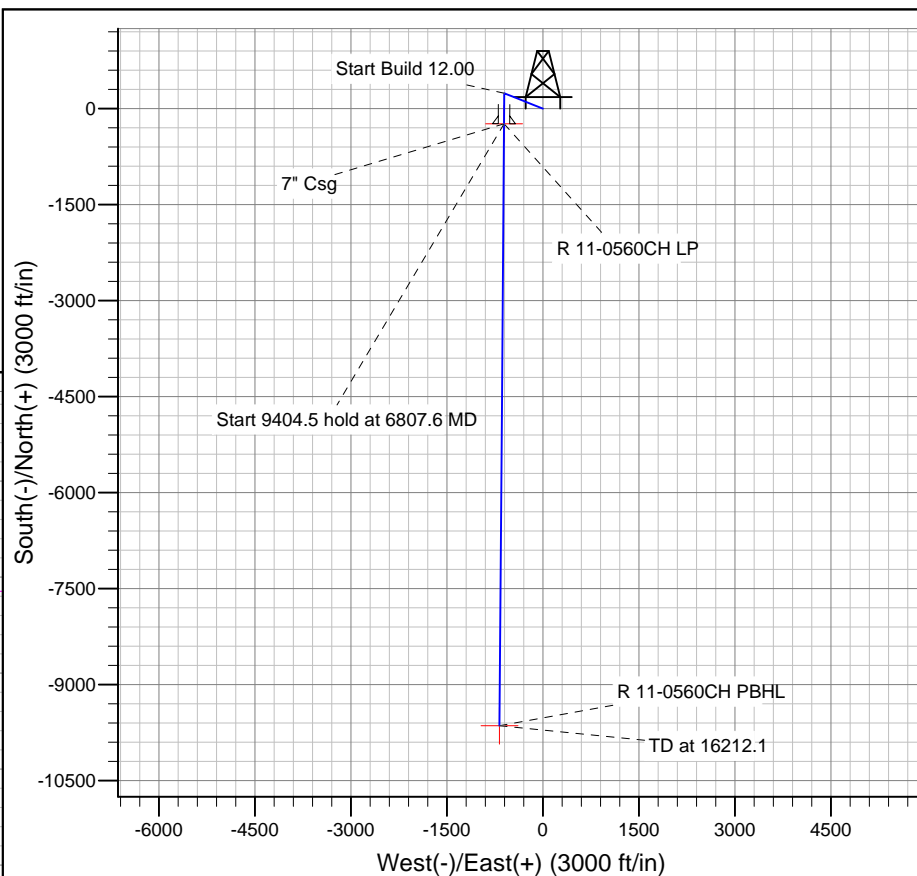
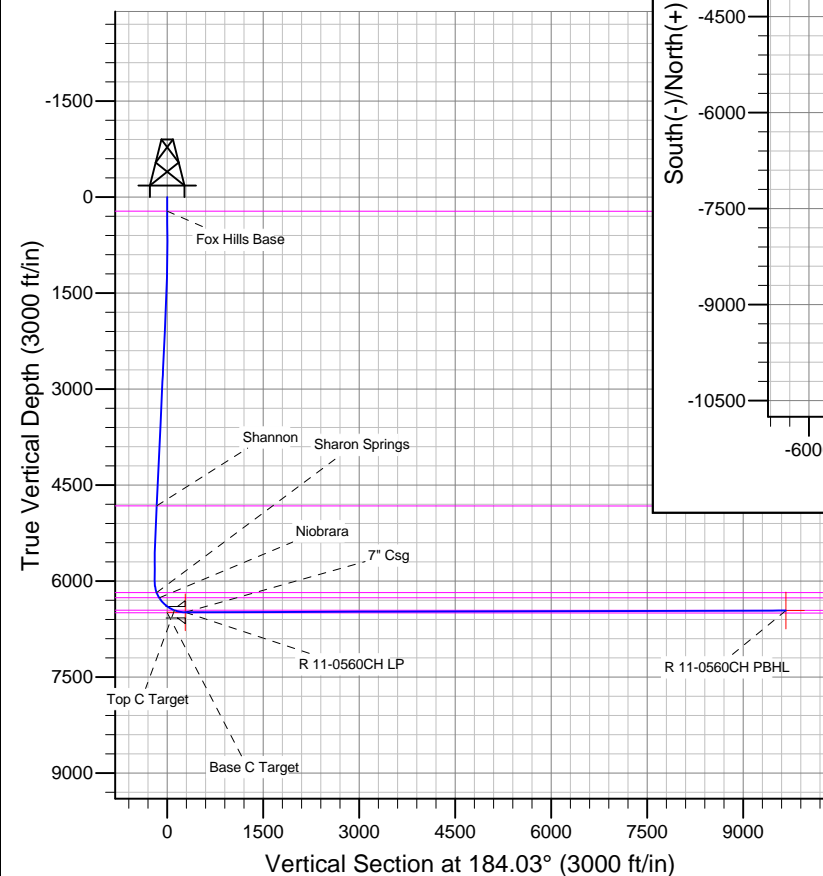
TVDPath	MDPath	Formation
220.0	220.0	Base C Target
4826.4	4865.9	Fox Hills Base
6181.7	6232.4	Shannon
6261.7	6322.0	Sharon Springs
6455.7	6632.4	Niobrara
		Top C Target

CASING DETAILS

TVD	MD	Name	Size
6487.0	6807.6	7" Csg	7

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
R 11-0560CH PBHL	6461.0	-9642.1	-680.1	Point
R 11-0560CH LP	6487.0	-237.9	-606.5	Point



Azimuths to True North
Magnetic North: 8.24°

Magnetic Field
Strength: 52944.9snT
Dip Angle: 67.12°
Date: 3/26/2014
Model: IGRF2010

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Ruh 6-62-11-0560CH
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4770.0ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4770.0ft (Original Well Elev)
Site:	Ruh 6-62-11_14 NWNE Pad	North Reference:	True
Well:	Ruh 6-62-11-0560CH	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		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 6-62-11-0560CH					
Well Position	+N-S	0.0 ft	Northing:	1,430,278.63 ft	Latitude:	40° 30' 29.441 N
	+E-W	0.0 ft	Easting:	3,337,424.14 ft	Longitude:	104° 17' 11.378 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,747.0ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/26/2014	8.24	67.12	52,945

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	184.03	

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	
1,426.0	8.52	291.78	1,424.4	11.7	-29.4	2.00	2.00	0.00	291.78	
5,380.3	8.52	291.78	5,335.1	229.2	-573.4	0.00	0.00	0.00	0.00	
5,806.3	0.00	180.45	5,759.5	240.9	-602.7	2.00	-2.00	0.00	180.00	
6,056.3	0.00	180.45	6,009.5	240.9	-602.7	0.00	0.00	0.00	180.45	
6,807.6	90.16	180.45	6,487.0	-237.9	-606.5	12.00	12.00	0.00	180.45	R 11-0560CH LP
16,212.1	90.16	180.45	6,461.0	-9,642.1	-680.1	0.00	0.00	0.00	0.00	R 11-0560CH PBHI

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Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Ruh 6-62-11-0560CH
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4770.0ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4770.0ft (Original Well Elev)
Site:	Ruh 6-62-11_14 NWNE Pad	North Reference:	True
Well:	Ruh 6-62-11-0560CH	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
220.0	0.00	0.00	220.0	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	291.78	1,100.0	0.6	-1.6	-0.5	2.00	2.00	0.00
1,200.0	4.00	291.78	1,199.8	2.6	-6.5	-2.1	2.00	2.00	0.00
1,300.0	6.00	291.78	1,299.5	5.8	-14.6	-4.8	2.00	2.00	0.00
1,400.0	8.00	291.78	1,398.7	10.3	-25.9	-8.5	2.00	2.00	0.00
1,426.0	8.52	291.78	1,424.4	11.7	-29.4	-9.6	2.00	2.00	0.00
1,500.0	8.52	291.78	1,497.6	15.8	-39.5	-13.0	0.00	0.00	0.00
1,600.0	8.52	291.78	1,596.5	21.3	-53.3	-17.5	0.00	0.00	0.00
1,700.0	8.52	291.78	1,695.4	26.8	-67.1	-22.0	0.00	0.00	0.00
1,800.0	8.52	291.78	1,794.3	32.3	-80.8	-26.5	0.00	0.00	0.00
1,900.0	8.52	291.78	1,893.2	37.8	-94.6	-31.0	0.00	0.00	0.00
2,000.0	8.52	291.78	1,992.1	43.3	-108.3	-35.6	0.00	0.00	0.00
2,100.0	8.52	291.78	2,091.0	48.8	-122.1	-40.1	0.00	0.00	0.00
2,200.0	8.52	291.78	2,189.9	54.3	-135.8	-44.6	0.00	0.00	0.00
2,300.0	8.52	291.78	2,288.8	59.8	-149.6	-49.1	0.00	0.00	0.00
2,400.0	8.52	291.78	2,387.7	65.3	-163.4	-53.6	0.00	0.00	0.00
2,500.0	8.52	291.78	2,486.6	70.8	-177.1	-58.1	0.00	0.00	0.00
2,600.0	8.52	291.78	2,585.5	76.3	-190.9	-62.7	0.00	0.00	0.00
2,700.0	8.52	291.78	2,684.4	81.8	-204.6	-67.2	0.00	0.00	0.00
2,800.0	8.52	291.78	2,783.3	87.3	-218.4	-71.7	0.00	0.00	0.00
2,900.0	8.52	291.78	2,882.2	92.8	-232.1	-76.2	0.00	0.00	0.00
3,000.0	8.52	291.78	2,981.1	98.3	-245.9	-80.7	0.00	0.00	0.00
3,100.0	8.52	291.78	3,080.0	103.8	-259.7	-85.2	0.00	0.00	0.00
3,200.0	8.52	291.78	3,178.9	109.3	-273.4	-89.8	0.00	0.00	0.00
3,300.0	8.52	291.78	3,277.8	114.8	-287.2	-94.3	0.00	0.00	0.00
3,400.0	8.52	291.78	3,376.6	120.3	-300.9	-98.8	0.00	0.00	0.00
3,500.0	8.52	291.78	3,475.5	125.8	-314.7	-103.3	0.00	0.00	0.00
3,600.0	8.52	291.78	3,574.4	131.3	-328.4	-107.8	0.00	0.00	0.00
3,700.0	8.52	291.78	3,673.3	136.8	-342.2	-112.3	0.00	0.00	0.00
3,800.0	8.52	291.78	3,772.2	142.3	-356.0	-116.9	0.00	0.00	0.00
3,900.0	8.52	291.78	3,871.1	147.8	-369.7	-121.4	0.00	0.00	0.00
4,000.0	8.52	291.78	3,970.0	153.3	-383.5	-125.9	0.00	0.00	0.00
4,100.0	8.52	291.78	4,068.9	158.8	-397.2	-130.4	0.00	0.00	0.00
4,200.0	8.52	291.78	4,167.8	164.3	-411.0	-134.9	0.00	0.00	0.00
4,300.0	8.52	291.78	4,266.7	169.8	-424.7	-139.4	0.00	0.00	0.00
4,400.0	8.52	291.78	4,365.6	175.3	-438.5	-144.0	0.00	0.00	0.00
4,500.0	8.52	291.78	4,464.5	180.8	-452.3	-148.5	0.00	0.00	0.00
4,600.0	8.52	291.78	4,563.4	186.2	-466.0	-153.0	0.00	0.00	0.00
4,700.0	8.52	291.78	4,662.3	191.7	-479.8	-157.5	0.00	0.00	0.00
4,800.0	8.52	291.78	4,761.2	197.2	-493.5	-162.0	0.00	0.00	0.00
4,865.9	8.52	291.78	4,826.4	200.9	-502.6	-165.0	0.00	0.00	0.00
Shannon									

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Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Ruh 6-62-11-0560CH
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4770.0ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4770.0ft (Original Well Elev)
Site:	Ruh 6-62-11_14 NWNE Pad	North Reference:	True
Well:	Ruh 6-62-11-0560CH	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	8.52	291.78	4,860.1	202.7	-507.3	-166.5	0.00	0.00	0.00
5,000.0	8.52	291.78	4,959.0	208.2	-521.0	-171.1	0.00	0.00	0.00
5,100.0	8.52	291.78	5,057.9	213.7	-534.8	-175.6	0.00	0.00	0.00
5,200.0	8.52	291.78	5,156.8	219.2	-548.6	-180.1	0.00	0.00	0.00
5,300.0	8.52	291.78	5,255.7	224.7	-562.3	-184.6	0.00	0.00	0.00
5,380.3	8.52	291.78	5,335.1	229.2	-573.4	-188.2	0.00	0.00	0.00
5,400.0	8.13	291.78	5,354.6	230.2	-576.0	-189.1	2.00	-2.00	0.00
5,500.0	6.13	291.78	5,453.8	234.8	-587.5	-192.9	2.00	-2.00	0.00
5,600.0	4.13	291.78	5,553.4	238.1	-595.8	-195.6	2.00	-2.00	0.00
5,700.0	2.13	291.78	5,653.2	240.2	-600.9	-197.3	2.00	-2.00	0.00
5,800.0	0.13	291.78	5,753.2	240.9	-602.7	-197.9	2.00	-2.00	0.00
5,806.3	0.00	180.45	5,759.5	240.9	-602.7	-197.9	2.00	-2.00	0.00
5,900.0	0.00	180.45	5,853.2	240.9	-602.7	-197.9	0.00	0.00	0.00
6,000.0	0.00	180.45	5,953.2	240.9	-602.7	-197.9	0.00	0.00	0.00
6,056.3	0.00	180.45	6,009.5	240.9	-602.7	-197.9	0.00	0.00	0.00
6,100.0	5.24	180.45	6,053.2	238.9	-602.7	-195.9	12.00	12.00	0.00
6,200.0	17.24	180.45	6,151.1	219.4	-602.9	-176.5	12.00	12.00	0.00
6,232.4	21.13	180.45	6,181.7	208.8	-603.0	-165.8	12.00	12.00	0.00
Sharon Springs									
6,300.0	29.24	180.45	6,242.8	180.0	-603.2	-137.2	12.00	12.00	0.00
6,322.0	31.88	180.45	6,261.7	168.9	-603.3	-126.0	12.00	12.00	0.00
Niobrara									
6,400.0	41.24	180.45	6,324.3	122.4	-603.6	-79.7	12.00	12.00	0.00
6,500.0	53.24	180.45	6,392.1	49.2	-604.2	-6.5	12.00	12.00	0.00
6,600.0	65.24	180.45	6,443.1	-36.6	-604.9	79.1	12.00	12.00	0.00
6,632.4	69.13	180.45	6,455.7	-66.5	-605.1	108.9	12.00	12.00	0.00
Top C Target									
6,700.0	77.24	180.45	6,475.2	-131.1	-605.6	173.4	12.00	12.00	0.00
6,800.0	89.24	180.45	6,487.0	-230.3	-606.4	272.3	12.00	12.00	0.00
6,807.6	90.15	180.45	6,487.0	-237.9	-606.5	280.0	11.95	11.95	0.00
7" Csg - R 11-0560CH LP									
6,900.0	90.16	180.45	6,486.7	-330.2	-607.2	372.2	0.00	0.00	0.00
7,000.0	90.16	180.45	6,486.5	-430.2	-608.0	472.0	0.00	0.00	0.00
7,100.0	90.16	180.45	6,486.2	-530.2	-608.8	571.8	0.00	0.00	0.00
7,200.0	90.16	180.45	6,485.9	-630.2	-609.5	671.6	0.00	0.00	0.00
7,300.0	90.16	180.45	6,485.6	-730.2	-610.3	771.4	0.00	0.00	0.00
7,400.0	90.16	180.45	6,485.4	-830.2	-611.1	871.2	0.00	0.00	0.00
7,500.0	90.16	180.45	6,485.1	-930.2	-611.9	971.0	0.00	0.00	0.00
7,600.0	90.16	180.45	6,484.8	-1,030.2	-612.7	1,070.8	0.00	0.00	0.00
7,700.0	90.16	180.45	6,484.5	-1,130.2	-613.5	1,170.6	0.00	0.00	0.00
7,800.0	90.16	180.45	6,484.3	-1,230.2	-614.2	1,270.4	0.00	0.00	0.00
7,900.0	90.16	180.45	6,484.0	-1,330.2	-615.0	1,370.2	0.00	0.00	0.00
8,000.0	90.16	180.45	6,483.7	-1,430.2	-615.8	1,470.0	0.00	0.00	0.00
8,100.0	90.16	180.45	6,483.4	-1,530.2	-616.6	1,569.8	0.00	0.00	0.00
8,200.0	90.16	180.45	6,483.2	-1,630.2	-617.4	1,669.6	0.00	0.00	0.00
8,300.0	90.16	180.45	6,482.9	-1,730.2	-618.2	1,769.4	0.00	0.00	0.00
8,400.0	90.16	180.45	6,482.6	-1,830.2	-618.9	1,869.2	0.00	0.00	0.00
8,500.0	90.16	180.45	6,482.3	-1,930.2	-619.7	1,969.0	0.00	0.00	0.00
8,600.0	90.16	180.45	6,482.0	-2,030.2	-620.5	2,068.8	0.00	0.00	0.00
8,700.0	90.16	180.45	6,481.8	-2,130.2	-621.3	2,168.6	0.00	0.00	0.00
8,800.0	90.16	180.45	6,481.5	-2,230.2	-622.1	2,268.4	0.00	0.00	0.00
8,900.0	90.16	180.45	6,481.2	-2,330.2	-622.9	2,368.2	0.00	0.00	0.00
9,000.0	90.16	180.45	6,480.9	-2,430.2	-623.6	2,468.0	0.00	0.00	0.00

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Ruh 6-62-11-0560CH
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4770.0ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4770.0ft (Original Well Elev)
Site:	Ruh 6-62-11_14 NWNE Pad	North Reference:	True
Well:	Ruh 6-62-11-0560CH	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	90.16	180.45	6,480.7	-2,530.2	-624.4	2,567.8	0.00	0.00	0.00
9,200.0	90.16	180.45	6,480.4	-2,630.2	-625.2	2,667.6	0.00	0.00	0.00
9,300.0	90.16	180.45	6,480.1	-2,730.2	-626.0	2,767.4	0.00	0.00	0.00
9,400.0	90.16	180.45	6,479.8	-2,830.2	-626.8	2,867.2	0.00	0.00	0.00
9,500.0	90.16	180.45	6,479.6	-2,930.2	-627.6	2,967.1	0.00	0.00	0.00
9,600.0	90.16	180.45	6,479.3	-3,030.2	-628.3	3,066.9	0.00	0.00	0.00
9,700.0	90.16	180.45	6,479.0	-3,130.2	-629.1	3,166.7	0.00	0.00	0.00
9,800.0	90.16	180.45	6,478.7	-3,230.1	-629.9	3,266.5	0.00	0.00	0.00
9,900.0	90.16	180.45	6,478.5	-3,330.1	-630.7	3,366.3	0.00	0.00	0.00
10,000.0	90.16	180.45	6,478.2	-3,430.1	-631.5	3,466.1	0.00	0.00	0.00
10,100.0	90.16	180.45	6,477.9	-3,530.1	-632.2	3,565.9	0.00	0.00	0.00
10,200.0	90.16	180.45	6,477.6	-3,630.1	-633.0	3,665.7	0.00	0.00	0.00
10,300.0	90.16	180.45	6,477.3	-3,730.1	-633.8	3,765.5	0.00	0.00	0.00
10,400.0	90.16	180.45	6,477.1	-3,830.1	-634.6	3,865.3	0.00	0.00	0.00
10,500.0	90.16	180.45	6,476.8	-3,930.1	-635.4	3,965.1	0.00	0.00	0.00
10,600.0	90.16	180.45	6,476.5	-4,030.1	-636.2	4,064.9	0.00	0.00	0.00
10,700.0	90.16	180.45	6,476.2	-4,130.1	-636.9	4,164.7	0.00	0.00	0.00
10,800.0	90.16	180.45	6,476.0	-4,230.1	-637.7	4,264.5	0.00	0.00	0.00
10,900.0	90.16	180.45	6,475.7	-4,330.1	-638.5	4,364.3	0.00	0.00	0.00
11,000.0	90.16	180.45	6,475.4	-4,430.1	-639.3	4,464.1	0.00	0.00	0.00
11,100.0	90.16	180.45	6,475.1	-4,530.1	-640.1	4,563.9	0.00	0.00	0.00
11,200.0	90.16	180.45	6,474.9	-4,630.1	-640.9	4,663.7	0.00	0.00	0.00
11,300.0	90.16	180.45	6,474.6	-4,730.1	-641.6	4,763.5	0.00	0.00	0.00
11,400.0	90.16	180.45	6,474.3	-4,830.1	-642.4	4,863.3	0.00	0.00	0.00
11,500.0	90.16	180.45	6,474.0	-4,930.1	-643.2	4,963.1	0.00	0.00	0.00
11,600.0	90.16	180.45	6,473.8	-5,030.1	-644.0	5,062.9	0.00	0.00	0.00
11,700.0	90.16	180.45	6,473.5	-5,130.1	-644.8	5,162.7	0.00	0.00	0.00
11,800.0	90.16	180.45	6,473.2	-5,230.1	-645.6	5,262.5	0.00	0.00	0.00
11,900.0	90.16	180.45	6,472.9	-5,330.1	-646.3	5,362.3	0.00	0.00	0.00
12,000.0	90.16	180.45	6,472.6	-5,430.1	-647.1	5,462.1	0.00	0.00	0.00
12,100.0	90.16	180.45	6,472.4	-5,530.1	-647.9	5,562.0	0.00	0.00	0.00
12,200.0	90.16	180.45	6,472.1	-5,630.1	-648.7	5,661.8	0.00	0.00	0.00
12,300.0	90.16	180.45	6,471.8	-5,730.1	-649.5	5,761.6	0.00	0.00	0.00
12,400.0	90.16	180.45	6,471.5	-5,830.1	-650.3	5,861.4	0.00	0.00	0.00
12,500.0	90.16	180.45	6,471.3	-5,930.1	-651.0	5,961.2	0.00	0.00	0.00
12,600.0	90.16	180.45	6,471.0	-6,030.1	-651.8	6,061.0	0.00	0.00	0.00
12,700.0	90.16	180.45	6,470.7	-6,130.0	-652.6	6,160.8	0.00	0.00	0.00
12,800.0	90.16	180.45	6,470.4	-6,230.0	-653.4	6,260.6	0.00	0.00	0.00
12,900.0	90.16	180.45	6,470.2	-6,330.0	-654.2	6,360.4	0.00	0.00	0.00
13,000.0	90.16	180.45	6,469.9	-6,430.0	-655.0	6,460.2	0.00	0.00	0.00
13,100.0	90.16	180.45	6,469.6	-6,530.0	-655.7	6,560.0	0.00	0.00	0.00
13,200.0	90.16	180.45	6,469.3	-6,630.0	-656.5	6,659.8	0.00	0.00	0.00
13,300.0	90.16	180.45	6,469.1	-6,730.0	-657.3	6,759.6	0.00	0.00	0.00
13,400.0	90.16	180.45	6,468.8	-6,830.0	-658.1	6,859.4	0.00	0.00	0.00
13,500.0	90.16	180.45	6,468.5	-6,930.0	-658.9	6,959.2	0.00	0.00	0.00
13,600.0	90.16	180.45	6,468.2	-7,030.0	-659.7	7,059.0	0.00	0.00	0.00
13,700.0	90.16	180.45	6,467.9	-7,130.0	-660.4	7,158.8	0.00	0.00	0.00
13,800.0	90.16	180.45	6,467.7	-7,230.0	-661.2	7,258.6	0.00	0.00	0.00
13,900.0	90.16	180.45	6,467.4	-7,330.0	-662.0	7,358.4	0.00	0.00	0.00
14,000.0	90.16	180.45	6,467.1	-7,430.0	-662.8	7,458.2	0.00	0.00	0.00
14,100.0	90.16	180.45	6,466.8	-7,530.0	-663.6	7,558.0	0.00	0.00	0.00
14,200.0	90.16	180.45	6,466.6	-7,630.0	-664.4	7,657.8	0.00	0.00	0.00
14,300.0	90.16	180.45	6,466.3	-7,730.0	-665.1	7,757.6	0.00	0.00	0.00
14,400.0	90.16	180.45	6,466.0	-7,830.0	-665.9	7,857.4	0.00	0.00	0.00

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Ruh 6-62-11-0560CH
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4770.0ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4770.0ft (Original Well Elev)
Site:	Ruh 6-62-11_14 NWNE Pad	North Reference:	True
Well:	Ruh 6-62-11-0560CH	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	90.16	180.45	6,465.7	-7,930.0	-666.7	7,957.2	0.00	0.00	0.00
14,600.0	90.16	180.45	6,465.5	-8,030.0	-667.5	8,057.0	0.00	0.00	0.00
14,700.0	90.16	180.45	6,465.2	-8,130.0	-668.3	8,156.9	0.00	0.00	0.00
14,800.0	90.16	180.45	6,464.9	-8,230.0	-669.1	8,256.7	0.00	0.00	0.00
14,900.0	90.16	180.45	6,464.6	-8,330.0	-669.8	8,356.5	0.00	0.00	0.00
15,000.0	90.16	180.45	6,464.4	-8,430.0	-670.6	8,456.3	0.00	0.00	0.00
15,100.0	90.16	180.45	6,464.1	-8,530.0	-671.4	8,556.1	0.00	0.00	0.00
15,200.0	90.16	180.45	6,463.8	-8,630.0	-672.2	8,655.9	0.00	0.00	0.00
15,300.0	90.16	180.45	6,463.5	-8,730.0	-673.0	8,755.7	0.00	0.00	0.00
15,400.0	90.16	180.45	6,463.2	-8,830.0	-673.7	8,855.5	0.00	0.00	0.00
15,500.0	90.16	180.45	6,463.0	-8,930.0	-674.5	8,955.3	0.00	0.00	0.00
15,600.0	90.16	180.45	6,462.7	-9,029.9	-675.3	9,055.1	0.00	0.00	0.00
15,700.0	90.16	180.45	6,462.4	-9,129.9	-676.1	9,154.9	0.00	0.00	0.00
15,800.0	90.16	180.45	6,462.1	-9,229.9	-676.9	9,254.7	0.00	0.00	0.00
15,900.0	90.16	180.45	6,461.9	-9,329.9	-677.7	9,354.5	0.00	0.00	0.00
16,000.0	90.16	180.45	6,461.6	-9,429.9	-678.4	9,454.3	0.00	0.00	0.00
16,100.0	90.16	180.45	6,461.3	-9,529.9	-679.2	9,554.1	0.00	0.00	0.00
16,200.0	90.16	180.45	6,461.0	-9,629.9	-680.0	9,653.9	0.00	0.00	0.00
16,212.1	90.16	180.45	6,461.0	-9,642.1	-680.1	9,666.0	0.00	0.00	0.00
R 11-0560CH PBHL									

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,807.6	6,487.0	7" Csg	7	8-3/4

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
220.0	220.0	Fox Hills Base		-0.16	90.16
4,865.9	4,825.0	Shannon		-0.16	90.16
6,232.4	6,180.0	Sharon Springs		-0.16	90.16
6,322.0	6,260.0	Niobrara		-0.16	90.16
6,632.4	6,454.0	Top C Target		-0.16	90.16
	6,497.0	Base C Target		-0.16	90.16