

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**CBC #1**

**CBC Fed 23D-22-692**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**24 January, 2012**

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well CBC Fed 23D-22-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5773.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5773.00ft (Original Well Elev)
<b>Site:</b>	CBC #1	<b>North Reference:</b>	True
<b>Well:</b>	CBC Fed 23D-22-692	<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>	CBC #1		
<b>Site Position:</b>		<b>Northing:</b>	1,617,285.528 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,392,460.705 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 30' 30.449 N
		<b>Longitude:</b>	107° 39' 12.4092 W
		<b>Grid Convergence:</b>	-1.36 °

<b>Well</b>	CBC Fed 23D-22-692		
<b>Well Position</b>	<b>+N/-S</b>	48.44 ft	<b>Northing:</b>
	<b>+E/-W</b>	16.36 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			39° 30' 30.927 N
			<b>Longitude:</b>
			107° 39' 12.2004 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>
	IGRF2010	1/24/2012	10.12	65.80	52,242

<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	336.69

<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	
760.00	0.00	0.00	760.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,553.64	19.84	336.69	1,537.87	124.94	-53.84	2.50	2.50	0.00	336.69	
4,525.74	19.84	336.69	4,333.54	1,051.33	-453.09	0.00	0.00	0.00	0.00	
5,848.47	0.00	0.00	5,630.00	1,259.56	-542.83	1.50	-1.50	0.00	180.00	
7,848.47	0.00	0.00	7,630.00	1,259.56	-542.83	0.00	0.00	0.00	0.00	CBC Fed 23D-22-6

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well CBC Fed 23D-22-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5773.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5773.00ft (Original Well Elev)
<b>Site:</b>	CBC #1	<b>North Reference:</b>	True
<b>Well:</b>	CBC Fed 23D-22-692	<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
760.00	0.00	0.00	760.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	1.00	336.69	800.00	0.32	-0.14	0.35	2.50	2.50	0.00
900.00	3.50	336.69	899.91	3.93	-1.69	4.27	2.50	2.50	0.00
1,000.00	6.00	336.69	999.56	11.53	-4.97	12.55	2.50	2.50	0.00
1,100.00	8.50	336.69	1,098.75	23.12	-9.96	25.17	2.50	2.50	0.00
1,200.00	11.00	336.69	1,197.30	38.67	-16.67	42.11	2.50	2.50	0.00
1,300.00	13.50	336.69	1,295.02	58.15	-25.06	63.32	2.50	2.50	0.00
1,400.00	16.00	336.69	1,391.71	81.53	-35.14	88.78	2.50	2.50	0.00
1,500.00	18.50	336.69	1,487.21	108.76	-46.87	118.43	2.50	2.50	0.00
1,553.64	19.84	336.69	1,537.87	124.94	-53.84	136.05	2.50	2.50	0.00
1,600.00	19.84	336.69	1,581.48	139.39	-60.07	151.78	0.00	0.00	0.00
1,700.00	19.84	336.69	1,675.54	170.56	-73.51	185.72	0.00	0.00	0.00
1,800.00	19.84	336.69	1,769.61	201.73	-86.94	219.66	0.00	0.00	0.00
1,900.00	19.84	336.69	1,863.67	232.90	-100.37	253.61	0.00	0.00	0.00
2,000.00	19.84	336.69	1,957.74	264.07	-113.80	287.55	0.00	0.00	0.00
2,100.00	19.84	336.69	2,051.80	295.24	-127.24	321.49	0.00	0.00	0.00
2,200.00	19.84	336.69	2,145.86	326.41	-140.67	355.43	0.00	0.00	0.00
2,300.00	19.84	336.69	2,239.93	357.58	-154.10	389.37	0.00	0.00	0.00
2,400.00	19.84	336.69	2,333.99	388.75	-167.54	423.31	0.00	0.00	0.00
2,500.00	19.84	336.69	2,428.06	419.92	-180.97	457.25	0.00	0.00	0.00
2,600.00	19.84	336.69	2,522.12	451.09	-194.40	491.19	0.00	0.00	0.00
2,700.00	19.84	336.69	2,616.18	482.26	-207.84	525.13	0.00	0.00	0.00
2,800.00	19.84	336.69	2,710.25	513.42	-221.27	559.08	0.00	0.00	0.00
2,900.00	19.84	336.69	2,804.31	544.59	-234.70	593.02	0.00	0.00	0.00
3,000.00	19.84	336.69	2,898.37	575.76	-248.14	626.96	0.00	0.00	0.00
3,100.00	19.84	336.69	2,992.44	606.93	-261.57	660.90	0.00	0.00	0.00
3,200.00	19.84	336.69	3,086.50	638.10	-275.00	694.84	0.00	0.00	0.00
3,300.00	19.84	336.69	3,180.57	669.27	-288.44	728.78	0.00	0.00	0.00
3,400.00	19.84	336.69	3,274.63	700.44	-301.87	762.72	0.00	0.00	0.00
3,500.00	19.84	336.69	3,368.69	731.61	-315.30	796.66	0.00	0.00	0.00
3,600.00	19.84	336.69	3,462.76	762.78	-328.73	830.60	0.00	0.00	0.00
3,700.00	19.84	336.69	3,556.82	793.95	-342.17	864.54	0.00	0.00	0.00
3,800.00	19.84	336.69	3,650.89	825.12	-355.60	898.49	0.00	0.00	0.00
3,900.00	19.84	336.69	3,744.95	856.29	-369.03	932.43	0.00	0.00	0.00
4,000.00	19.84	336.69	3,839.01	887.46	-382.47	966.37	0.00	0.00	0.00
4,100.00	19.84	336.69	3,933.08	918.63	-395.90	1,000.31	0.00	0.00	0.00
4,200.00	19.84	336.69	4,027.14	949.80	-409.33	1,034.25	0.00	0.00	0.00
4,300.00	19.84	336.69	4,121.20	980.97	-422.77	1,068.19	0.00	0.00	0.00
4,400.00	19.84	336.69	4,215.27	1,012.14	-436.20	1,102.13	0.00	0.00	0.00
4,500.00	19.84	336.69	4,309.33	1,043.31	-449.63	1,136.07	0.00	0.00	0.00
4,525.74	19.84	336.69	4,333.54	1,051.33	-453.09	1,144.81	0.00	0.00	0.00
4,600.00	18.73	336.69	4,403.64	1,073.85	-462.80	1,169.33	1.50	-1.50	0.00
4,700.00	17.23	336.69	4,498.75	1,102.20	-475.01	1,200.20	1.50	-1.50	0.00
4,800.00	15.73	336.69	4,594.64	1,128.24	-486.24	1,228.56	1.50	-1.50	0.00
4,900.00	14.23	336.69	4,691.24	1,151.98	-496.46	1,254.40	1.50	-1.50	0.00

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well CBC Fed 23D-22-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5773.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5773.00ft (Original Well Elev)
<b>Site:</b>	CBC #1	<b>North Reference:</b>	True
<b>Well:</b>	CBC Fed 23D-22-692	<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)
5,000.00	12.73	336.69	4,788.49	1,173.38	-505.69	1,277.71	1.50	-1.50	0.00
5,100.00	11.23	336.69	4,886.31	1,192.43	-513.90	1,298.46	1.50	-1.50	0.00
5,200.00	9.73	336.69	4,984.64	1,209.13	-521.10	1,316.64	1.50	-1.50	0.00
5,300.00	8.23	336.69	5,083.41	1,223.46	-527.27	1,332.25	1.50	-1.50	0.00
5,400.00	6.73	336.69	5,182.56	1,235.41	-532.42	1,345.26	1.50	-1.50	0.00
5,500.00	5.23	336.69	5,282.01	1,244.98	-536.54	1,355.67	1.50	-1.50	0.00
5,600.00	3.73	336.69	5,381.70	1,252.14	-539.63	1,363.48	1.50	-1.50	0.00
5,700.00	2.23	336.69	5,481.56	1,256.91	-541.69	1,368.67	1.50	-1.50	0.00
5,800.00	0.73	336.69	5,581.53	1,259.28	-542.71	1,371.25	1.50	-1.50	0.00
5,848.47	0.00	0.00	5,630.00	1,259.56	-542.83	1,371.56	1.50	-1.50	0.00
5,900.00	0.00	0.00	5,681.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,000.00	0.00	0.00	5,781.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,100.00	0.00	0.00	5,881.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,200.00	0.00	0.00	5,981.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,300.00	0.00	0.00	6,081.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,400.00	0.00	0.00	6,181.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,500.00	0.00	0.00	6,281.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,600.00	0.00	0.00	6,381.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,700.00	0.00	0.00	6,481.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,800.00	0.00	0.00	6,581.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
6,900.00	0.00	0.00	6,681.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,000.00	0.00	0.00	6,781.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,100.00	0.00	0.00	6,881.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,200.00	0.00	0.00	6,981.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,300.00	0.00	0.00	7,081.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,400.00	0.00	0.00	7,181.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,500.00	0.00	0.00	7,281.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,600.00	0.00	0.00	7,381.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,700.00	0.00	0.00	7,481.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,800.00	0.00	0.00	7,581.53	1,259.56	-542.83	1,371.56	0.00	0.00	0.00
7,848.47	0.00	0.00	7,630.00	1,259.56	-542.83	1,371.56	0.00	0.00	0.00

### Formations

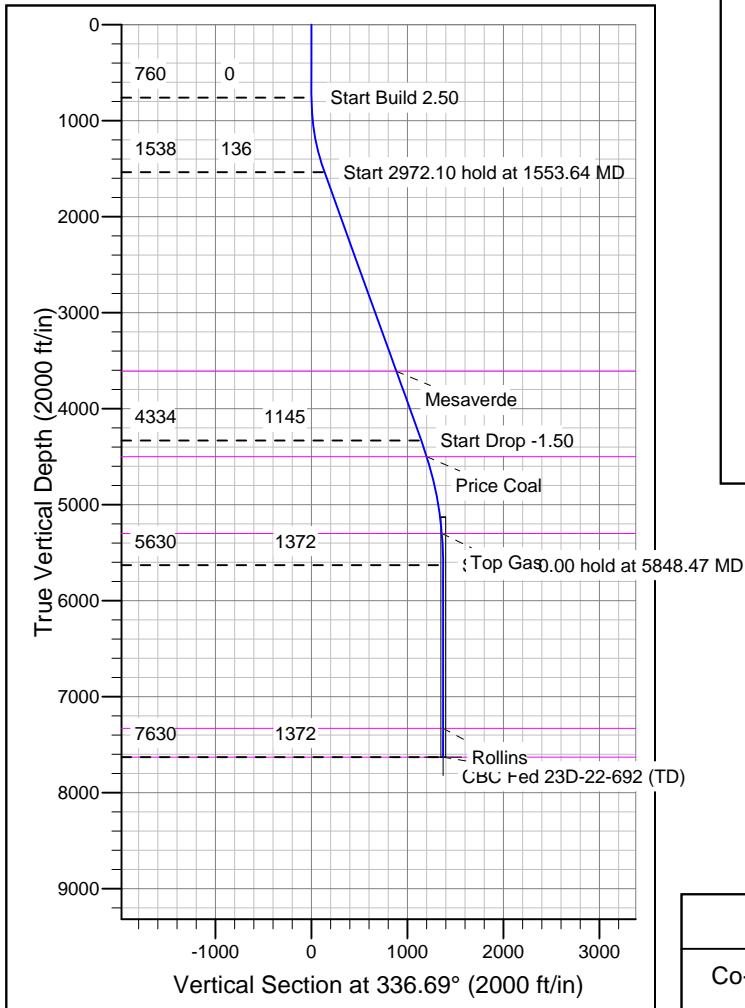
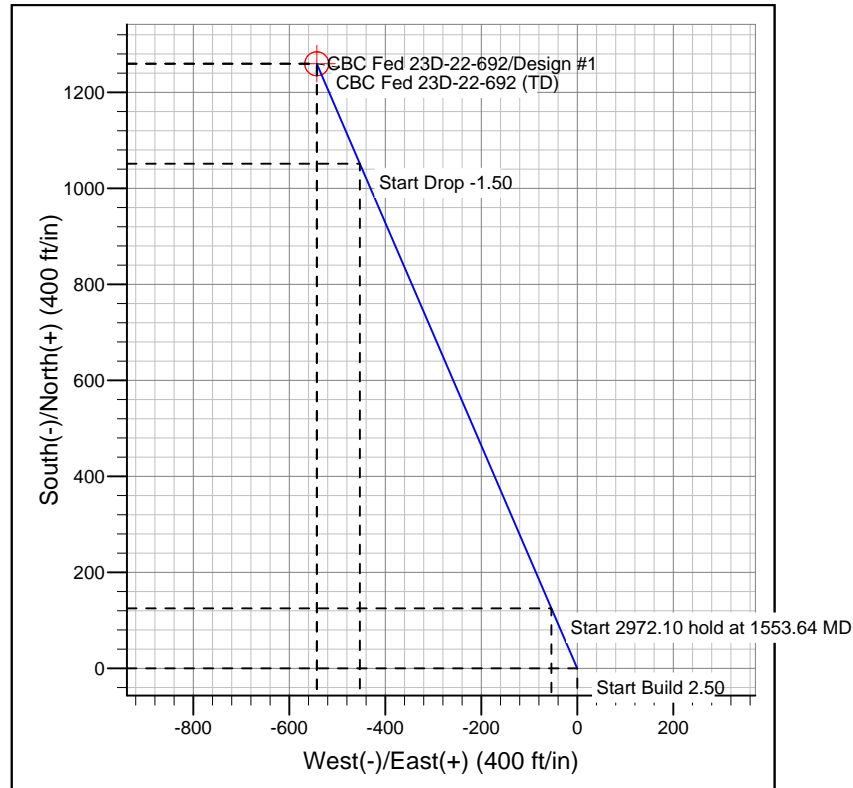
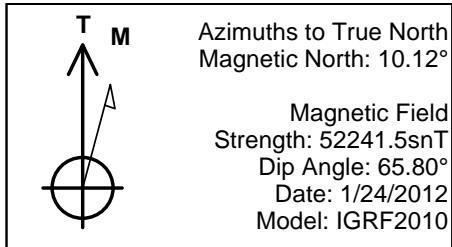
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,756.53	3,610.00	Mesaverde		0.00	
4,701.31	4,500.00	Price Coal		0.00	
5,518.06	5,300.00	Top Gas		0.00	
7,548.47	7,330.00	Rollins		0.00	
7,848.47	7,630.00	TD		0.00	

# WELL DETAILS: CBC Fed 23D-22-692

+N/-S	+E/-W	Northing	Easting	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1617333.562	2392478.213	0.00	39° 30' 30.927 N 107° 39' 12.2004 W		

## 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	760.00	0.00	0.00	760.00	0.00	0.00	0.00	0.00	0.00	
3	1553.64	19.84	336.69	1537.87	124.94	-53.84	2.50	336.69	136.05	
4	4525.74	19.84	336.69	4333.54	1051.33	-453.09	0.00	0.00	1144.81	
5	5848.47	0.00	0.00	5630.00	1259.56	-542.83	1.50	180.00	1371.56	
6	7848.47	0.00	0.00	7630.00	1259.56	-542.83	0.00	0.00	1371.56	CBC Fed 23D-22-692 (TD)



## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3610.00	3756.53	Mesaverde
4500.00	4701.31	Price Coal
5300.00	5518.06	Top Gas
7330.00	7548.47	Rollins
7630.00	7848.47	TD

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well CBC Fed 23D-22-692, True North  
 Vertical (TVD) Reference: WELL @ 5773.00ft (Original Well Elev)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: WELL @ 5773.00ft (Original Well Elev)  
 Calculation Method: Minimum Curvature