

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**CB-TG Land NW-20-692**

**CB-TG Land 22D-20-692**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**19 April, 2010**

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well CB-TG Land 22D-20-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5628.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5628.00ft (Original Well Elev)
<b>Site:</b>	CB-TG Land NW-20-692	<b>North Reference:</b>	True
<b>Well:</b>	CB-TG Land 22D-20-692	<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		

Site CB-TG Land NW-20-692					
Site Position:		Northing:	1,620,796.787 ft	Latitude:	39° 31' 2.716 N
From:	Lat/Long	Easting:	2,382,188.002 ft	Longitude:	107° 41' 24.5220 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	-1.38 °

Well	CB-TG Land 22D-20-692					
Well Position	+N-S	-0.01 ft	Northing:	1,620,796.778 ft	Latitude:	39° 31' 2.715 N
	+E-W	0.00 ft	Easting:	2,382,188.002 ft	Longitude:	107° 41' 24.5220 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	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	4/16/2010	10.42	65.83	52,397

<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	223.54

<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	
775.00	0.00	0.00	775.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,510.46	18.39	223.54	1,497.90	-84.81	-80.60	2.50	2.50	0.00	223.54	
4,045.11	18.39	223.54	3,903.16	-664.34	-631.36	0.00	0.00	0.00	0.00	
5,270.88	0.00	0.00	5,108.00	-805.68	-765.68	1.50	-1.50	0.00	180.00	
7,770.88	0.00	0.00	7,608.00	-805.68	-765.68	0.00	0.00	0.00	0.00	CB-TG Land 22D-2

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well CB-TG Land 22D-20-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5628.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5628.00ft (Original Well Elev)
<b>Site:</b>	CB-TG Land NW-20-692	<b>North Reference:</b>	True
<b>Well:</b>	CB-TG Land 22D-20-692	<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
775.00	0.00	0.00	775.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
800.00	0.62	223.54	800.00	-0.10	-0.09	0.14	2.50	2.50	0.00
900.00	3.12	223.54	899.94	-2.47	-2.35	3.41	2.50	2.50	0.00
1,000.00	5.62	223.54	999.64	-8.00	-7.60	11.04	2.50	2.50	0.00
1,100.00	8.12	223.54	1,098.91	-16.68	-15.85	23.01	2.50	2.50	0.00
1,200.00	10.62	223.54	1,197.57	-28.48	-27.07	39.29	2.50	2.50	0.00
1,300.00	13.12	223.54	1,295.42	-43.40	-41.24	59.87	2.50	2.50	0.00
1,400.00	15.62	223.54	1,392.28	-61.39	-58.34	84.69	2.50	2.50	0.00
1,500.00	18.12	223.54	1,487.97	-82.43	-78.34	113.72	2.50	2.50	0.00
1,510.46	18.39	223.54	1,497.90	-84.81	-80.60	117.00	2.50	2.50	0.00
1,600.00	18.39	223.54	1,582.87	-105.28	-100.05	145.24	0.00	0.00	0.00
1,700.00	18.39	223.54	1,677.77	-128.14	-121.78	176.78	0.00	0.00	0.00
1,800.00	18.39	223.54	1,772.66	-151.01	-143.51	208.33	0.00	0.00	0.00
1,900.00	18.39	223.54	1,867.56	-173.87	-165.24	239.87	0.00	0.00	0.00
2,000.00	18.39	223.54	1,962.45	-196.74	-186.97	271.41	0.00	0.00	0.00
2,100.00	18.39	223.54	2,057.35	-219.60	-208.70	302.95	0.00	0.00	0.00
2,200.00	18.39	223.54	2,152.24	-242.47	-230.43	334.50	0.00	0.00	0.00
2,300.00	18.39	223.54	2,247.14	-265.33	-252.16	366.04	0.00	0.00	0.00
2,400.00	18.39	223.54	2,342.03	-288.19	-273.89	397.58	0.00	0.00	0.00
2,500.00	18.39	223.54	2,436.93	-311.06	-295.62	429.12	0.00	0.00	0.00
2,600.00	18.39	223.54	2,531.82	-333.92	-317.34	460.67	0.00	0.00	0.00
2,700.00	18.39	223.54	2,626.72	-356.79	-339.07	492.21	0.00	0.00	0.00
2,800.00	18.39	223.54	2,721.61	-379.65	-360.80	523.75	0.00	0.00	0.00
2,900.00	18.39	223.54	2,816.51	-402.52	-382.53	555.29	0.00	0.00	0.00
3,000.00	18.39	223.54	2,911.40	-425.38	-404.26	586.84	0.00	0.00	0.00
3,100.00	18.39	223.54	3,006.30	-448.24	-425.99	618.38	0.00	0.00	0.00
3,200.00	18.39	223.54	3,101.19	-471.11	-447.72	649.92	0.00	0.00	0.00
3,300.00	18.39	223.54	3,196.09	-493.97	-469.45	681.46	0.00	0.00	0.00
3,400.00	18.39	223.54	3,290.98	-516.84	-491.18	713.01	0.00	0.00	0.00
3,500.00	18.39	223.54	3,385.88	-539.70	-512.91	744.55	0.00	0.00	0.00
3,600.00	18.39	223.54	3,480.77	-562.57	-534.64	776.09	0.00	0.00	0.00
3,700.00	18.39	223.54	3,575.67	-585.43	-556.37	807.63	0.00	0.00	0.00
3,755.15	18.39	223.54	3,628.00	-598.04	-568.35	825.03	0.00	0.00	0.00
Mesaverde									
3,800.00	18.39	223.54	3,670.56	-608.29	-578.09	839.18	0.00	0.00	0.00
3,900.00	18.39	223.54	3,765.46	-631.16	-599.82	870.72	0.00	0.00	0.00
4,000.00	18.39	223.54	3,860.35	-654.02	-621.55	902.26	0.00	0.00	0.00
4,045.11	18.39	223.54	3,903.16	-664.34	-631.36	916.49	0.00	0.00	0.00
4,100.00	17.56	223.54	3,955.37	-676.62	-643.02	933.43	1.50	-1.50	0.00
4,200.00	16.06	223.54	4,051.09	-697.58	-662.95	962.35	1.50	-1.50	0.00
4,300.00	14.56	223.54	4,147.54	-716.73	-681.14	988.76	1.50	-1.50	0.00
4,400.00	13.06	223.54	4,244.64	-734.03	-697.59	1,012.64	1.50	-1.50	0.00
4,500.00	11.56	223.54	4,342.34	-749.49	-712.28	1,033.96	1.50	-1.50	0.00
4,600.00	10.06	223.54	4,440.56	-763.09	-725.20	1,052.72	1.50	-1.50	0.00

**BBC**  
Planning Report

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<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5628.00ft (Original Well Elev)
<b>Site:</b>	CB-TG Land NW-20-692	<b>North Reference:</b>	True
<b>Well:</b>	CB-TG Land 22D-20-692	<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)
4,700.00	8.56	223.54	4,539.24	-774.82	-736.35	1,068.90	1.50	-1.50	0.00
4,708.86	8.43	223.54	4,548.00	-775.77	-737.25	1,070.21	1.50	-1.50	0.00
<b>Price Coal</b>									
4,800.00	7.06	223.54	4,638.31	-784.67	-745.72	1,082.50	1.50	-1.50	0.00
4,900.00	5.56	223.54	4,737.70	-792.64	-753.29	1,093.49	1.50	-1.50	0.00
5,000.00	4.06	223.54	4,837.35	-798.72	-759.07	1,101.88	1.50	-1.50	0.00
5,100.00	2.56	223.54	4,937.18	-802.91	-763.05	1,107.66	1.50	-1.50	0.00
5,200.00	1.06	223.54	5,037.12	-805.21	-765.23	1,110.83	1.50	-1.50	0.00
5,270.88	0.00	0.00	5,108.00	-805.68	-765.68	1,111.49	1.50	-1.50	0.00
5,300.00	0.00	0.00	5,137.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
5,400.00	0.00	0.00	5,237.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
5,470.88	0.00	0.00	5,308.00	-805.68	-765.68	1,111.49	0.00	0.00	0.00
<b>Top Gas</b>									
5,500.00	0.00	0.00	5,337.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
5,600.00	0.00	0.00	5,437.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
5,700.00	0.00	0.00	5,537.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
5,800.00	0.00	0.00	5,637.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
5,900.00	0.00	0.00	5,737.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,000.00	0.00	0.00	5,837.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,100.00	0.00	0.00	5,937.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,200.00	0.00	0.00	6,037.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,300.00	0.00	0.00	6,137.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,400.00	0.00	0.00	6,237.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,500.00	0.00	0.00	6,337.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,600.00	0.00	0.00	6,437.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,700.00	0.00	0.00	6,537.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,800.00	0.00	0.00	6,637.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
6,900.00	0.00	0.00	6,737.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
7,000.00	0.00	0.00	6,837.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
7,100.00	0.00	0.00	6,937.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
7,200.00	0.00	0.00	7,037.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
7,300.00	0.00	0.00	7,137.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
7,400.00	0.00	0.00	7,237.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
7,470.88	0.00	0.00	7,308.00	-805.68	-765.68	1,111.49	0.00	0.00	0.00
<b>Rollins</b>									
7,500.00	0.00	0.00	7,337.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
7,600.00	0.00	0.00	7,437.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
7,700.00	0.00	0.00	7,537.12	-805.68	-765.68	1,111.49	0.00	0.00	0.00
7,770.88	0.00	0.00	7,608.00	-805.68	-765.68	1,111.49	0.00	0.00	0.00

**Casing Points**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
775.00	775.00	9 5/8"	9-5/8	12-1/4

# BBC

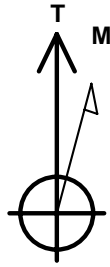
## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well CB-TG Land 22D-20-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5628.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5628.00ft (Original Well Elev)
<b>Site:</b>	CB-TG Land NW-20-692	<b>North Reference:</b>	True
<b>Well:</b>	CB-TG Land 22D-20-692	<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 (°)	
3,755.15	3,628.00	Mesaverde		0.00		
4,708.86	4,548.00	Price Coal		0.00		
5,470.88	5,308.00	Top Gas		0.00		
7,470.88	7,308.00	Rollins		0.00		
	7,608.00	TD		0.00		

## WELL DETAILS: CB-TG Land 22D-20-692

Ground Level: 0.00  
 +N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.00 0.00 1620796.778 2382188.000 29° 31' 2.703"N 104° 24.5220 W



Azimuths to True North  
 Magnetic North: 10.42°

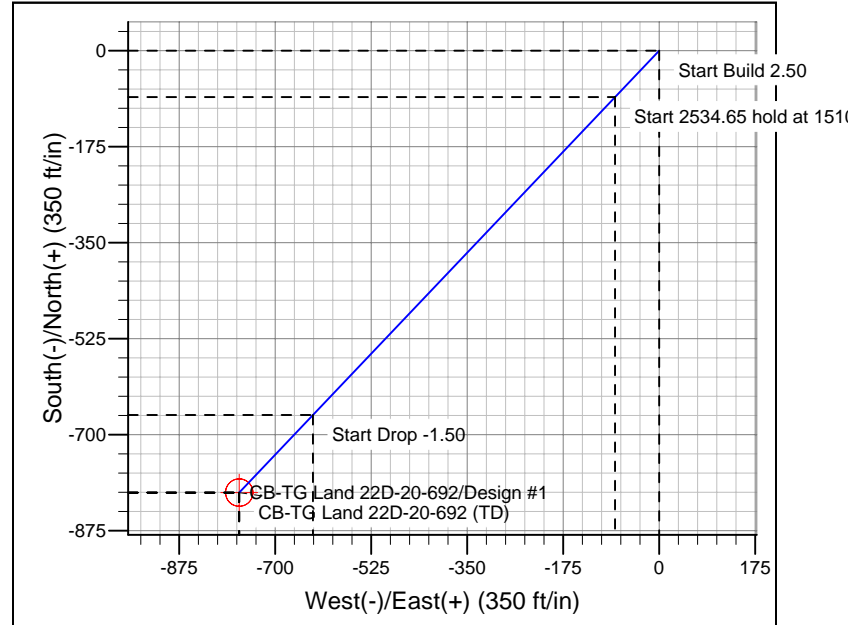
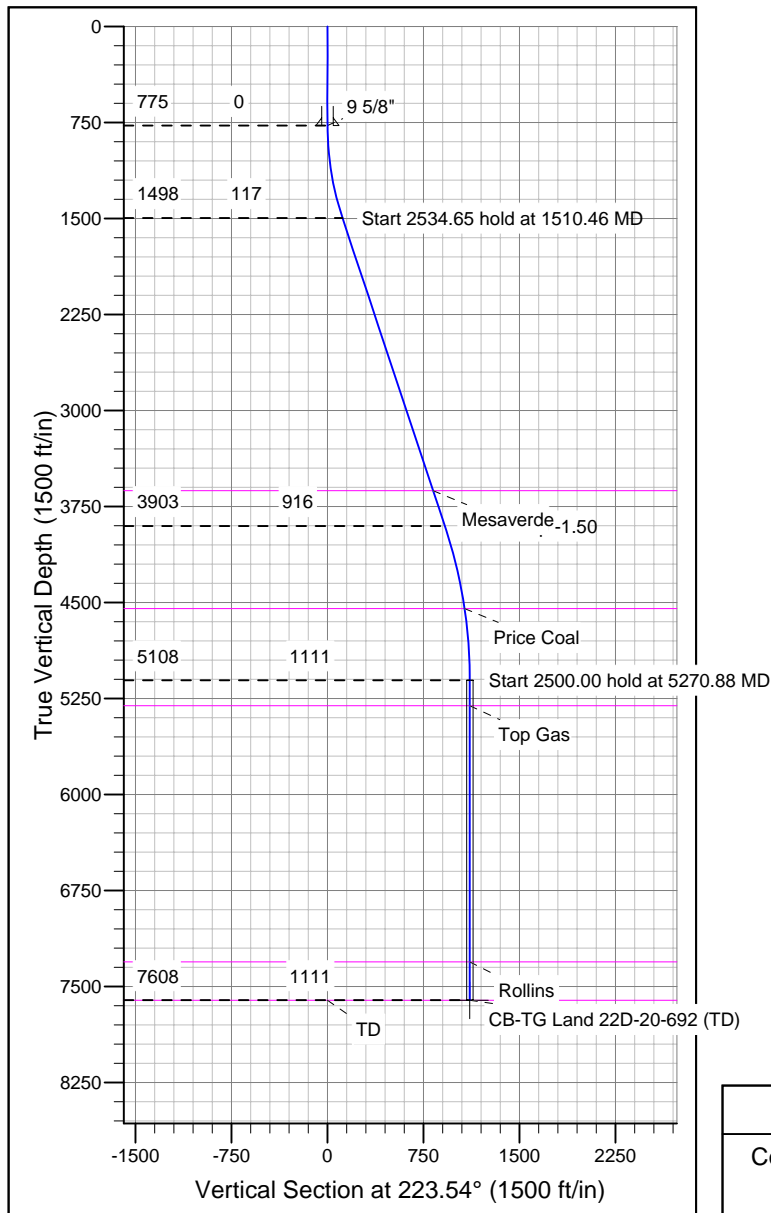
Magnetic Field  
 Strength: 52397.4snT  
 Dip Angle: 65.83°  
 Date: 4/16/2010  
 Model: BGGM2007

## 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	
	2775.00	0.00	0.00	775.00	0.00	0.00	0.00	0.00	0.00	
	3510.46	18.39	223.54	1497.90	-84.81	-80.60	2.50	223.54	117.00	
	4045.11	18.39	223.54	3903.16	-664.34	-631.36	0.00	0.00	916.49	
	5270.88	0.00	0.00	5108.00	-805.68	-765.68	1.50	180.00	111.49	
	7770.88	0.00	0.00	7608.00	-805.68	-765.68	0.00	0.00	111.49	CB-TG Land 22D-20-692 (TD)

## WELLBORE TARGET DETAILS

Name TVD +N/-S +E/-W Shape  
 CB-TG Land 22D-20-692 (TD) 5628.00 -805.68 -765.68 Circle (Radius: 25.00)



## CASING DETAILS

TVD MD Name Size  
 775.00 775.00 9 5/8" 9-5/8"

## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3628.00	3755.15	Mesaverde
4548.00	4708.86	Price Coal
5308.00	5470.88	Top Gas
7308.00	7470.88	Rollins

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well CB-TG Land 22D-20-692, True North  
 Vertical (TVD) Reference: WELL @ 5628.00ft (Original Well Elev)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: WELL @ 5628.00ft (Original Well Elev)  
 Calculation Method: Minimum Curvature