

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**MDP #26**

**Federal 13A-34-691**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**18 November, 2010**

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Federal 13A-34-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Site:</b>	MDP #26	<b>North Reference:</b>	True
<b>Well:</b>	Federal 13A-34-691	<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 #26		
<b>Site Position:</b>		<b>Northing:</b>	1,605,944.154 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,420,639.729 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 28' 44.832 N
		<b>Longitude:</b>	107° 33' 9.6912 W
		<b>Grid Convergence:</b>	-1.29 °

<b>Well</b>	Federal 13A-34-691		
<b>Well Position</b>	<b>+N/-S</b>	2.90 ft	<b>Northing:</b>
	<b>+E/-W</b>	-19.76 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			39° 28' 44.861 N
			<b>Longitude:</b>
			107° 33' 9.9432 W
			<b>Ground Level:</b>
			0.00 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>
	BGGM2007	10/25/2010	10.30	65.80	52,327

<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	60.47

<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	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,855.18	26.38	60.47	1,818.30	117.61	207.65	2.50	2.50	0.00	60.47	
4,591.67	26.38	60.47	4,269.84	716.83	1,265.61	0.00	0.00	0.00	0.00	
6,350.31	0.00	0.00	5,967.00	912.85	1,611.70	1.50	-1.50	0.00	180.00	
8,350.31	0.00	0.00	7,967.00	912.85	1,611.70	0.00	0.00	0.00	0.00	Federal 13A-34-691

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## Planning Report

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<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Site:</b>	MDP #26	<b>North Reference:</b>	True
<b>Well:</b>	Federal 13A-34-691	<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	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	2.50	60.47	899.97	1.08	1.90	2.18	2.50	2.50	0.00	
1,000.00	5.00	60.47	999.75	4.30	7.59	8.72	2.50	2.50	0.00	
1,100.00	7.50	60.47	1,099.14	9.66	17.06	19.61	2.50	2.50	0.00	
1,200.00	10.00	60.47	1,197.97	17.16	30.30	34.82	2.50	2.50	0.00	
1,300.00	12.50	60.47	1,296.04	26.77	47.27	54.33	2.50	2.50	0.00	
1,400.00	15.00	60.47	1,393.17	38.49	67.95	78.09	2.50	2.50	0.00	
1,500.00	17.50	60.47	1,489.17	52.28	92.30	106.07	2.50	2.50	0.00	
1,600.00	20.00	60.47	1,583.85	68.12	120.26	138.21	2.50	2.50	0.00	
1,700.00	22.50	60.47	1,677.05	85.98	151.80	174.45	2.50	2.50	0.00	
1,800.00	25.00	60.47	1,768.57	105.82	186.84	214.73	2.50	2.50	0.00	
1,855.18	26.38	60.47	1,818.30	117.61	207.65	238.65	2.50	2.50	0.00	
1,900.00	26.38	60.47	1,858.45	127.43	224.98	258.56	0.00	0.00	0.00	
2,000.00	26.38	60.47	1,948.03	149.32	263.64	302.99	0.00	0.00	0.00	
2,100.00	26.38	60.47	2,037.62	171.22	302.30	347.42	0.00	0.00	0.00	
2,200.00	26.38	60.47	2,127.21	193.12	340.96	391.85	0.00	0.00	0.00	
2,300.00	26.38	60.47	2,216.80	215.01	379.62	436.29	0.00	0.00	0.00	
2,400.00	26.38	60.47	2,306.38	236.91	418.29	480.72	0.00	0.00	0.00	
2,500.00	26.38	60.47	2,395.97	258.81	456.95	525.15	0.00	0.00	0.00	
2,600.00	26.38	60.47	2,485.56	280.71	495.61	569.58	0.00	0.00	0.00	
2,700.00	26.38	60.47	2,575.14	302.60	534.27	614.01	0.00	0.00	0.00	
2,800.00	26.38	60.47	2,664.73	324.50	572.93	658.44	0.00	0.00	0.00	
2,900.00	26.38	60.47	2,754.32	346.40	611.59	702.88	0.00	0.00	0.00	
3,000.00	26.38	60.47	2,843.91	368.29	650.25	747.31	0.00	0.00	0.00	
3,100.00	26.38	60.47	2,933.49	390.19	688.91	791.74	0.00	0.00	0.00	
3,200.00	26.38	60.47	3,023.08	412.09	727.57	836.17	0.00	0.00	0.00	
3,300.00	26.38	60.47	3,112.67	433.99	766.23	880.60	0.00	0.00	0.00	
3,400.00	26.38	60.47	3,202.25	455.88	804.90	925.03	0.00	0.00	0.00	
3,500.00	26.38	60.47	3,291.84	477.78	843.56	969.46	0.00	0.00	0.00	
3,600.00	26.38	60.47	3,381.43	499.68	882.22	1,013.90	0.00	0.00	0.00	
3,700.00	26.38	60.47	3,471.01	521.57	920.88	1,058.33	0.00	0.00	0.00	
3,800.00	26.38	60.47	3,560.60	543.47	959.54	1,102.76	0.00	0.00	0.00	
3,900.00	26.38	60.47	3,650.19	565.37	998.20	1,147.19	0.00	0.00	0.00	
4,000.00	26.38	60.47	3,739.78	587.27	1,036.86	1,191.62	0.00	0.00	0.00	
4,018.11	26.38	60.47	3,756.00	591.23	1,043.86	1,199.67	0.00	0.00	0.00	
<b>Mesaverde</b>										
4,100.00	26.38	60.47	3,829.36	609.16	1,075.52	1,236.05	0.00	0.00	0.00	
4,200.00	26.38	60.47	3,918.95	631.06	1,114.18	1,280.48	0.00	0.00	0.00	
4,300.00	26.38	60.47	4,008.54	652.96	1,152.84	1,324.92	0.00	0.00	0.00	
4,400.00	26.38	60.47	4,098.12	674.85	1,191.51	1,369.35	0.00	0.00	0.00	
4,500.00	26.38	60.47	4,187.71	696.75	1,230.17	1,413.78	0.00	0.00	0.00	
4,591.67	26.38	60.47	4,269.84	716.83	1,265.61	1,454.51	0.00	0.00	0.00	
4,600.00	26.25	60.47	4,277.30	718.64	1,268.82	1,458.20	1.50	-1.50	0.00	
4,700.00	24.75	60.47	4,367.55	739.86	1,306.29	1,501.26	1.50	-1.50	0.00	
4,800.00	23.25	60.47	4,458.90	759.91	1,341.68	1,541.94	1.50	-1.50	0.00	

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<b>Well:</b>	Federal 13A-34-691	<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)
4,900.00	21.75	60.47	4,551.29	778.78	1,374.99	1,580.21	1.50	-1.50	0.00
5,000.00	20.25	60.47	4,644.64	796.44	1,406.17	1,616.06	1.50	-1.50	0.00
5,096.94	18.80	60.47	4,736.00	812.41	1,434.37	1,648.46	1.50	-1.50	0.00
<b>Price Coal</b>									
5,100.00	18.75	60.47	4,738.90	812.89	1,435.23	1,649.44	1.50	-1.50	0.00
5,200.00	17.25	60.47	4,834.00	828.13	1,462.12	1,680.35	1.50	-1.50	0.00
5,300.00	15.75	60.47	4,929.87	842.13	1,486.84	1,708.76	1.50	-1.50	0.00
5,400.00	14.25	60.47	5,026.46	854.89	1,509.37	1,734.65	1.50	-1.50	0.00
5,500.00	12.75	60.47	5,123.69	866.40	1,529.68	1,758.00	1.50	-1.50	0.00
5,600.00	11.25	60.47	5,221.50	876.65	1,547.78	1,778.80	1.50	-1.50	0.00
5,614.77	11.03	60.47	5,236.00	878.05	1,550.27	1,781.66	1.50	-1.50	0.00
<b>Top Gas</b>									
5,700.00	9.75	60.47	5,319.83	885.63	1,563.64	1,797.03	1.50	-1.50	0.00
5,800.00	8.25	60.47	5,418.59	893.34	1,577.26	1,812.68	1.50	-1.50	0.00
5,900.00	6.75	60.47	5,517.73	899.78	1,588.63	1,825.74	1.50	-1.50	0.00
6,000.00	5.25	60.47	5,617.18	904.94	1,597.73	1,836.20	1.50	-1.50	0.00
6,100.00	3.75	60.47	5,716.87	908.81	1,604.56	1,844.06	1.50	-1.50	0.00
6,200.00	2.25	60.47	5,816.73	911.39	1,609.12	1,849.30	1.50	-1.50	0.00
6,300.00	0.75	60.47	5,916.69	912.68	1,611.41	1,851.93	1.50	-1.50	0.00
6,350.31	0.00	0.00	5,967.00	912.85	1,611.70	1,852.26	1.50	-1.50	0.00
6,400.00	0.00	0.00	6,016.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
6,500.00	0.00	0.00	6,116.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
6,600.00	0.00	0.00	6,216.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
6,700.00	0.00	0.00	6,316.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
6,800.00	0.00	0.00	6,416.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
6,900.00	0.00	0.00	6,516.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,000.00	0.00	0.00	6,616.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,100.00	0.00	0.00	6,716.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,200.00	0.00	0.00	6,816.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,300.00	0.00	0.00	6,916.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,400.00	0.00	0.00	7,016.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,500.00	0.00	0.00	7,116.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,600.00	0.00	0.00	7,216.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,700.00	0.00	0.00	7,316.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,800.00	0.00	0.00	7,416.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
7,900.00	0.00	0.00	7,516.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
8,000.00	0.00	0.00	7,616.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
8,049.31	0.00	0.00	7,666.00	912.85	1,611.70	1,852.26	0.00	0.00	0.00
<b>Rollins</b>									
8,100.00	0.00	0.00	7,716.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
8,200.00	0.00	0.00	7,816.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
8,300.00	0.00	0.00	7,916.69	912.85	1,611.70	1,852.26	0.00	0.00	0.00
8,349.31	0.00	0.00	7,966.00	912.85	1,611.70	1,852.26	0.00	0.00	0.00
<b>TD</b>									
8,350.31	0.00	0.00	7,967.00	912.85	1,611.70	1,852.26	0.00	0.00	0.00

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Federal 13A-34-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Site:</b>	MDP #26	<b>North Reference:</b>	True
<b>Well:</b>	Federal 13A-34-691	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

### Casing Points

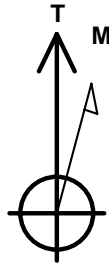
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
	9 5/8"		9-5/8	12-1/4

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,018.11	3,756.00	Mesaverde		0.00	
5,096.94	4,736.00	Price Coal		0.00	
5,614.77	5,236.00	Top Gas		0.00	
8,049.31	7,666.00	Rollins		0.00	
8,349.31	7,966.00	TD		0.00	

## WELL DETAILS: Federal 13A-34-691

Ground Level: 0.00  
 +N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.00 0.001605947.5012420620.00028' 44.867'N33' 9.9432 W



Azimuths to True North  
 Magnetic North: 10.30°

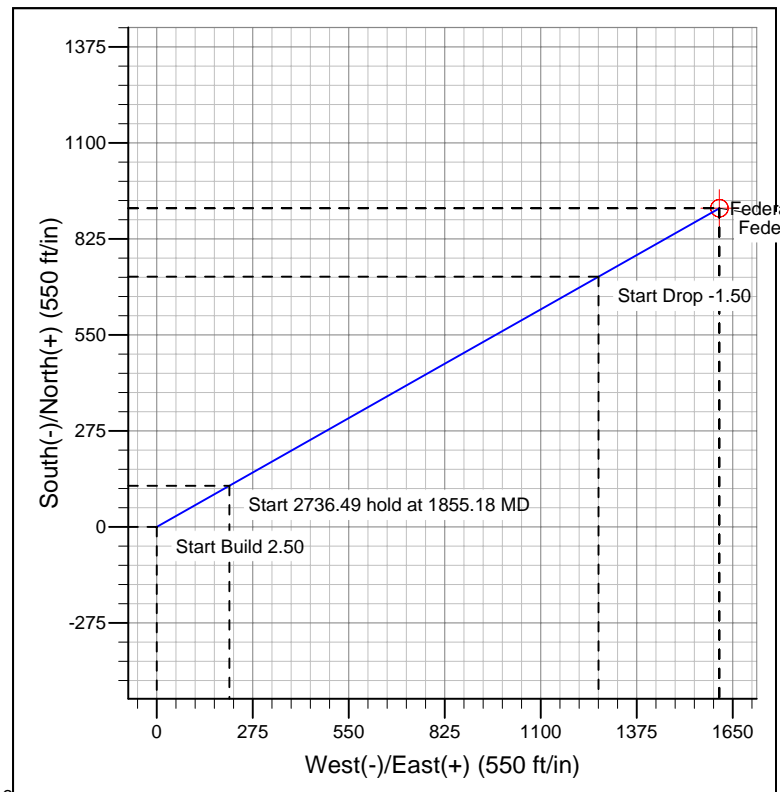
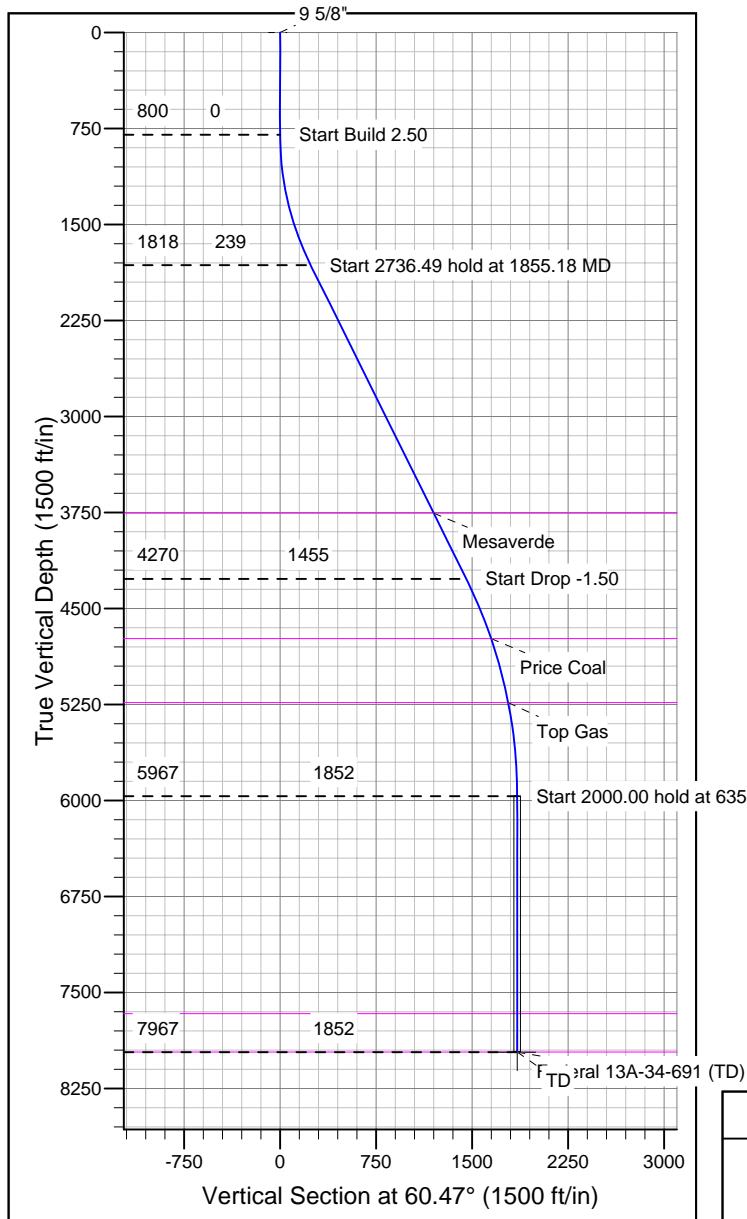
Magnetic Field  
 Strength: 52327.3snT  
 Dip Angle: 65.80°  
 Date: 10/25/2010  
 Model: BGGM2007

## 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	00.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	
3	55.18	26.38	60.47	1818.30	117.61	207.65	2.50	60.47	238.65	
4	91.67	26.38	60.47	269.84	716.83	265.61	0.00	0.00	454.51	
5	50.31	0.00	0.00	967.00	912.85	1611.70	1.50	180.00	852.26	
6	50.31	0.00	0.00	967.00	912.85	1611.70	0.00	0.00	852.26	Federal 13A-34-691 (TD)

## WELLBORE TARGET DETAILS

Name TVD +N/-S +E/-W Shape  
 Federal 13A-34-691 (TD) 85 1611.70 Circle (Radius: 25.00)



## FORMATION TOP DETAILS

TVD	MD	Path	Formation
3756.00	018.11		Mesaverde
4736.00	096.94		Price Coal
5236.00	0614.77		Top Gas
7666.00	049.31		Rollins
7966.00	0349.31		TD

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Federal 13A-34-691, True North  
 Vertical (TVD) Reference: WELL @ 6748.00ft (Original Well Elev)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: WELL @ 6748.00ft (Original Well Elev)  
 Calculation Method: Minimum Curvature