

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**MDP #15**

**GGU Swanson 32B-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 Swanson 32B-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 Swanson 32B-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 Swanson 32B-29-691		
<b>Well Position</b>	<b>+N/-S</b>	43.49 ft	<b>Northing:</b>
	<b>+E/-W</b>	-137.18 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			39° 29' 48.240 N
			<b>Longitude:</b>
			107° 34' 34.1300 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	7.86

<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	
755.00	0.00	0.00	755.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,776.60	25.54	7.86	1,743.10	221.84	30.62	2.50	2.50	0.00	7.86	
3,317.20	25.54	7.86	3,133.17	879.82	121.42	0.00	0.00	0.00	0.00	
5,019.87	0.00	0.00	4,780.00	1,249.56	172.45	1.50	-1.50	0.00	180.00	
7,519.87	0.00	0.00	7,280.00	1,249.56	172.45	0.00	0.00	0.00	0.00	GGU Swanson 32B

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well GGU Swanson 32B-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 Swanson 32B-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
755.00	0.00	0.00	755.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
800.00	1.12	7.86	800.00	0.44	0.06	0.44	2.50	2.50	0.00
900.00	3.62	7.86	899.90	4.54	0.63	4.59	2.50	2.50	0.00
1,000.00	6.12	7.86	999.53	12.96	1.79	13.08	2.50	2.50	0.00
1,100.00	8.62	7.86	1,098.70	25.67	3.54	25.92	2.50	2.50	0.00
1,200.00	11.12	7.86	1,197.21	42.66	5.89	43.07	2.50	2.50	0.00
1,300.00	13.62	7.86	1,294.88	63.89	8.82	64.50	2.50	2.50	0.00
1,400.00	16.12	7.86	1,391.52	89.32	12.33	90.16	2.50	2.50	0.00
1,500.00	18.62	7.86	1,486.95	118.90	16.41	120.02	2.50	2.50	0.00
1,600.00	21.12	7.86	1,580.98	152.57	21.06	154.02	2.50	2.50	0.00
1,700.00	23.62	7.86	1,673.45	190.28	26.26	192.08	2.50	2.50	0.00
1,776.60	25.54	7.86	1,743.10	221.84	30.62	223.95	2.50	2.50	0.00
1,800.00	25.54	7.86	1,764.22	231.84	31.99	234.04	0.00	0.00	0.00
1,900.00	25.54	7.86	1,854.44	274.55	37.89	277.15	0.00	0.00	0.00
2,000.00	25.54	7.86	1,944.67	317.26	43.78	320.26	0.00	0.00	0.00
2,100.00	25.54	7.86	2,034.90	359.97	49.68	363.38	0.00	0.00	0.00
2,200.00	25.54	7.86	2,125.13	402.67	55.57	406.49	0.00	0.00	0.00
2,300.00	25.54	7.86	2,215.36	445.38	61.47	449.61	0.00	0.00	0.00
2,400.00	25.54	7.86	2,305.59	488.09	67.36	492.72	0.00	0.00	0.00
2,500.00	25.54	7.86	2,395.82	530.80	73.25	535.83	0.00	0.00	0.00
2,600.00	25.54	7.86	2,486.04	573.51	79.15	578.95	0.00	0.00	0.00
2,700.00	25.54	7.86	2,576.27	616.22	85.04	622.06	0.00	0.00	0.00
2,800.00	25.54	7.86	2,666.50	658.93	90.94	665.18	0.00	0.00	0.00
2,900.00	25.54	7.86	2,756.73	701.64	96.83	708.29	0.00	0.00	0.00
3,000.00	25.54	7.86	2,846.96	744.35	102.72	751.40	0.00	0.00	0.00
3,100.00	25.54	7.86	2,937.19	787.06	108.62	794.52	0.00	0.00	0.00
3,200.00	25.54	7.86	3,027.42	829.77	114.51	837.63	0.00	0.00	0.00
3,300.00	25.54	7.86	3,117.64	872.48	120.41	880.74	0.00	0.00	0.00
3,317.20	25.54	7.86	3,133.17	879.82	121.42	888.16	0.00	0.00	0.00
3,400.00	24.30	7.86	3,208.25	914.38	126.19	923.05	1.50	-1.50	0.00
3,500.00	22.80	7.86	3,299.92	953.96	131.65	963.00	1.50	-1.50	0.00
3,600.00	21.30	7.86	3,392.61	991.14	136.78	1,000.53	1.50	-1.50	0.00
3,629.36	20.86	7.86	3,420.00	1,001.60	138.23	1,011.09	1.50	-1.50	0.00
Mesaverde									
3,700.00	19.80	7.86	3,486.24	1,025.91	141.58	1,035.63	1.50	-1.50	0.00
3,800.00	18.30	7.86	3,580.77	1,058.24	146.04	1,068.27	1.50	-1.50	0.00
3,900.00	16.80	7.86	3,676.11	1,088.10	150.16	1,098.42	1.50	-1.50	0.00
4,000.00	15.30	7.86	3,772.21	1,115.49	153.94	1,126.06	1.50	-1.50	0.00
4,100.00	13.80	7.86	3,869.00	1,140.37	157.38	1,151.18	1.50	-1.50	0.00
4,200.00	12.30	7.86	3,966.42	1,162.73	160.46	1,173.75	1.50	-1.50	0.00
4,300.00	10.80	7.86	4,064.39	1,182.56	163.20	1,193.77	1.50	-1.50	0.00
4,400.00	9.30	7.86	4,162.85	1,199.85	165.59	1,211.22	1.50	-1.50	0.00
4,427.49	8.89	7.86	4,190.00	1,204.15	166.18	1,215.56	1.50	-1.50	0.00
Price Coal									

# 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 Swanson 32B-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)
4,500.00	7.80	7.86	4,261.74	1,214.57	167.62	1,226.08	1.50	-1.50	0.00
4,600.00	6.30	7.86	4,360.98	1,226.73	169.29	1,238.35	1.50	-1.50	0.00
4,700.00	4.80	7.86	4,460.51	1,236.30	170.62	1,248.02	1.50	-1.50	0.00
4,800.00	3.30	7.86	4,560.26	1,243.30	171.58	1,255.08	1.50	-1.50	0.00
4,900.00	1.80	7.86	4,660.15	1,247.70	172.19	1,259.52	1.50	-1.50	0.00
5,000.00	0.30	7.86	4,760.14	1,249.51	172.44	1,261.35	1.50	-1.50	0.00
5,019.87	0.00	0.00	4,780.00	1,249.56	172.45	1,261.40	1.50	-1.50	0.00
5,099.87	0.00	0.00	4,860.00	1,249.56	172.45	1,261.40	0.00	0.00	0.00
<b>Top Gas</b>									
5,100.00	0.00	0.00	4,860.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
5,200.00	0.00	0.00	4,960.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
5,300.00	0.00	0.00	5,060.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
5,400.00	0.00	0.00	5,160.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
5,500.00	0.00	0.00	5,260.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
5,600.00	0.00	0.00	5,360.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
5,700.00	0.00	0.00	5,460.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
5,800.00	0.00	0.00	5,560.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
5,900.00	0.00	0.00	5,660.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,000.00	0.00	0.00	5,760.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,100.00	0.00	0.00	5,860.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,200.00	0.00	0.00	5,960.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,300.00	0.00	0.00	6,060.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,400.00	0.00	0.00	6,160.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,500.00	0.00	0.00	6,260.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,600.00	0.00	0.00	6,360.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,700.00	0.00	0.00	6,460.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,800.00	0.00	0.00	6,560.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
6,900.00	0.00	0.00	6,660.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
7,000.00	0.00	0.00	6,760.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
7,100.00	0.00	0.00	6,860.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
7,200.00	0.00	0.00	6,960.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
7,219.87	0.00	0.00	6,980.00	1,249.56	172.45	1,261.40	0.00	0.00	0.00
<b>Rollins</b>									
7,300.00	0.00	0.00	7,060.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
7,400.00	0.00	0.00	7,160.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
7,500.00	0.00	0.00	7,260.13	1,249.56	172.45	1,261.40	0.00	0.00	0.00
7,519.87	0.00	0.00	7,280.00	1,249.56	172.45	1,261.40	0.00	0.00	0.00
<b>TD</b>									

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
755.00	755.00	9 5/8"	9-5/8	12-1/4

# BBC

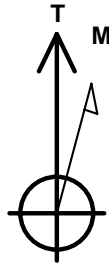
## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well GGU Swanson 32B-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 Swanson 32B-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 (°)	
3,629.36	3,420.00	Mesaverde		0.00		
4,427.49	4,190.00	Price Coal		0.00		
5,099.87	4,860.00	Top Gas		0.00		
7,219.87	6,980.00	Rollins		0.00		
7,519.87	7,280.00	TD		0.00		

## WELL DETAILS: GGU Swanson 32B-29-691

Ground Level: 0.00  
 +N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.00 0.00 1612508.363 2414167.398 29° 48.207' N 104° 34.1300' W



Azimuths to True North  
 Magnetic North: 10.37°

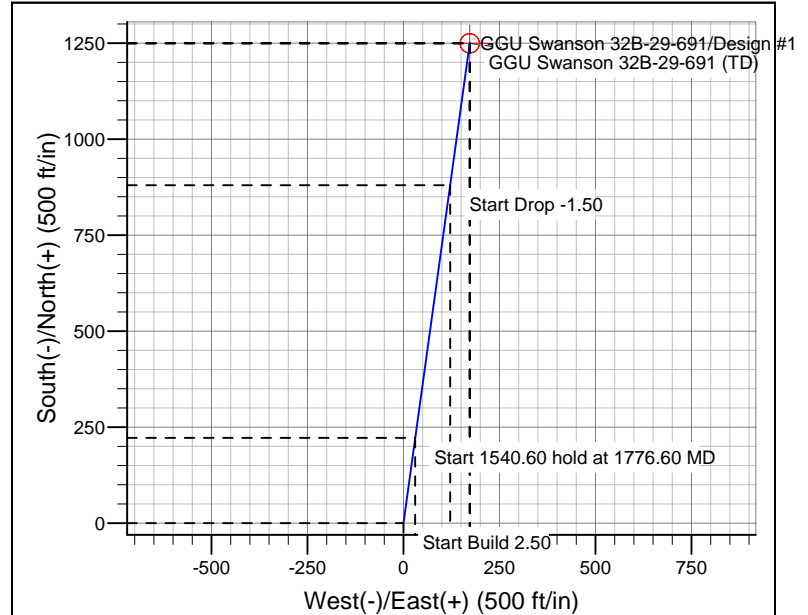
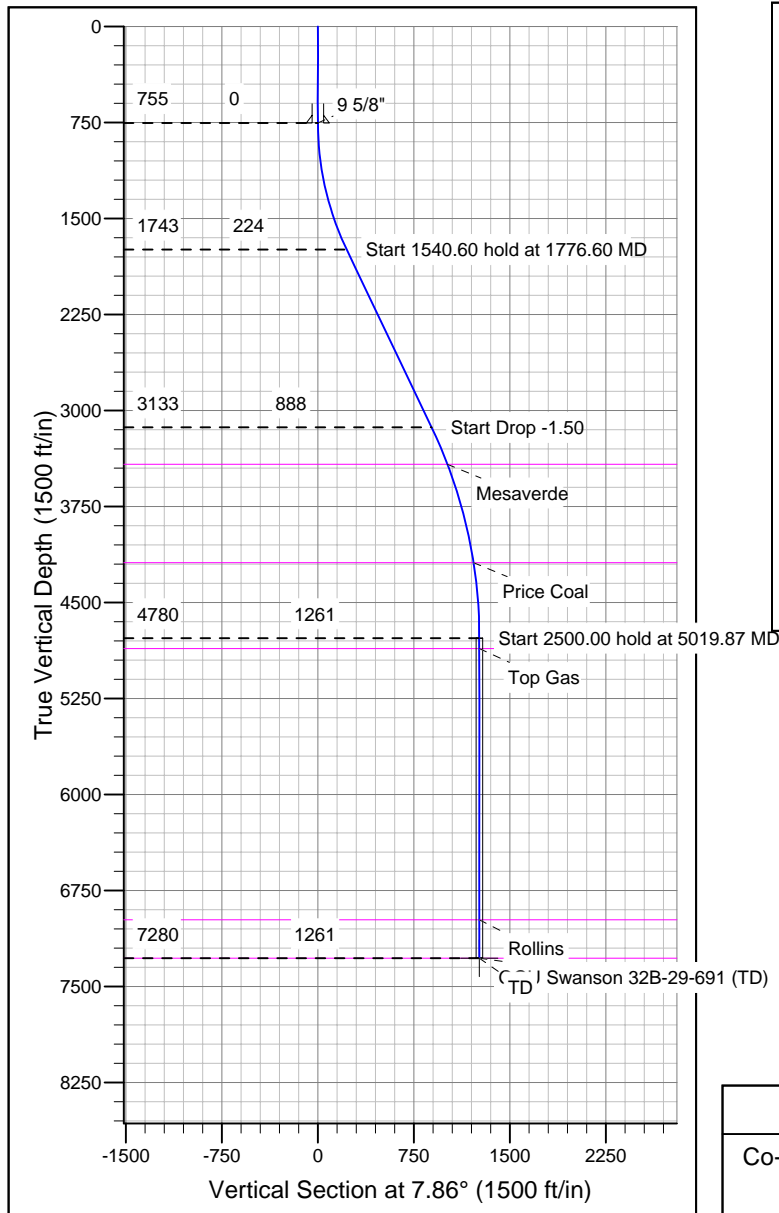
Magnetic Field  
 Strength: 52398.2snT  
 Dip Angle: 65.83°  
 Date: 4/15/2010  
 Model: BGGM2007

## 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	755.00	0.00	0.00	755.00	0.00	0.00	0.00	0.00	0.00	
3	1776.60	25.54	7.861743.10	221.84	30.62	2.50	7.86	223.95		
4	3117.20	25.54	7.863133.17	879.82	121.42	0.00	0.00	888.16		
5	5019.87	0.00	0.004780.00	1249.56	172.45	1.50	180.00	261.40		
6	7280.00	0.00	0.007280.00	1249.56	172.45	0.00	0.00	261.40		GGU Swanson 32B-29-691 (TD)

## WELLBORE TARGET DETAILS

Name TVD +N/-S +E/-W Shape  
 GGU Swanson 32B-29-691 (TD) 172.45 Circle (Radius: 25.00)



## CASING DETAILS

TVD MD Name Size  
 755.00 755.00 9 5/8" 9-5/8"

## FORMATION TOP DETAILS

TVD	MD	Formation
3420.00	3629.36	Mesaverde
4190.00	4427.49	Price Coal
4860.00	5099.87	Top Gas
6980.00	7219.87	Rollins
7280.00	7519.87	TD

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GGU Swanson 32B-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