

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**MDP #3**

**GGU Barge FED 32D-32-691**


**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**23 December, 2009**

WELL DETAILS: GGU Barge FED 32D-32-691							
		Ground Level: 0.00					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
0.00	0.00	1608634.184	2413020.930	39° 29' 9.7000" N	107° 34' 47.6200" W		

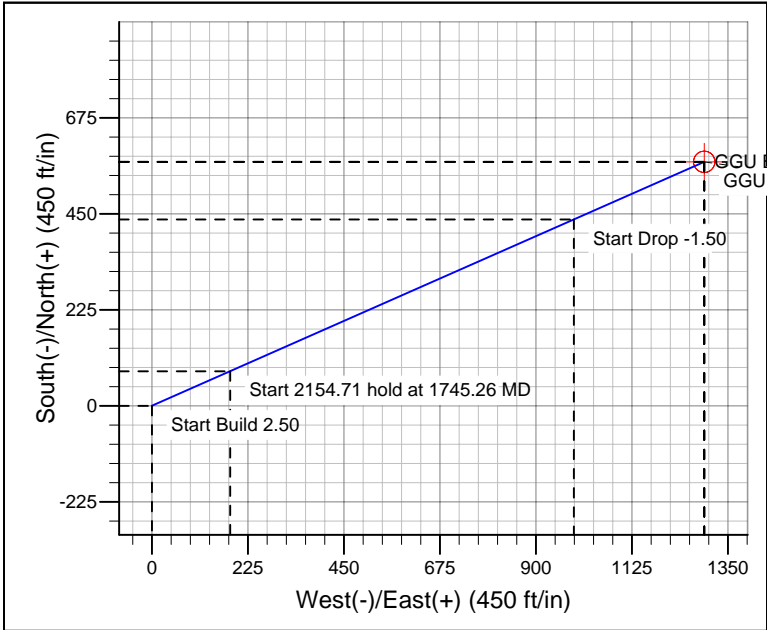
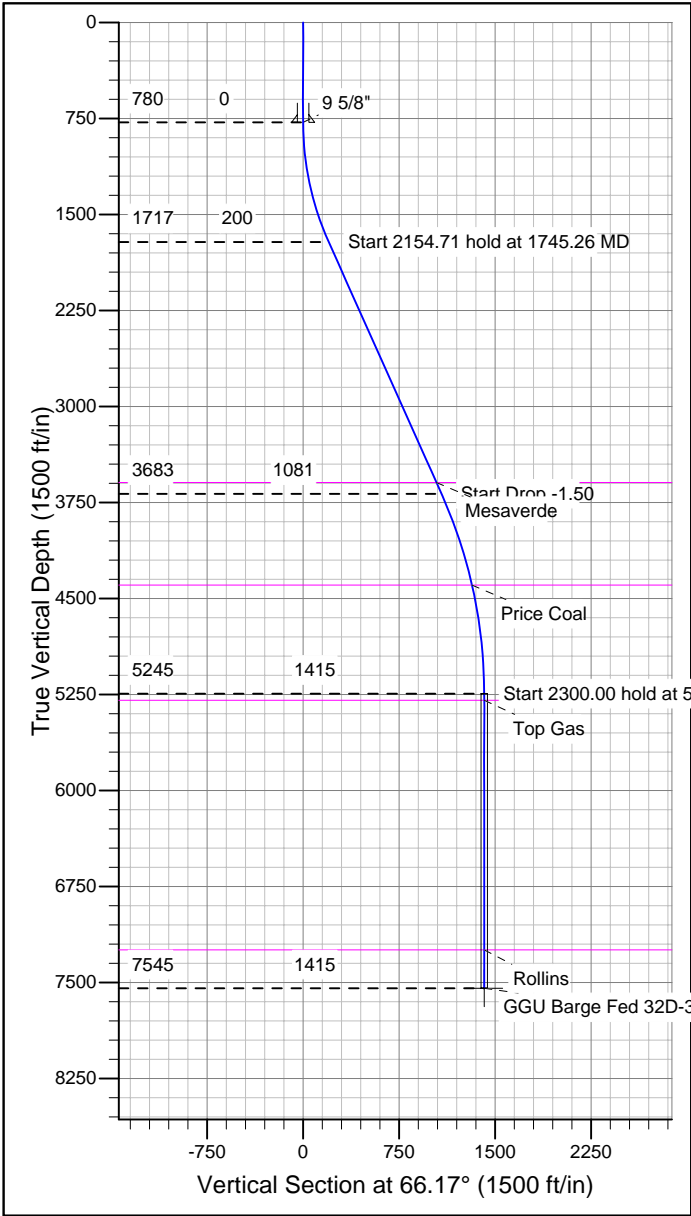


Azimuths to True North  
Magnetic North: 13.41°

1  
Magnetic Field  
Strength: 52474.8 nT  
Dip Angle: 65.84°  
Date: 12/23/2009  
Model: BGGM2007

SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
780.00	0.00	0.00	780.00	0.00	0.00	0.00	0.00	0.00		
1745.26	24.13	66.17	1716.97	80.92	183.21	2.50	66.17	200.28		
3683.37	24.13	66.17	3683.38	436.84	989.01	0.00	0.00	1081.19		
5508.73	0.00	0.00	5245.00	571.70	1294.36	1.50	180.00	1415.00		
7508.73	0.00	0.00	7545.00	571.70	1294.36	0.00	0.00	1415.00	GGU Barge Fed 32D-32-691 TD	

WELLBORE TARGET DETAILS				
Name	TVD	+N/-S	+E/-W	Shape
GGU Barge Fed 32D-32-691 TD	7545.00	571.70	1294.36	Circle (Radius: 25.00)



CASING DETAILS			
TVD	MD	Name	Size
780.00	780.00	9 5/8"	9-5/8

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3595.00	3803.12	Mesaverde
4395.00	4651.55	Price Coal
5295.00	5558.73	Top Gas
7245.00	7508.73	Rollins

REFERENCE INFORMATION	
Co-ordinate (N/E) Reference: Well GGU Barge FED 32D-32-691, True North	
Vertical (TVD) Reference: WELL @ 0.00ft (Original Well Elev)	
Section (VS) Reference: Slot - (0.00N, 0.00E)	
Measured Depth Reference: WELL @ 0.00ft (Original Well Elev)	
Calculation Method: Minimum Curvature	

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well GGU Barge FED 32D-32-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 0.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 0.00ft (Original Well Elev)
<b>Site:</b>	MDP #3	<b>North Reference:</b>	True
<b>Well:</b>	GGU Barge FED 32D-32-691	<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 #3		
<b>Site Position:</b>		<b>Northing:</b>	1,608,604.964 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,413,060.256 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 29' 9.420 N
		<b>Longitude:</b>	107° 34' 47.1100 W
		<b>Grid Convergence:</b>	-1.31 °

<b>Well</b>	GGU Barge FED 32D-32-691		
<b>Well Position</b>	<b>+N/-S</b>	28.31 ft	<b>Northing:</b>
	<b>+E/-W</b>	-39.98 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			39° 29' 9.700 N
			<b>Longitude:</b>
			107° 34' 47.6200 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	12/23/2009	10.41	65.84	52,475

<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	66.17

<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	
780.00	0.00	0.00	780.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,745.26	24.13	66.17	1,716.97	80.92	183.21	2.50	2.50	0.00	66.17	
3,899.97	24.13	66.17	3,683.38	436.84	989.01	0.00	0.00	0.00	0.00	
5,508.73	0.00	0.00	5,245.00	571.70	1,294.36	1.50	-1.50	0.00	180.00	
7,808.73	0.00	0.00	7,545.00	571.70	1,294.36	0.00	0.00	0.00	0.00	GGU Barge Fed 32

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well GGU Barge FED 32D-32-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 0.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 0.00ft (Original Well Elev)
<b>Site:</b>	MDP #3	<b>North Reference:</b>	True
<b>Well:</b>	GGU Barge FED 32D-32-691	<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
780.00	0.00	0.00	780.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
800.00	0.50	66.17	800.00	0.04	0.08	0.09	2.50	2.50	0.00
900.00	3.00	66.17	899.95	1.27	2.87	3.14	2.50	2.50	0.00
1,000.00	5.50	66.17	999.66	4.26	9.65	10.55	2.50	2.50	0.00
1,100.00	8.00	66.17	1,098.96	9.01	20.40	22.30	2.50	2.50	0.00
1,200.00	10.50	66.17	1,197.65	15.51	35.11	38.38	2.50	2.50	0.00
1,300.00	13.00	66.17	1,295.55	23.73	53.73	58.74	2.50	2.50	0.00
1,400.00	15.50	66.17	1,392.47	33.68	76.25	83.35	2.50	2.50	0.00
1,500.00	18.00	66.17	1,488.21	45.32	102.61	112.17	2.50	2.50	0.00
1,600.00	20.50	66.17	1,582.62	58.64	132.76	145.14	2.50	2.50	0.00
1,700.00	23.00	66.17	1,675.49	73.61	166.66	182.19	2.50	2.50	0.00
1,745.26	24.13	66.17	1,716.97	80.92	183.21	200.28	2.50	2.50	0.00
1,800.00	24.13	66.17	1,766.93	89.96	203.68	222.66	0.00	0.00	0.00
1,900.00	24.13	66.17	1,858.19	106.48	241.08	263.55	0.00	0.00	0.00
2,000.00	24.13	66.17	1,949.45	123.00	278.47	304.43	0.00	0.00	0.00
2,100.00	24.13	66.17	2,040.71	139.52	315.87	345.31	0.00	0.00	0.00
2,200.00	24.13	66.17	2,131.98	156.04	353.27	386.20	0.00	0.00	0.00
2,300.00	24.13	66.17	2,223.24	172.55	390.67	427.08	0.00	0.00	0.00
2,400.00	24.13	66.17	2,314.50	189.07	428.06	467.96	0.00	0.00	0.00
2,500.00	24.13	66.17	2,405.76	205.59	465.46	508.84	0.00	0.00	0.00
2,600.00	24.13	66.17	2,497.02	222.11	502.86	549.73	0.00	0.00	0.00
2,700.00	24.13	66.17	2,588.28	238.63	540.26	590.61	0.00	0.00	0.00
2,800.00	24.13	66.17	2,679.54	255.14	577.66	631.49	0.00	0.00	0.00
2,900.00	24.13	66.17	2,770.80	271.66	615.05	672.38	0.00	0.00	0.00
3,000.00	24.13	66.17	2,862.06	288.18	652.45	713.26	0.00	0.00	0.00
3,100.00	24.13	66.17	2,953.32	304.70	689.85	754.14	0.00	0.00	0.00
3,200.00	24.13	66.17	3,044.59	321.22	727.25	795.03	0.00	0.00	0.00
3,300.00	24.13	66.17	3,135.85	337.73	764.64	835.91	0.00	0.00	0.00
3,400.00	24.13	66.17	3,227.11	354.25	802.04	876.79	0.00	0.00	0.00
3,500.00	24.13	66.17	3,318.37	370.77	839.44	917.67	0.00	0.00	0.00
3,600.00	24.13	66.17	3,409.63	387.29	876.84	958.56	0.00	0.00	0.00
3,700.00	24.13	66.17	3,500.89	403.81	914.23	999.44	0.00	0.00	0.00
3,800.00	24.13	66.17	3,592.15	420.32	951.63	1,040.32	0.00	0.00	0.00
3,803.12	24.13	66.17	3,595.00	420.84	952.80	1,041.60	0.00	0.00	0.00
Mesaverde									
3,899.97	24.13	66.17	3,683.38	436.84	989.01	1,081.19	0.00	0.00	0.00
3,900.00	24.13	66.17	3,683.41	436.84	989.03	1,081.21	0.00	0.00	0.00
4,000.00	22.63	66.17	3,775.20	452.88	1,025.33	1,120.89	1.50	-1.50	0.00
4,100.00	21.13	66.17	3,867.99	467.93	1,059.42	1,158.16	1.50	-1.50	0.00
4,200.00	19.63	66.17	3,961.73	482.00	1,091.27	1,192.98	1.50	-1.50	0.00
4,300.00	18.13	66.17	4,056.35	495.08	1,120.87	1,225.34	1.50	-1.50	0.00
4,400.00	16.63	66.17	4,151.78	507.15	1,148.20	1,255.21	1.50	-1.50	0.00
4,500.00	15.13	66.17	4,247.96	518.20	1,173.23	1,282.57	1.50	-1.50	0.00
4,600.00	13.63	66.17	4,344.82	528.24	1,195.95	1,307.41	1.50	-1.50	0.00

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well GGU Barge FED 32D-32-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 0.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 0.00ft (Original Well Elev)
<b>Site:</b>	MDP #3	<b>North Reference:</b>	True
<b>Well:</b>	GGU Barge FED 32D-32-691	<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)
4,651.55	12.86	66.17	4,395.00	533.01	1,206.75	1,319.22	1.50	-1.50	0.00
<b>Price Coal</b>									
4,700.00	12.13	66.17	4,442.30	537.24	1,216.34	1,329.70	1.50	-1.50	0.00
4,800.00	10.63	66.17	4,540.33	545.21	1,234.39	1,349.43	1.50	-1.50	0.00
4,900.00	9.13	66.17	4,638.85	552.15	1,250.08	1,366.59	1.50	-1.50	0.00
5,000.00	7.63	66.17	4,737.78	558.04	1,263.42	1,381.17	1.50	-1.50	0.00
5,100.00	6.13	66.17	4,837.05	562.88	1,274.38	1,393.15	1.50	-1.50	0.00
5,200.00	4.63	66.17	4,936.61	566.67	1,282.95	1,402.53	1.50	-1.50	0.00
5,300.00	3.13	66.17	5,036.38	569.40	1,289.14	1,409.29	1.50	-1.50	0.00
5,400.00	1.63	66.17	5,136.29	571.08	1,292.94	1,413.45	1.50	-1.50	0.00
5,500.00	0.13	66.17	5,236.27	571.70	1,294.35	1,414.99	1.50	-1.50	0.00
5,508.73	0.00	0.00	5,245.00	571.70	1,294.36	1,415.00	1.50	-1.50	0.00
5,558.73	0.00	0.00	5,295.00	571.70	1,294.36	1,415.00	0.00	0.00	0.00
<b>Top Gas</b>									
5,600.00	0.00	0.00	5,336.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,436.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,536.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,636.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,000.00	0.00	0.00	5,736.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,100.00	0.00	0.00	5,836.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,200.00	0.00	0.00	5,936.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,036.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,136.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,236.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,336.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,436.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,536.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,636.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,000.00	0.00	0.00	6,736.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,100.00	0.00	0.00	6,836.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,200.00	0.00	0.00	6,936.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,036.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,136.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,236.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,508.73	0.00	0.00	7,245.00	571.70	1,294.36	1,415.00	0.00	0.00	0.00
<b>Rollins</b>									
7,600.00	0.00	0.00	7,336.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,436.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,536.27	571.70	1,294.36	1,415.00	0.00	0.00	0.00
7,808.73	0.00	0.00	7,545.00	571.70	1,294.36	1,415.00	0.00	0.00	0.00

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
780.00	780.00	9 5/8"	9-5/8	12-1/4

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well GGU Barge FED 32D-32-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 0.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 0.00ft (Original Well Elev)
<b>Site:</b>	MDP #3	<b>North Reference:</b>	True
<b>Well:</b>	GGU Barge FED 32D-32-691	<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 (°)	
3,803.12	3,595.00	Mesaverde		0.00		
4,651.55	4,395.00	Price Coal		0.00		
5,558.73	5,295.00	Top Gas		0.00		
7,508.73	7,245.00	Rollins		0.00		