

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**MDP #13**

**Federal 32B-20-691**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**15 April, 2010**

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Federal 32B-20-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6453.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6453.00ft (Original Well Elev)
<b>Site:</b>	MDP #13	<b>North Reference:</b>	True
<b>Well:</b>	Federal 32B-20-691	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	GARFIELD COUNTY, COLORADO NAD 1983		
<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 Central Zone		

<b>Site</b>	MDP #13		
<b>Site Position:</b>		<b>Northing:</b>	1,618,522.157 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,414,645.051 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 30' 47.770 N
		<b>Longitude:</b>	107° 34' 29.7900 W
		<b>Grid Convergence:</b>	-1.31 °

<b>Well</b>	Federal 32B-20-691		
<b>Well Position</b>	<b>+N/-S</b>	18.20 ft	<b>Northing:</b>
	<b>+E/-W</b>	-7.05 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<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>
	BGGM2007	4/15/2010	10.37	65.85	52,404

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	335.56

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
775.00	0.00	0.00	775.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,172.83	9.95	335.56	1,170.84	31.36	-14.25	2.50	2.50	0.00	335.56	
4,051.53	9.95	335.56	4,006.27	484.00	-219.97	0.00	0.00	0.00	0.00	
4,714.58	0.00	0.00	4,666.00	536.26	-243.73	1.50	-1.50	0.00	180.00	
7,714.58	0.00	0.00	7,666.00	536.26	-243.73	0.00	0.00	0.00	0.00	Federal 32B-20-691

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Federal 32B-20-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6453.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6453.00ft (Original Well Elev)
<b>Site:</b>	MDP #13	<b>North Reference:</b>	True
<b>Well:</b>	Federal 32B-20-691	<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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
775.00	0.00	0.00	775.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
800.00	0.62	335.56	800.00	0.12	-0.06	0.14	2.50	2.50	0.00
900.00	3.12	335.56	899.94	3.10	-1.41	3.41	2.50	2.50	0.00
1,000.00	5.62	335.56	999.64	10.05	-4.57	11.04	2.50	2.50	0.00
1,100.00	8.12	335.56	1,098.91	20.94	-9.52	23.01	2.50	2.50	0.00
1,172.83	9.95	335.56	1,170.84	31.36	-14.25	34.44	2.50	2.50	0.00
1,200.00	9.95	335.56	1,197.60	35.63	-16.19	39.13	0.00	0.00	0.00
1,300.00	9.95	335.56	1,296.09	51.35	-23.34	56.41	0.00	0.00	0.00
1,400.00	9.95	335.56	1,394.59	67.08	-30.49	73.68	0.00	0.00	0.00
1,500.00	9.95	335.56	1,493.09	82.80	-37.63	90.95	0.00	0.00	0.00
1,600.00	9.95	335.56	1,591.59	98.52	-44.78	108.22	0.00	0.00	0.00
1,700.00	9.95	335.56	1,690.08	114.25	-51.92	125.49	0.00	0.00	0.00
1,800.00	9.95	335.56	1,788.58	129.97	-59.07	142.76	0.00	0.00	0.00
1,900.00	9.95	335.56	1,887.08	145.69	-66.22	160.04	0.00	0.00	0.00
2,000.00	9.95	335.56	1,985.57	161.42	-73.36	177.31	0.00	0.00	0.00
2,100.00	9.95	335.56	2,084.07	177.14	-80.51	194.58	0.00	0.00	0.00
2,200.00	9.95	335.56	2,182.57	192.87	-87.66	211.85	0.00	0.00	0.00
2,300.00	9.95	335.56	2,281.07	208.59	-94.80	229.12	0.00	0.00	0.00
2,400.00	9.95	335.56	2,379.56	224.31	-101.95	246.39	0.00	0.00	0.00
2,500.00	9.95	335.56	2,478.06	240.04	-109.10	263.67	0.00	0.00	0.00
2,600.00	9.95	335.56	2,576.56	255.76	-116.24	280.94	0.00	0.00	0.00
2,700.00	9.95	335.56	2,675.05	271.48	-123.39	298.21	0.00	0.00	0.00
2,800.00	9.95	335.56	2,773.55	287.21	-130.53	315.48	0.00	0.00	0.00
2,900.00	9.95	335.56	2,872.05	302.93	-137.68	332.75	0.00	0.00	0.00
3,000.00	9.95	335.56	2,970.55	318.66	-144.83	350.02	0.00	0.00	0.00
3,100.00	9.95	335.56	3,069.04	334.38	-151.97	367.30	0.00	0.00	0.00
3,200.00	9.95	335.56	3,167.54	350.10	-159.12	384.57	0.00	0.00	0.00
3,300.00	9.95	335.56	3,266.04	365.83	-166.27	401.84	0.00	0.00	0.00
3,400.00	9.95	335.56	3,364.53	381.55	-173.41	419.11	0.00	0.00	0.00
3,500.00	9.95	335.56	3,463.03	397.27	-180.56	436.38	0.00	0.00	0.00
3,600.00	9.95	335.56	3,561.53	413.00	-187.71	453.65	0.00	0.00	0.00
3,700.00	9.95	335.56	3,660.03	428.72	-194.85	470.92	0.00	0.00	0.00
3,800.00	9.95	335.56	3,758.52	444.45	-202.00	488.20	0.00	0.00	0.00
3,838.05	9.95	335.56	3,796.00	450.43	-204.72	494.77	0.00	0.00	0.00
Mesaverde									
3,900.00	9.95	335.56	3,857.02	460.17	-209.14	505.47	0.00	0.00	0.00
4,000.00	9.95	335.56	3,955.52	475.89	-216.29	522.74	0.00	0.00	0.00
4,051.53	9.95	335.56	4,006.27	484.00	-219.97	531.64	0.00	0.00	0.00
4,100.00	9.22	335.56	4,054.07	491.34	-223.31	539.71	1.50	-1.50	0.00
4,200.00	7.72	335.56	4,152.97	504.75	-229.41	554.43	1.50	-1.50	0.00
4,300.00	6.22	335.56	4,252.23	515.79	-234.43	566.57	1.50	-1.50	0.00
4,400.00	4.72	335.56	4,351.77	524.47	-238.37	576.10	1.50	-1.50	0.00
4,500.00	3.22	335.56	4,451.53	530.77	-241.23	583.02	1.50	-1.50	0.00
4,600.00	1.72	335.56	4,551.44	534.69	-243.01	587.32	1.50	-1.50	0.00

# BBC

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<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6453.00ft (Original Well Elev)
<b>Site:</b>	MDP #13	<b>North Reference:</b>	True
<b>Well:</b>	Federal 32B-20-691	<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)
4,699.58	0.23	335.56	4,651.00	536.23	-243.71	589.01	1.50	-1.50	0.00
<b>Price Coal</b>									
4,700.00	0.22	335.56	4,651.42	536.23	-243.71	589.02	1.50	-1.50	0.00
4,714.58	0.00	0.00	4,666.00	536.26	-243.73	589.04	1.50	-1.50	0.00
4,774.58	0.00	0.00	4,726.00	536.26	-243.73	589.04	0.00	0.00	0.00
<b>Top Gas</b>									
4,800.00	0.00	0.00	4,751.42	536.26	-243.73	589.04	0.00	0.00	0.00
4,900.00	0.00	0.00	4,851.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,000.00	0.00	0.00	4,951.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,100.00	0.00	0.00	5,051.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,200.00	0.00	0.00	5,151.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,300.00	0.00	0.00	5,251.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,400.00	0.00	0.00	5,351.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,500.00	0.00	0.00	5,451.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,600.00	0.00	0.00	5,551.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,700.00	0.00	0.00	5,651.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,800.00	0.00	0.00	5,751.42	536.26	-243.73	589.04	0.00	0.00	0.00
5,900.00	0.00	0.00	5,851.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,000.00	0.00	0.00	5,951.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,100.00	0.00	0.00	6,051.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,200.00	0.00	0.00	6,151.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,300.00	0.00	0.00	6,251.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,400.00	0.00	0.00	6,351.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,500.00	0.00	0.00	6,451.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,600.00	0.00	0.00	6,551.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,700.00	0.00	0.00	6,651.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,800.00	0.00	0.00	6,751.42	536.26	-243.73	589.04	0.00	0.00	0.00
6,900.00	0.00	0.00	6,851.42	536.26	-243.73	589.04	0.00	0.00	0.00
7,000.00	0.00	0.00	6,951.42	536.26	-243.73	589.04	0.00	0.00	0.00
7,100.00	0.00	0.00	7,051.42	536.26	-243.73	589.04	0.00	0.00	0.00
7,200.00	0.00	0.00	7,151.42	536.26	-243.73	589.04	0.00	0.00	0.00
7,300.00	0.00	0.00	7,251.42	536.26	-243.73	589.04	0.00	0.00	0.00
7,400.00	0.00	0.00	7,351.42	536.26	-243.73	589.04	0.00	0.00	0.00
7,414.58	0.00	0.00	7,366.00	536.26	-243.73	589.04	0.00	0.00	0.00
<b>Rollins</b>									
7,500.00	0.00	0.00	7,451.42	536.26	-243.73	589.04	0.00	0.00	0.00
7,600.00	0.00	0.00	7,551.42	536.26	-243.73	589.04	0.00	0.00	0.00
7,700.00	0.00	0.00	7,651.42	536.26	-243.73	589.04	0.00	0.00	0.00
7,714.58	0.00	0.00	7,666.00	536.26	-243.73	589.04	0.00	0.00	0.00
<b>TD</b>									

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
775.00	775.00	9 5/8"	9-5/8	12-1/4

# BBC

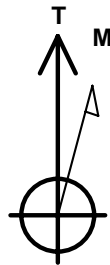
## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Federal 32B-20-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6453.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6453.00ft (Original Well Elev)
<b>Site:</b>	MDP #13	<b>North Reference:</b>	True
<b>Well:</b>	Federal 32B-20-691	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,838.05	3,796.00	Mesaverde		0.00		
4,699.58	4,651.00	Price Coal		0.00		
4,774.58	4,726.00	Top Gas		0.00		
7,414.58	7,366.00	Rollins		0.00		
7,714.58	7,666.00	TD		0.00		

## WELL DETAILS: Federal 32B-20-691

Ground Level: 0.00  
 +N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.00 0.00 1618540.517 2414638.498 30° 47.957' N 104° 29.8800 W



Azimuths to True North  
 Magnetic North: 10.37°

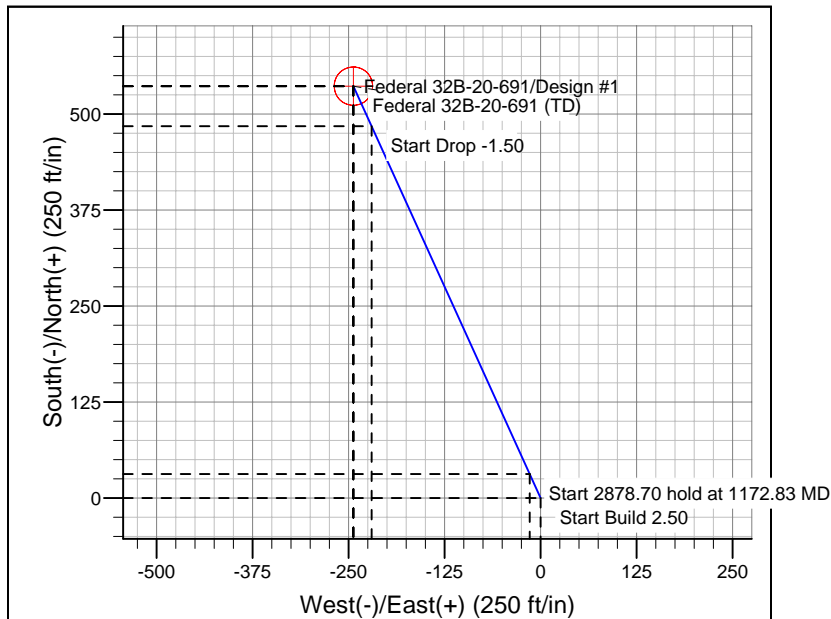
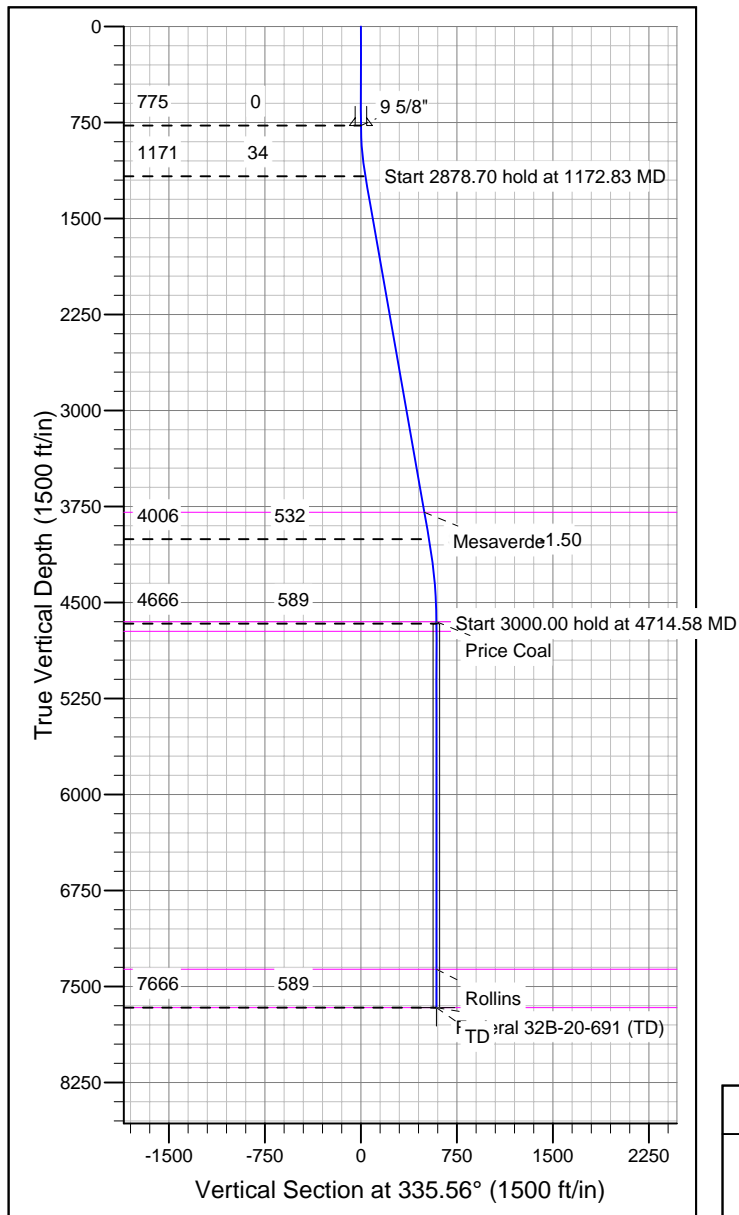
Magnetic Field  
 Strength: 52404.0snT  
 Dip Angle: 65.85°  
 Date: 4/15/2010  
 Model: BGGM2007

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	775.00	0.00	0.00	775.00	0.00	0.00	0.00	0.00	0.00	
3	1172.83	9.95	335.56	1170.84	31.36	-14.25	2.50	335.56	34.44	
4	151.53	9.95	335.56	4006.27	484.00	-219.97	0.00	0.00	531.64	
5	14.58	0.00	0.00	4666.00	536.26	-243.73	1.50	180.00	589.04	
6	14.58	0.00	0.00	7666.00	536.26	-243.73	0.00	0.00	589.04	Federal 32B-20-691 (TD)

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Federal 32B-20-691 (TD)	7666.00	536.26	-243.73	Circle (Radius: 25.00)



## CASING DETAILS

TVD	MD	Name	Size
775.00	775.00	9 5/8"	9-5/8

## FORMATION TOP DETAILS

TVD	MD	Formation
3796.00	3838.05	Mesaverde
4651.00	4699.58	Price Coal
4726.00	4774.58	Top Gas
7366.00	7414.58	Rollins
7666.00	7714.58	TD

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Federal 32B-20-691, True North  
 Vertical (TVD) Reference: WELL @ 6453.00ft (Original Well Elev)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: WELL @ 6453.00ft (Original Well Elev)  
 Calculation Method: Minimum Curvature