

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**MDP #3**

**GGU Barge 22A-32-691**

**Wellbore #1**

**Plan: Design #1**

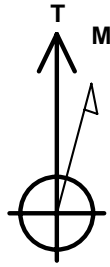
## **Standard Planning Report**

**23 December, 2009**

## WELL DETAILS: GGU Barge 22A-32-691

Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1608618.764	2413031.556	39° 29' 9.550000"	107° 34' 47.4800 W	



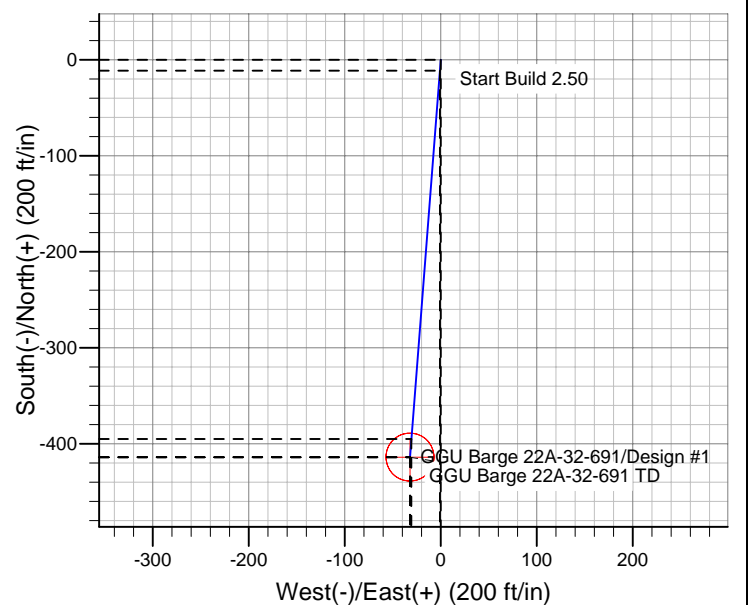
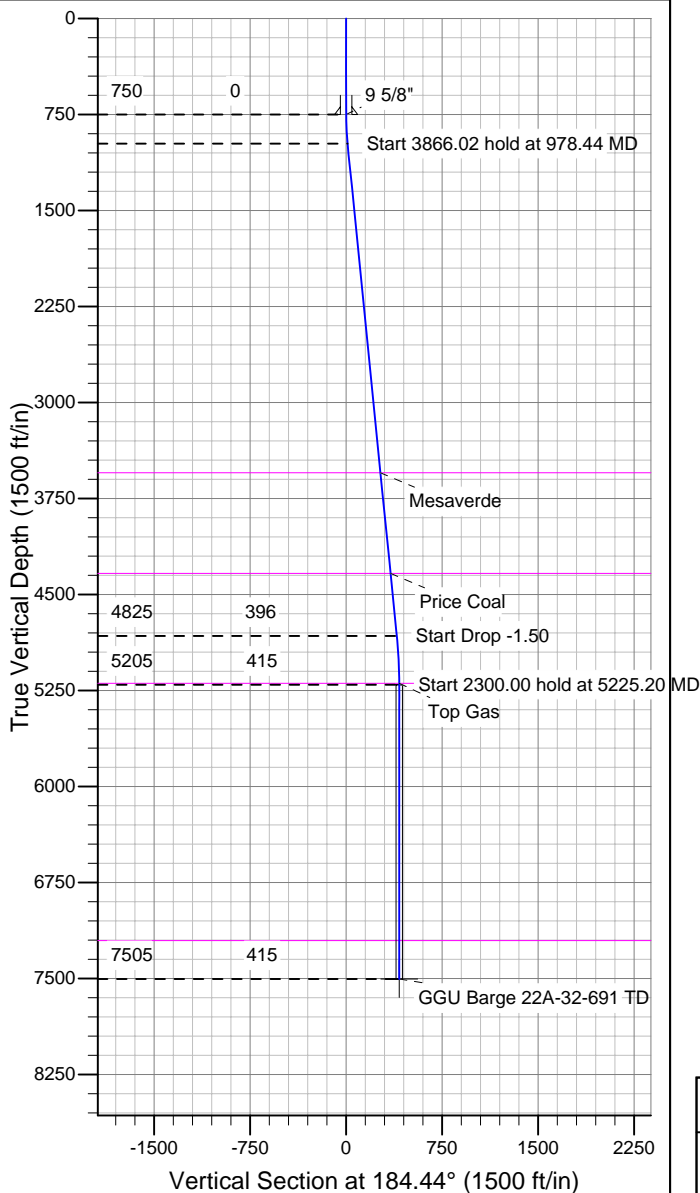
Azimuths to True North  
Magnetic North: 10.348°  
Magnetic Field  
Strength: 52474.7snT  
Dip Angle: 65.84°  
Date: 12/23/2009  
Model: BGGM2007

## SECTION DETAILS

	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	750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	
3	978.44	5.71	184.44	978.06	-11.34	-0.88	2.50	184.44	11.38	
4	4844.46	5.71	184.44	4824.89	-394.90	-30.68	0.00	0.00	396.09	
5	5225.20	0.00	0.00	5205.00	-413.80	-32.14	1.50	180.00	415.05	
6	7205.20	0.00	0.00	7505.00	-413.80	-32.14	0.00	0.00	415.05	GGU Barge 22A-32-691 TD

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
GGU Barge 22A-32-691 TD	7503.20	-413.80	-32.14	Circle (Radius: 25.00)



## CASING DETAILS

TVD	MD	Name	Size
750.00	750.00	9 5/8"	9-5/8

## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3550.00	3563.21	Mesaverde
4335.00	4352.12	Price Coal
5195.00	5215.20	Top Gas
7205.00	7225.20	Rollins

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GGU Barge 22A-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 22A-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 22A-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 22A-32-691		
<b>Well Position</b>	<b>+N/-S</b>	13.14 ft	<b>Northing:</b>
	<b>+E/-W</b>	-29.01 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			39° 29' 9.550 N
			<b>Longitude:</b>
			107° 34' 47.4800 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	184.44

<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	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00	
978.44	5.71	184.44	978.06	-11.34	-0.88	2.50	2.50	0.00	184.44	
4,844.46	5.71	184.44	4,824.89	-394.90	-30.68	0.00	0.00	0.00	0.00	
5,225.20	0.00	0.00	5,205.00	-413.80	-32.14	1.50	-1.50	0.00	180.00	
7,525.20	0.00	0.00	7,505.00	-413.80	-32.14	0.00	0.00	0.00	0.00	GGU Barge 22A-32

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well GGU Barge 22A-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 22A-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	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00	
9 5/8"										
800.00	1.25	184.44	800.00	-0.54	-0.04	0.55	2.50	2.50	0.00	
900.00	3.75	184.44	899.89	-4.89	-0.38	4.91	2.50	2.50	0.00	
978.44	5.71	184.44	978.06	-11.34	-0.88	11.38	2.50	2.50	0.00	
1,000.00	5.71	184.44	999.51	-13.48	-1.05	13.52	0.00	0.00	0.00	
1,100.00	5.71	184.44	1,099.02	-23.40	-1.82	23.47	0.00	0.00	0.00	
1,200.00	5.71	184.44	1,198.52	-33.32	-2.59	33.42	0.00	0.00	0.00	
1,300.00	5.71	184.44	1,298.03	-43.24	-3.36	43.37	0.00	0.00	0.00	
1,400.00	5.71	184.44	1,397.53	-53.17	-4.13	53.33	0.00	0.00	0.00	
1,500.00	5.71	184.44	1,497.03	-63.09	-4.90	63.28	0.00	0.00	0.00	
1,600.00	5.71	184.44	1,596.54	-73.01	-5.67	73.23	0.00	0.00	0.00	
1,700.00	5.71	184.44	1,696.04	-82.93	-6.44	83.18	0.00	0.00	0.00	
1,800.00	5.71	184.44	1,795.54	-92.85	-7.21	93.13	0.00	0.00	0.00	
1,900.00	5.71	184.44	1,895.05	-102.77	-7.98	103.08	0.00	0.00	0.00	
2,000.00	5.71	184.44	1,994.55	-112.69	-8.75	113.03	0.00	0.00	0.00	
2,100.00	5.71	184.44	2,094.05	-122.61	-9.52	122.98	0.00	0.00	0.00	
2,200.00	5.71	184.44	2,193.56	-132.54	-10.30	132.94	0.00	0.00	0.00	
2,300.00	5.71	184.44	2,293.06	-142.46	-11.07	142.89	0.00	0.00	0.00	
2,400.00	5.71	184.44	2,392.57	-152.38	-11.84	152.84	0.00	0.00	0.00	
2,500.00	5.71	184.44	2,492.07	-162.30	-12.61	162.79	0.00	0.00	0.00	
2,600.00	5.71	184.44	2,591.57	-172.22	-13.38	172.74	0.00	0.00	0.00	
2,700.00	5.71	184.44	2,691.08	-182.14	-14.15	182.69	0.00	0.00	0.00	
2,800.00	5.71	184.44	2,790.58	-192.06	-14.92	192.64	0.00	0.00	0.00	
2,900.00	5.71	184.44	2,890.08	-201.98	-15.69	202.59	0.00	0.00	0.00	
3,000.00	5.71	184.44	2,989.59	-211.91	-16.46	212.54	0.00	0.00	0.00	
3,100.00	5.71	184.44	3,089.09	-221.83	-17.23	222.50	0.00	0.00	0.00	
3,200.00	5.71	184.44	3,188.59	-231.75	-18.00	232.45	0.00	0.00	0.00	
3,300.00	5.71	184.44	3,288.10	-241.67	-18.77	242.40	0.00	0.00	0.00	
3,400.00	5.71	184.44	3,387.60	-251.59	-19.54	252.35	0.00	0.00	0.00	
3,500.00	5.71	184.44	3,487.11	-261.51	-20.31	262.30	0.00	0.00	0.00	
3,563.21	5.71	184.44	3,550.00	-267.78	-20.80	268.59	0.00	0.00	0.00	
Mesaverde										
3,600.00	5.71	184.44	3,586.61	-271.43	-21.09	272.25	0.00	0.00	0.00	
3,700.00	5.71	184.44	3,686.11	-281.36	-21.86	282.20	0.00	0.00	0.00	
3,800.00	5.71	184.44	3,785.62	-291.28	-22.63	292.15	0.00	0.00	0.00	
3,900.00	5.71	184.44	3,885.12	-301.20	-23.40	302.11	0.00	0.00	0.00	
4,000.00	5.71	184.44	3,984.62	-311.12	-24.17	312.06	0.00	0.00	0.00	
4,100.00	5.71	184.44	4,084.13	-321.04	-24.94	322.01	0.00	0.00	0.00	
4,200.00	5.71	184.44	4,183.63	-330.96	-25.71	331.96	0.00	0.00	0.00	
4,300.00	5.71	184.44	4,283.13	-340.88	-26.48	341.91	0.00	0.00	0.00	
4,352.12	5.71	184.44	4,335.00	-346.05	-26.88	347.10	0.00	0.00	0.00	
Price Coal										
4,400.00	5.71	184.44	4,382.64	-350.80	-27.25	351.86	0.00	0.00	0.00	
4,500.00	5.71	184.44	4,482.14	-360.73	-28.02	361.81	0.00	0.00	0.00	

# BBC

## Planning Report

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<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 22A-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)
4,600.00	5.71	184.44	4,581.65	-370.65	-28.79	371.76	0.00	0.00	0.00
4,700.00	5.71	184.44	4,681.15	-380.57	-29.56	381.71	0.00	0.00	0.00
4,800.00	5.71	184.44	4,780.65	-390.49	-30.33	391.67	0.00	0.00	0.00
4,844.46	5.71	184.44	4,824.89	-394.90	-30.68	396.09	0.00	0.00	0.00
4,900.00	4.88	184.44	4,880.20	-400.01	-31.07	401.22	1.50	-1.50	0.00
5,000.00	3.38	184.44	4,979.93	-407.19	-31.63	408.41	1.50	-1.50	0.00
5,100.00	1.88	184.44	5,079.82	-411.76	-31.99	413.00	1.50	-1.50	0.00
5,200.00	0.38	184.44	5,179.80	-413.72	-32.14	414.97	1.50	-1.50	0.00
5,215.20	0.15	184.44	5,195.00	-413.79	-32.14	415.04	1.50	-1.50	0.00
<b>Top Gas</b>									
5,225.20	0.00	0.00	5,205.00	-413.80	-32.14	415.05	1.50	-1.50	0.00
5,300.00	0.00	0.00	5,279.80	-413.80	-32.14	415.05	0.00	0.00	0.00
5,400.00	0.00	0.00	5,379.80	-413.80	-32.14	415.05	0.00	0.00	0.00
5,500.00	0.00	0.00	5,479.80	-413.80	-32.14	415.05	0.00	0.00	0.00
5,600.00	0.00	0.00	5,579.80	-413.80	-32.14	415.05	0.00	0.00	0.00
5,700.00	0.00	0.00	5,679.80	-413.80	-32.14	415.05	0.00	0.00	0.00
5,800.00	0.00	0.00	5,779.80	-413.80	-32.14	415.05	0.00	0.00	0.00
5,900.00	0.00	0.00	5,879.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,000.00	0.00	0.00	5,979.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,100.00	0.00	0.00	6,079.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,200.00	0.00	0.00	6,179.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,300.00	0.00	0.00	6,279.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,400.00	0.00	0.00	6,379.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,500.00	0.00	0.00	6,479.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,600.00	0.00	0.00	6,579.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,700.00	0.00	0.00	6,679.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,800.00	0.00	0.00	6,779.80	-413.80	-32.14	415.05	0.00	0.00	0.00
6,900.00	0.00	0.00	6,879.80	-413.80	-32.14	415.05	0.00	0.00	0.00
7,000.00	0.00	0.00	6,979.80	-413.80	-32.14	415.05	0.00	0.00	0.00
7,100.00	0.00	0.00	7,079.80	-413.80	-32.14	415.05	0.00	0.00	0.00
7,200.00	0.00	0.00	7,179.80	-413.80	-32.14	415.05	0.00	0.00	0.00
7,225.20	0.00	0.00	7,205.00	-413.80	-32.14	415.05	0.00	0.00	0.00
<b>Rollins</b>									
7,300.00	0.00	0.00	7,279.80	-413.80	-32.14	415.05	0.00	0.00	0.00
7,400.00	0.00	0.00	7,379.80	-413.80	-32.14	415.05	0.00	0.00	0.00
7,500.00	0.00	0.00	7,479.80	-413.80	-32.14	415.05	0.00	0.00	0.00
7,525.20	0.00	0.00	7,505.00	-413.80	-32.14	415.05	0.00	0.00	0.00

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
750.00	750.00	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 22A-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 22A-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 (°)	
3,563.21	3,550.00	Mesaverde		0.00		
4,352.12	4,335.00	Price Coal		0.00		
5,215.20	5,195.00	Top Gas		0.00		
7,225.20	7,205.00	Rollins		0.00		