

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**CBC #1**

**CBC 34B-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 34B-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 34B-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 34B-22-692		
<b>Well Position</b>	<b>+N/-S</b>	18.57 ft	<b>Northing:</b>
	<b>+E/-W</b>	12.41 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			39° 30' 30.632 N
			<b>Longitude:</b>
			107° 39' 12.2508 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	52,241

<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	131.76

<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	
1,359.10	14.98	131.76	1,352.30	-51.86	58.08	2.50	2.50	0.00	131.76	
4,620.42	14.98	131.76	4,502.83	-613.25	686.76	0.00	0.00	0.00	0.00	
5,618.93	0.00	0.00	5,490.00	-699.69	783.55	1.50	-1.50	0.00	180.00	
7,618.93	0.00	0.00	7,490.00	-699.69	783.55	0.00	0.00	0.00	0.00	CBC 34B-22-692 (T

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## Planning Report

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<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 34B-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	131.76	800.00	-0.23	0.26	0.35	2.50	2.50	0.00	
900.00	3.50	131.76	899.91	-2.85	3.19	4.27	2.50	2.50	0.00	
1,000.00	6.00	131.76	999.56	-8.36	9.36	12.55	2.50	2.50	0.00	
1,100.00	8.50	131.76	1,098.75	-16.77	18.78	25.17	2.50	2.50	0.00	
1,200.00	11.00	131.76	1,197.30	-28.05	31.41	42.11	2.50	2.50	0.00	
1,300.00	13.50	131.76	1,295.02	-42.18	47.23	63.32	2.50	2.50	0.00	
1,359.10	14.98	131.76	1,352.30	-51.86	58.08	77.86	2.50	2.50	0.00	
1,400.00	14.98	131.76	1,391.81	-58.90	65.96	88.43	0.00	0.00	0.00	
1,500.00	14.98	131.76	1,488.41	-76.11	85.24	114.27	0.00	0.00	0.00	
1,600.00	14.98	131.76	1,585.02	-93.33	104.51	140.12	0.00	0.00	0.00	
1,700.00	14.98	131.76	1,681.62	-110.54	123.79	165.96	0.00	0.00	0.00	
1,800.00	14.98	131.76	1,778.22	-127.75	143.07	191.81	0.00	0.00	0.00	
1,900.00	14.98	131.76	1,874.82	-144.97	162.34	217.65	0.00	0.00	0.00	
2,000.00	14.98	131.76	1,971.43	-162.18	181.62	243.49	0.00	0.00	0.00	
2,100.00	14.98	131.76	2,068.03	-179.40	200.90	269.34	0.00	0.00	0.00	
2,200.00	14.98	131.76	2,164.63	-196.61	220.18	295.18	0.00	0.00	0.00	
2,300.00	14.98	131.76	2,261.24	-213.82	239.45	321.03	0.00	0.00	0.00	
2,400.00	14.98	131.76	2,357.84	-231.04	258.73	346.87	0.00	0.00	0.00	
2,500.00	14.98	131.76	2,454.44	-248.25	278.01	372.71	0.00	0.00	0.00	
2,600.00	14.98	131.76	2,551.04	-265.46	297.28	398.56	0.00	0.00	0.00	
2,700.00	14.98	131.76	2,647.65	-282.68	316.56	424.40	0.00	0.00	0.00	
2,800.00	14.98	131.76	2,744.25	-299.89	335.84	450.25	0.00	0.00	0.00	
2,900.00	14.98	131.76	2,840.85	-317.11	355.11	476.09	0.00	0.00	0.00	
3,000.00	14.98	131.76	2,937.45	-334.32	374.39	501.93	0.00	0.00	0.00	
3,100.00	14.98	131.76	3,034.06	-351.53	393.67	527.78	0.00	0.00	0.00	
3,200.00	14.98	131.76	3,130.66	-368.75	412.95	553.62	0.00	0.00	0.00	
3,300.00	14.98	131.76	3,227.26	-385.96	432.22	579.47	0.00	0.00	0.00	
3,400.00	14.98	131.76	3,323.86	-403.17	451.50	605.31	0.00	0.00	0.00	
3,500.00	14.98	131.76	3,420.47	-420.39	470.78	631.16	0.00	0.00	0.00	
3,600.00	14.98	131.76	3,517.07	-437.60	490.05	657.00	0.00	0.00	0.00	
3,700.00	14.98	131.76	3,613.67	-454.82	509.33	682.84	0.00	0.00	0.00	
3,800.00	14.98	131.76	3,710.28	-472.03	528.61	708.69	0.00	0.00	0.00	
3,900.00	14.98	131.76	3,806.88	-489.24	547.89	734.53	0.00	0.00	0.00	
4,000.00	14.98	131.76	3,903.48	-506.46	567.16	760.38	0.00	0.00	0.00	
4,100.00	14.98	131.76	4,000.08	-523.67	586.44	786.22	0.00	0.00	0.00	
4,200.00	14.98	131.76	4,096.69	-540.88	605.72	812.06	0.00	0.00	0.00	
4,300.00	14.98	131.76	4,193.29	-558.10	624.99	837.91	0.00	0.00	0.00	
4,400.00	14.98	131.76	4,289.89	-575.31	644.27	863.75	0.00	0.00	0.00	
4,500.00	14.98	131.76	4,386.49	-592.53	663.55	889.60	0.00	0.00	0.00	
4,600.00	14.98	131.76	4,483.10	-609.74	682.82	915.44	0.00	0.00	0.00	
4,620.42	14.98	131.76	4,502.83	-613.25	686.76	920.72	0.00	0.00	0.00	
4,700.00	13.78	131.76	4,579.91	-626.42	701.50	940.48	1.50	-1.50	0.00	
4,800.00	12.28	131.76	4,677.33	-641.44	718.32	963.03	1.50	-1.50	0.00	
4,900.00	10.78	131.76	4,775.31	-654.76	733.24	983.03	1.50	-1.50	0.00	

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## Planning Report

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<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 34B-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	9.28	131.76	4,873.78	-666.36	746.23	1,000.45	1.50	-1.50	0.00
5,100.00	7.78	131.76	4,972.67	-676.25	757.30	1,015.29	1.50	-1.50	0.00
5,200.00	6.28	131.76	5,071.91	-684.40	766.44	1,027.54	1.50	-1.50	0.00
5,300.00	4.78	131.76	5,171.44	-690.82	773.63	1,037.18	1.50	-1.50	0.00
5,400.00	3.28	131.76	5,271.19	-695.51	778.88	1,044.21	1.50	-1.50	0.00
5,500.00	1.78	131.76	5,371.09	-698.45	782.17	1,048.63	1.50	-1.50	0.00
5,600.00	0.28	131.76	5,471.07	-699.66	783.52	1,050.44	1.50	-1.50	0.00
5,618.93	0.00	0.00	5,490.00	-699.69	783.55	1,050.49	1.50	-1.50	0.00
5,700.00	0.00	0.00	5,571.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
5,800.00	0.00	0.00	5,671.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
5,900.00	0.00	0.00	5,771.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,000.00	0.00	0.00	5,871.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,100.00	0.00	0.00	5,971.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,200.00	0.00	0.00	6,071.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,300.00	0.00	0.00	6,171.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,400.00	0.00	0.00	6,271.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,500.00	0.00	0.00	6,371.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,600.00	0.00	0.00	6,471.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,700.00	0.00	0.00	6,571.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,800.00	0.00	0.00	6,671.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
6,900.00	0.00	0.00	6,771.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
7,000.00	0.00	0.00	6,871.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
7,100.00	0.00	0.00	6,971.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
7,200.00	0.00	0.00	7,071.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
7,300.00	0.00	0.00	7,171.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
7,400.00	0.00	0.00	7,271.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
7,500.00	0.00	0.00	7,371.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
7,600.00	0.00	0.00	7,471.07	-699.69	783.55	1,050.49	0.00	0.00	0.00
7,618.93	0.00	0.00	7,490.00	-699.69	783.55	1,050.49	0.00	0.00	0.00

### Formations

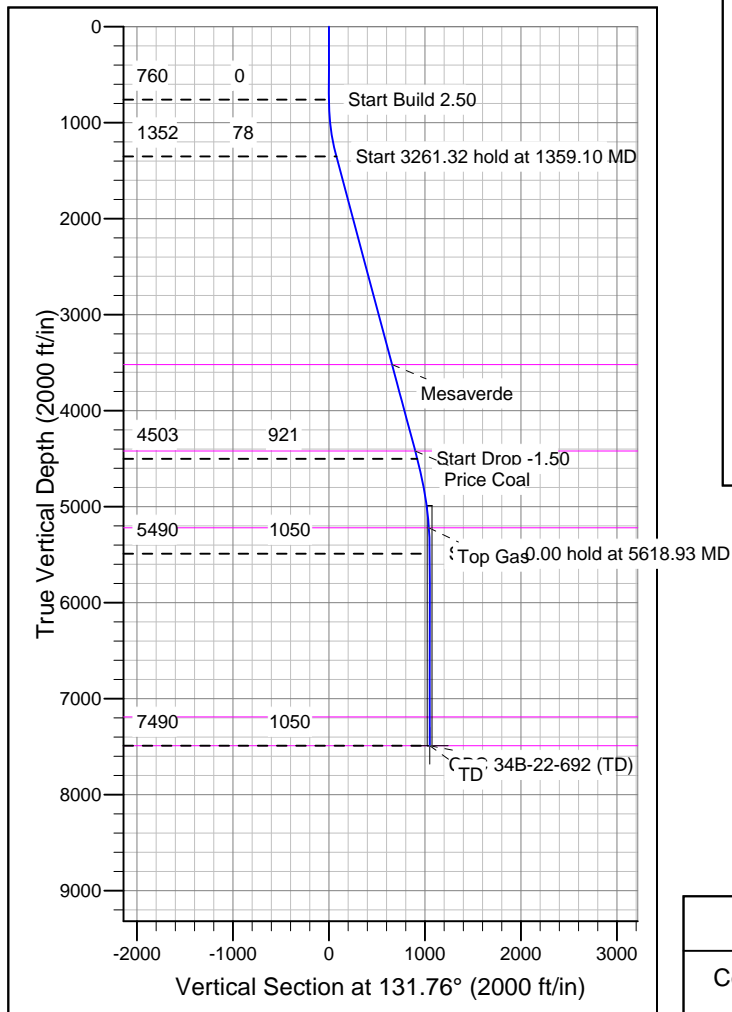
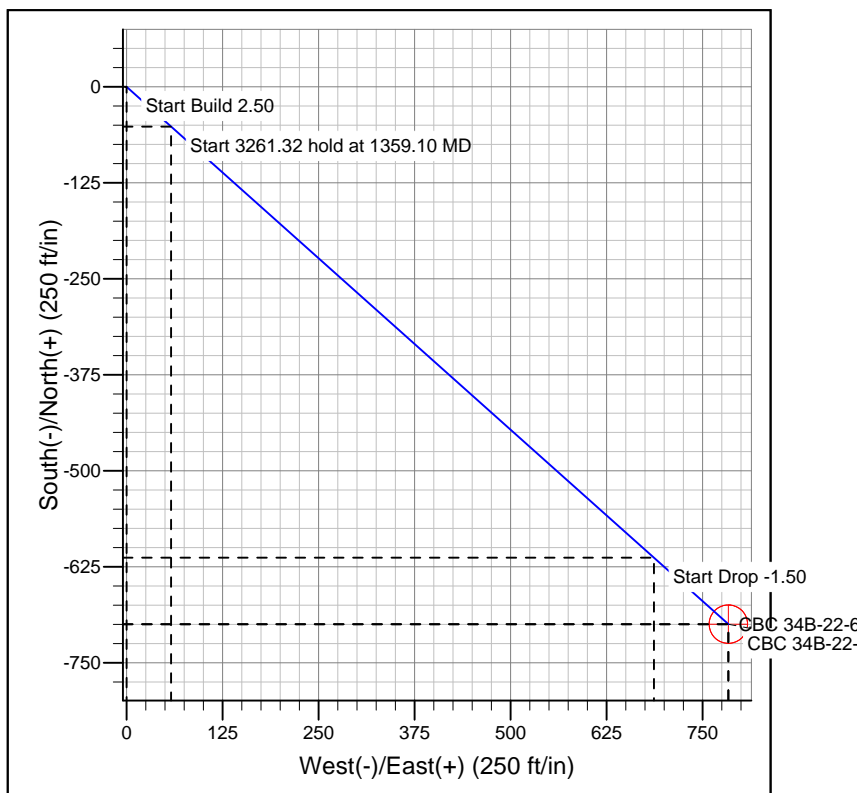
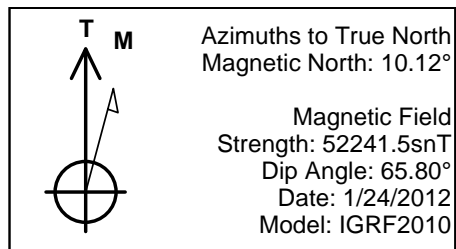
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,603.03	3,520.00	Mesaverde		0.00	
4,534.68	4,420.00	Price Coal		0.00	
5,348.70	5,220.00	Top Gas		0.00	
7,318.93	7,190.00	Rollins		0.00	
7,618.93	7,490.00	TD		0.00	

# WELL DETAILS: CBC 34B-22-692

+N/-S	+E/-W	Northing	Ground Level:	0.00	Longitude	Slot
0.00	0.00	1617303.796	Easting	2392473.556	39° 30' 30.632 N 107° 39' 12.2508 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	1359.10	14.98	131.76	1352.30	-51.86	58.08	2.50	131.76	77.86	
4	4620.42	14.98	131.76	4502.83	-613.25	686.76	0.00	0.00	920.72	
5	5618.93	0.00	0.00	5490.00	-699.69	783.55	1.50	180.00	1050.49	
6	7618.93	0.00	0.00	7490.00	-699.69	783.55	0.00	0.00	1050.49	CBC 34B-22-692 (TD)



## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3520.00	3603.03	Mesaverde
4420.00	4534.68	Price Coal
5220.00	5348.70	Top Gas
7190.00	7318.93	Rollins
7490.00	7618.93	TD

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well CBC 34B-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