

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**MDP #15**

**GGU Federal 43D-29-691**

**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 GGU Federal 43D-29-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6031.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6031.00ft (Original Well Elev)
<b>Site:</b>	MDP #15	<b>North Reference:</b>	True
<b>Well:</b>	GGU Federal 43D-29-691	<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 #15		
<b>Site Position:</b>		<b>Northing:</b>	1,612,461.747 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,414,303.528 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 29' 47.810 N
		<b>Longitude:</b>	107° 34' 32.3800 W
		<b>Grid Convergence:</b>	-1.31 °

<b>Well</b>	GGU Federal 43D-29-691		
<b>Well Position</b>	<b>+N/-S</b>	21.24 ft	<b>Northing:</b>
	<b>+E/-W</b>	-43.90 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			39° 29' 48.020 N
			<b>Longitude:</b>
			107° 34' 32.9400 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	4/15/2010	10.37	65.83	52,398

<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	66.65

<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	
765.00	0.00	0.00	765.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,001.50	30.91	66.65	1,942.38	129.03	298.89	2.50	2.50	0.00	66.65	
3,313.13	30.91	66.65	3,067.70	396.11	917.52	0.00	0.00	0.00	0.00	
5,373.97	0.00	0.00	5,030.00	611.16	1,415.66	1.50	-1.50	0.00	180.00	
7,623.97	0.00	0.00	7,280.00	611.16	1,415.66	0.00	0.00	0.00	0.00	GGU Federal 43D-2

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well GGU Federal 43D-29-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6031.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6031.00ft (Original Well Elev)
<b>Site:</b>	MDP #15	<b>North Reference:</b>	True
<b>Well:</b>	GGU Federal 43D-29-691	<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
765.00	0.00	0.00	765.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>9 5/8"</b>									
800.00	0.87	66.65	800.00	0.11	0.25	0.27	2.50	2.50	0.00
900.00	3.37	66.65	899.92	1.58	3.65	3.97	2.50	2.50	0.00
1,000.00	5.87	66.65	999.59	4.77	11.05	12.04	2.50	2.50	0.00
1,100.00	8.37	66.65	1,098.81	9.69	22.44	24.44	2.50	2.50	0.00
1,200.00	10.87	66.65	1,197.39	16.31	37.79	41.16	2.50	2.50	0.00
1,300.00	13.37	66.65	1,295.15	24.64	57.07	62.16	2.50	2.50	0.00
1,400.00	15.87	66.65	1,391.91	34.64	80.25	87.41	2.50	2.50	0.00
1,500.00	18.37	66.65	1,487.47	46.31	107.28	116.85	2.50	2.50	0.00
1,600.00	20.87	66.65	1,581.65	59.63	138.11	150.44	2.50	2.50	0.00
1,700.00	23.37	66.65	1,674.28	74.55	172.69	188.10	2.50	2.50	0.00
1,800.00	25.87	66.65	1,765.18	91.07	210.94	229.76	2.50	2.50	0.00
1,900.00	28.37	66.65	1,854.17	109.14	252.80	275.35	2.50	2.50	0.00
2,000.00	30.87	66.65	1,941.09	128.73	298.18	324.78	2.50	2.50	0.00
2,001.50	30.91	66.65	1,942.38	129.03	298.89	325.55	2.50	2.50	0.00
2,100.00	30.91	66.65	2,026.89	149.09	345.34	376.15	0.00	0.00	0.00
2,200.00	30.91	66.65	2,112.68	169.45	392.51	427.52	0.00	0.00	0.00
2,300.00	30.91	66.65	2,198.48	189.81	439.67	478.90	0.00	0.00	0.00
2,400.00	30.91	66.65	2,284.27	210.18	486.84	530.27	0.00	0.00	0.00
2,500.00	30.91	66.65	2,370.07	230.54	534.00	581.64	0.00	0.00	0.00
2,600.00	30.91	66.65	2,455.86	250.90	581.17	633.01	0.00	0.00	0.00
2,700.00	30.91	66.65	2,541.66	271.26	628.33	684.39	0.00	0.00	0.00
2,800.00	30.91	66.65	2,627.45	291.62	675.50	735.76	0.00	0.00	0.00
2,900.00	30.91	66.65	2,713.25	311.99	722.66	787.13	0.00	0.00	0.00
3,000.00	30.91	66.65	2,799.04	332.35	769.83	838.51	0.00	0.00	0.00
3,100.00	30.91	66.65	2,884.84	352.71	816.99	889.88	0.00	0.00	0.00
3,200.00	30.91	66.65	2,970.64	373.07	864.16	941.25	0.00	0.00	0.00
3,300.00	30.91	66.65	3,056.43	393.43	911.33	992.62	0.00	0.00	0.00
3,313.13	30.91	66.65	3,067.70	396.11	917.52	999.37	0.00	0.00	0.00
3,400.00	29.61	66.65	3,142.73	413.46	957.71	1,043.15	1.50	-1.50	0.00
3,500.00	28.11	66.65	3,230.30	432.59	1,002.02	1,091.41	1.50	-1.50	0.00
3,600.00	26.61	66.65	3,319.12	450.80	1,044.21	1,137.37	1.50	-1.50	0.00
3,689.94	25.26	66.65	3,400.00	466.39	1,080.33	1,176.70	1.50	-1.50	0.00
<b>Mesaverde</b>									
3,700.00	25.11	66.65	3,409.10	468.09	1,084.26	1,180.98	1.50	-1.50	0.00
3,800.00	23.61	66.65	3,500.20	484.44	1,122.12	1,222.23	1.50	-1.50	0.00
3,900.00	22.11	66.65	3,592.34	499.83	1,157.79	1,261.07	1.50	-1.50	0.00
4,000.00	20.61	66.65	3,685.47	514.27	1,191.22	1,297.49	1.50	-1.50	0.00
4,100.00	19.11	66.65	3,779.52	527.73	1,222.41	1,331.46	1.50	-1.50	0.00
4,200.00	17.61	66.65	3,874.42	540.22	1,251.33	1,362.96	1.50	-1.50	0.00
4,300.00	16.11	66.65	3,970.12	551.71	1,277.96	1,391.96	1.50	-1.50	0.00
4,400.00	14.61	66.65	4,066.55	562.21	1,302.27	1,418.45	1.50	-1.50	0.00
4,500.00	13.11	66.65	4,163.64	571.71	1,324.27	1,442.40	1.50	-1.50	0.00
4,516.79	12.86	66.65	4,180.00	573.20	1,327.73	1,446.18	1.50	-1.50	0.00

# BBC

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<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6031.00ft (Original Well Elev)
<b>Site:</b>	MDP #15	<b>North Reference:</b>	True
<b>Well:</b>	GGU Federal 43D-29-691	<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)
<b>Price Coal</b>									
4,600.00	11.61	66.65	4,261.31	580.19	1,343.92	1,463.81	1.50	-1.50	0.00
4,700.00	10.11	66.65	4,359.52	587.66	1,361.21	1,482.65	1.50	-1.50	0.00
4,800.00	8.61	66.65	4,458.19	594.10	1,376.14	1,498.91	1.50	-1.50	0.00
4,900.00	7.11	66.65	4,557.25	599.52	1,388.70	1,512.58	1.50	-1.50	0.00
5,000.00	5.61	66.65	4,656.63	603.91	1,398.87	1,523.66	1.50	-1.50	0.00
5,100.00	4.11	66.65	4,756.26	607.27	1,406.64	1,532.13	1.50	-1.50	0.00
5,200.00	2.61	66.65	4,856.09	609.59	1,412.02	1,537.99	1.50	-1.50	0.00
5,223.93	2.25	66.65	4,880.00	609.99	1,412.96	1,539.01	1.50	-1.50	0.00
<b>Top Gas</b>									
5,300.00	1.11	66.65	4,956.03	610.88	1,415.00	1,541.24	1.50	-1.50	0.00
5,373.97	0.00	0.00	5,030.00	611.16	1,415.66	1,541.95	1.50	-1.50	0.00
5,400.00	0.00	0.00	5,056.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
5,500.00	0.00	0.00	5,156.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
5,600.00	0.00	0.00	5,256.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
5,700.00	0.00	0.00	5,356.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
5,800.00	0.00	0.00	5,456.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
5,900.00	0.00	0.00	5,556.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,000.00	0.00	0.00	5,656.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,100.00	0.00	0.00	5,756.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,200.00	0.00	0.00	5,856.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,300.00	0.00	0.00	5,956.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,323.97	0.00	0.00	5,980.00	611.16	1,415.66	1,541.95	0.00	0.00	0.00
<b>Rollins</b>									
6,400.00	0.00	0.00	6,056.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,500.00	0.00	0.00	6,156.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,600.00	0.00	0.00	6,256.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,700.00	0.00	0.00	6,356.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,800.00	0.00	0.00	6,456.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
6,900.00	0.00	0.00	6,556.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
7,000.00	0.00	0.00	6,656.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
7,100.00	0.00	0.00	6,756.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
7,200.00	0.00	0.00	6,856.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
7,300.00	0.00	0.00	6,956.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
7,400.00	0.00	0.00	7,056.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
7,500.00	0.00	0.00	7,156.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
7,600.00	0.00	0.00	7,256.03	611.16	1,415.66	1,541.95	0.00	0.00	0.00
7,623.97	0.00	0.00	7,280.00	611.16	1,415.66	1,541.95	0.00	0.00	0.00
<b>TD</b>									

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
765.00	765.00	9 5/8"	9-5/8	12-1/4

# BBC

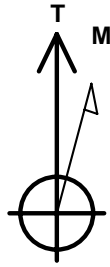
## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well GGU Federal 43D-29-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6031.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6031.00ft (Original Well Elev)
<b>Site:</b>	MDP #15	<b>North Reference:</b>	True
<b>Well:</b>	GGU Federal 43D-29-691	<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 (°)	
3,689.94	3,400.00	Mesaverde		0.00		
4,516.79	4,180.00	Price Coal		0.00		
5,223.93	4,880.00	Top Gas		0.00		
6,323.97	5,980.00	Rollins		0.00		
7,623.97	7,280.00	TD		0.00		

## WELL DETAILS: GGU Federal 43D-29-691

Ground Level: 0.00  
 +N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.00 0.00 1612483.983 2414260.137 29° 48.027' N 104° 32.940' W



Azimuths to True North  
 Magnetic North: 10.37°

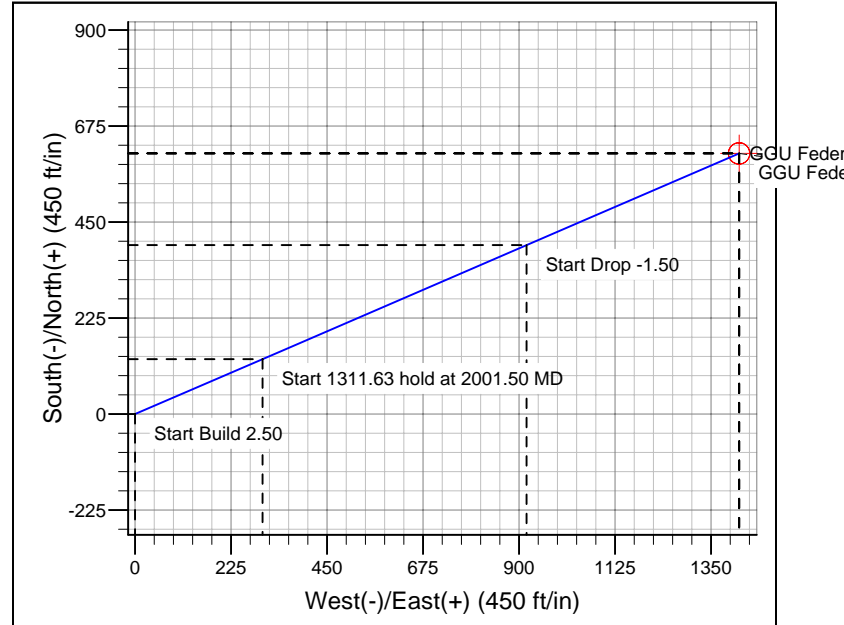
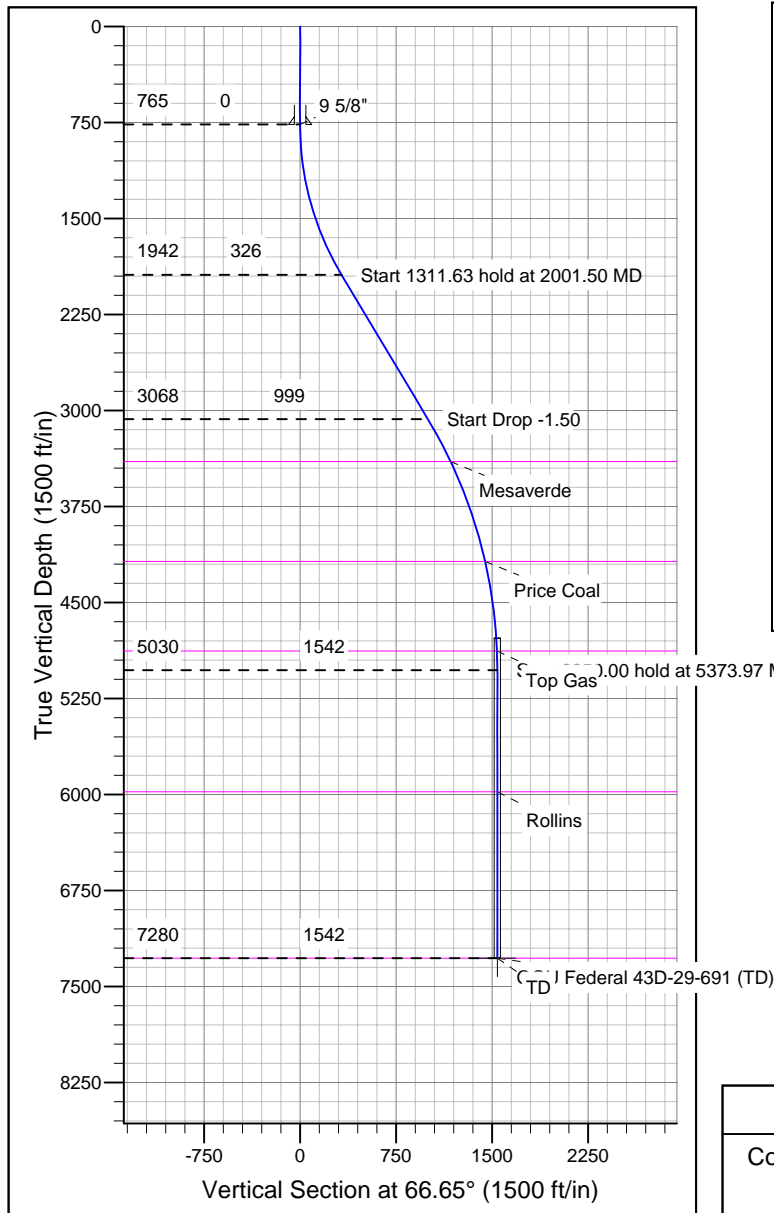
Magnetic Field  
 Strength: 52398.2snT  
 Dip Angle: 65.83°  
 Date: 4/15/2010  
 Model: BGGM2007

## 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	765.00	0.00	0.00	765.00	0.00	0.00	0.00	0.00	0.00	
3	2001.50	30.91	66.65	1942.38	129.03	298.89	2.50	66.65	325.55	
4	3013.13	30.91	66.65	3067.70	396.11	917.52	0.00	0.00	999.37	
5	5373.97	0.00	0.00	5030.00	611.16	1415.66	1.50	180.00	541.95	
6	7280.00	0.00	0.00	7280.00	611.16	1415.66	0.00	0.00	541.95	GGU Federal 43D-29-691 (TD)

## WELLBORE TARGET DETAILS

Name TVD +N/-S +E/-W Shape  
 GGU Federal 43D-29-691 (TD) 7280.00 611.16 1415.66 Circle (Radius: 25.00)



## CASING DETAILS

TVD MD Name Size  
 765.00 765.00 9 5/8" 9-5/8"

## FORMATION TOP DETAILS

TVD Path MD Path Formation  
 3400.00 3689.94 Mesaverde  
 4180.00 4516.79 Price Coal  
 4880.00 5223.93 Top Gas  
 5980.00 6323.97 Rollins  
 7280.00 7280.00 TD

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GGU Federal 43D-29-691, True North  
 Vertical (TVD) Reference: WELL @ 6031.00ft (Original Well Elev)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: WELL @ 6031.00ft (Original Well Elev)  
 Calculation Method: Minimum Curvature