

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**Epperly NWSW-23-692**

**Epperly 23B-23-692**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**28 June, 2011**

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Epperly 23B-23-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5853.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5853.00ft (Original Well Elev)
<b>Site:</b>	Epperly NWSW-23-692	<b>North Reference:</b>	True
<b>Well:</b>	Epperly 23B-23-692	<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>	Epperly NWSW-23-692		
<b>Site Position:</b>		<b>Northing:</b>	1,618,446.580 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,396,102.855 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 30' 42.772 N
		<b>Longitude:</b>	107° 38' 26.3004 W
		<b>Grid Convergence:</b>	-1.35 °

<b>Well</b>	Epperly 23B-23-692		
<b>Well Position</b>	<b>+N/-S</b>	-24.41 ft	<b>Northing:</b>
	<b>+E/-W</b>	10.16 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			39° 30' 42.530 N
			<b>Longitude:</b>
			107° 38' 26.1708 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>
	IGRF200510	12/31/2009	10.36	65.87	52,481

<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	116.34

<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	
770.00	0.00	0.00	770.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,491.88	18.05	116.34	1,480.00	-50.03	101.04	2.50	2.50	0.00	116.34	
4,606.79	18.05	116.34	4,441.67	-478.24	965.82	0.00	0.00	0.00	0.00	
5,809.92	0.00	0.00	5,625.00	-561.63	1,134.22	1.50	-1.50	0.00	180.00	
7,809.92	0.00	0.00	7,625.00	-561.63	1,134.22	0.00	0.00	0.00	0.00	Epperly 23B-23-692

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Epperly 23B-23-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5853.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5853.00ft (Original Well Elev)
<b>Site:</b>	Epperly NWSW-23-692	<b>North Reference:</b>	True
<b>Well:</b>	Epperly 23B-23-692	<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	
770.00	0.00	0.00	770.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.75	116.34	800.00	-0.09	0.18	0.20	2.50	2.50	0.00	
900.00	3.25	116.34	899.93	-1.64	3.30	3.69	2.50	2.50	0.00	
1,000.00	5.75	116.34	999.61	-5.12	10.33	11.53	2.50	2.50	0.00	
1,100.00	8.25	116.34	1,098.86	-10.52	21.25	23.72	2.50	2.50	0.00	
1,200.00	10.75	116.34	1,197.48	-17.85	36.04	40.22	2.50	2.50	0.00	
1,300.00	13.25	116.34	1,295.29	-27.07	54.67	61.01	2.50	2.50	0.00	
1,400.00	15.75	116.34	1,392.10	-38.18	77.11	86.05	2.50	2.50	0.00	
1,491.88	18.05	116.34	1,480.00	-50.03	101.04	112.75	2.50	2.50	0.00	
1,500.00	18.05	116.34	1,487.72	-51.15	103.30	115.27	0.00	0.00	0.00	
1,600.00	18.05	116.34	1,582.80	-64.90	131.06	146.25	0.00	0.00	0.00	
1,700.00	18.05	116.34	1,677.88	-78.64	158.82	177.23	0.00	0.00	0.00	
1,800.00	18.05	116.34	1,772.96	-92.39	186.58	208.21	0.00	0.00	0.00	
1,900.00	18.05	116.34	1,868.04	-106.14	214.35	239.19	0.00	0.00	0.00	
2,000.00	18.05	116.34	1,963.12	-119.88	242.11	270.16	0.00	0.00	0.00	
2,100.00	18.05	116.34	2,058.21	-133.63	269.87	301.14	0.00	0.00	0.00	
2,200.00	18.05	116.34	2,153.29	-147.38	297.63	332.12	0.00	0.00	0.00	
2,300.00	18.05	116.34	2,248.37	-161.13	325.40	363.10	0.00	0.00	0.00	
2,400.00	18.05	116.34	2,343.45	-174.87	353.16	394.08	0.00	0.00	0.00	
2,500.00	18.05	116.34	2,438.53	-188.62	380.92	425.06	0.00	0.00	0.00	
2,600.00	18.05	116.34	2,533.61	-202.37	408.68	456.04	0.00	0.00	0.00	
2,700.00	18.05	116.34	2,628.69	-216.11	436.45	487.02	0.00	0.00	0.00	
2,800.00	18.05	116.34	2,723.77	-229.86	464.21	518.00	0.00	0.00	0.00	
2,900.00	18.05	116.34	2,818.85	-243.61	491.97	548.98	0.00	0.00	0.00	
3,000.00	18.05	116.34	2,913.93	-257.35	519.73	579.96	0.00	0.00	0.00	
3,100.00	18.05	116.34	3,009.01	-271.10	547.49	610.94	0.00	0.00	0.00	
3,200.00	18.05	116.34	3,104.09	-284.85	575.26	641.92	0.00	0.00	0.00	
3,300.00	18.05	116.34	3,199.17	-298.60	603.02	672.90	0.00	0.00	0.00	
3,400.00	18.05	116.34	3,294.25	-312.34	630.78	703.88	0.00	0.00	0.00	
3,500.00	18.05	116.34	3,389.33	-326.09	658.54	734.86	0.00	0.00	0.00	
3,600.00	18.05	116.34	3,484.41	-339.84	686.31	765.84	0.00	0.00	0.00	
3,700.00	18.05	116.34	3,579.49	-353.58	714.07	796.82	0.00	0.00	0.00	
3,800.00	18.05	116.34	3,674.57	-367.33	741.83	827.80	0.00	0.00	0.00	
3,900.00	18.05	116.34	3,769.65	-381.08	769.59	858.78	0.00	0.00	0.00	
4,000.00	18.05	116.34	3,864.73	-394.82	797.36	889.75	0.00	0.00	0.00	
4,100.00	18.05	116.34	3,959.81	-408.57	825.12	920.73	0.00	0.00	0.00	
4,200.00	18.05	116.34	4,054.89	-422.32	852.88	951.71	0.00	0.00	0.00	
4,300.00	18.05	116.34	4,149.97	-436.07	880.64	982.69	0.00	0.00	0.00	
4,400.00	18.05	116.34	4,245.05	-449.81	908.41	1,013.67	0.00	0.00	0.00	
4,500.00	18.05	116.34	4,340.13	-463.56	936.17	1,044.65	0.00	0.00	0.00	
4,600.00	18.05	116.34	4,435.21	-477.31	963.93	1,075.63	0.00	0.00	0.00	
4,606.79	18.05	116.34	4,441.67	-478.24	965.82	1,077.73	0.00	0.00	0.00	
4,700.00	16.65	116.34	4,530.64	-490.57	990.72	1,105.53	1.50	-1.50	0.00	
4,800.00	15.15	116.34	4,626.81	-502.73	1,015.27	1,132.92	1.50	-1.50	0.00	
4,900.00	13.65	116.34	4,723.67	-513.76	1,037.55	1,157.79	1.50	-1.50	0.00	

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<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5853.00ft (Original Well Elev)
<b>Site:</b>	Epperly NWSW-23-692	<b>North Reference:</b>	True
<b>Well:</b>	Epperly 23B-23-692	<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	12.15	116.34	4,821.14	-523.67	1,057.56	1,180.11	1.50	-1.50	0.00
5,100.00	10.65	116.34	4,919.16	-532.44	1,075.27	1,199.87	1.50	-1.50	0.00
5,200.00	9.15	116.34	5,017.67	-540.07	1,090.67	1,217.06	1.50	-1.50	0.00
5,300.00	7.65	116.34	5,116.60	-546.55	1,103.76	1,231.67	1.50	-1.50	0.00
5,400.00	6.15	116.34	5,215.87	-551.88	1,114.53	1,243.68	1.50	-1.50	0.00
5,500.00	4.65	116.34	5,315.42	-556.05	1,122.96	1,253.09	1.50	-1.50	0.00
5,600.00	3.15	116.34	5,415.19	-559.07	1,129.05	1,259.89	1.50	-1.50	0.00
5,700.00	1.65	116.34	5,515.10	-560.93	1,132.80	1,264.07	1.50	-1.50	0.00
5,800.00	0.15	116.34	5,615.08	-561.62	1,134.21	1,265.64	1.50	-1.50	0.00
5,809.92	0.00	0.00	5,625.00	-561.63	1,134.22	1,265.65	1.50	-1.50	0.00
5,900.00	0.00	0.00	5,715.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,000.00	0.00	0.00	5,815.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,100.00	0.00	0.00	5,915.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,200.00	0.00	0.00	6,015.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,300.00	0.00	0.00	6,115.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,400.00	0.00	0.00	6,215.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,500.00	0.00	0.00	6,315.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,600.00	0.00	0.00	6,415.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,700.00	0.00	0.00	6,515.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,800.00	0.00	0.00	6,615.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
6,900.00	0.00	0.00	6,715.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,000.00	0.00	0.00	6,815.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,100.00	0.00	0.00	6,915.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,200.00	0.00	0.00	7,015.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,300.00	0.00	0.00	7,115.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,400.00	0.00	0.00	7,215.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,500.00	0.00	0.00	7,315.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,600.00	0.00	0.00	7,415.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,700.00	0.00	0.00	7,515.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,800.00	0.00	0.00	7,615.08	-561.63	1,134.22	1,265.65	0.00	0.00	0.00
7,809.92	0.00	0.00	7,625.00	-561.63	1,134.22	1,265.65	0.00	0.00	0.00

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
780.00	780.00	9 5/8"	9-5/8	12-1/4

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,779.42	3,655.00	Mesaverde		0.00	
4,720.19	4,550.00	Price Coal		0.00	
5,584.79	5,400.00	Top Gas		0.00	
7,509.92	7,325.00	Rollins		0.00	
7,809.92	7,625.00	TD		0.00	

**Bill Barrett Corp**  
Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Epperly 23B-23-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5853.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5853.00ft (Original Well Elev)
<b>Site:</b>	Epperly NWSW-23-692	<b>North Reference:</b>	True
<b>Well:</b>	Epperly 23B-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

# WELL DETAILS: Epperly 23B-23-692

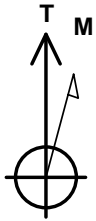
+N/-S	+E/-W	Northing	Easting	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1618421.935	2396112.434	0.00	39° 30' 42.530 N	107° 38' 26.1708 W	

## 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	770.00	0.00	0.00	770.00	0.00	0.00	0.00	0.00	0.00	
3	1491.88	18.05	116.34	1480.00	-50.03	101.04	2.50	116.34	112.75	
4	4606.79	18.05	116.34	4441.67	-478.24	965.82	0.00	0.00	1077.73	
5	5809.92	0.00	0.00	5625.00	-561.63	1134.22	1.50	180.00	1265.65	
6	7809.92	0.00	0.00	7625.00	-561.63	1134.22	0.00	0.00	1265.65	Epperly 23B-23-692 (TD)

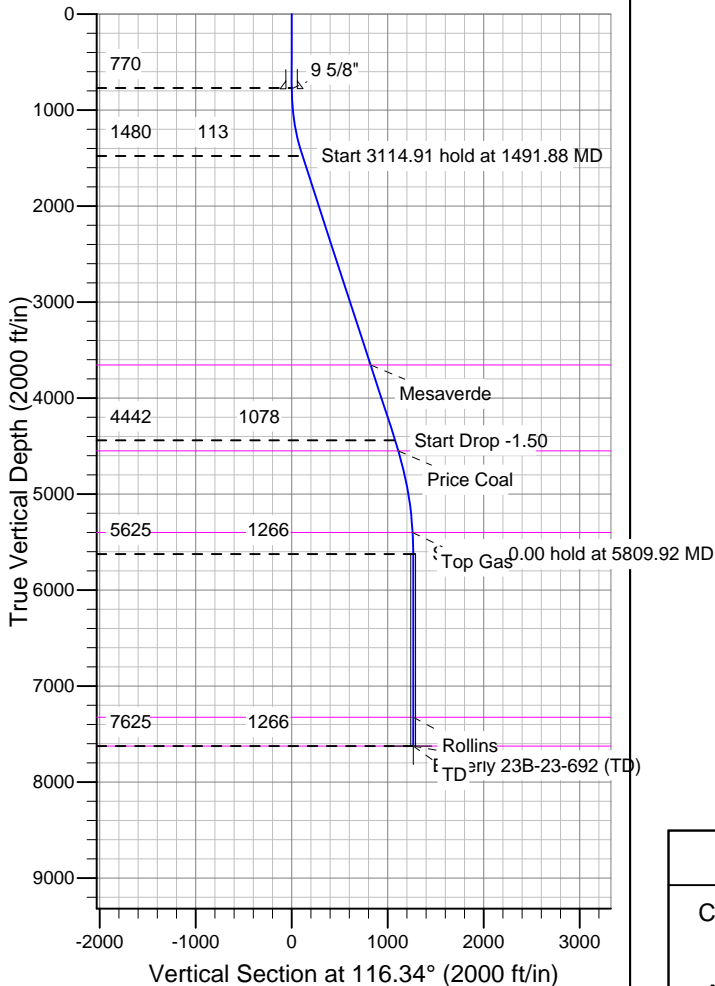
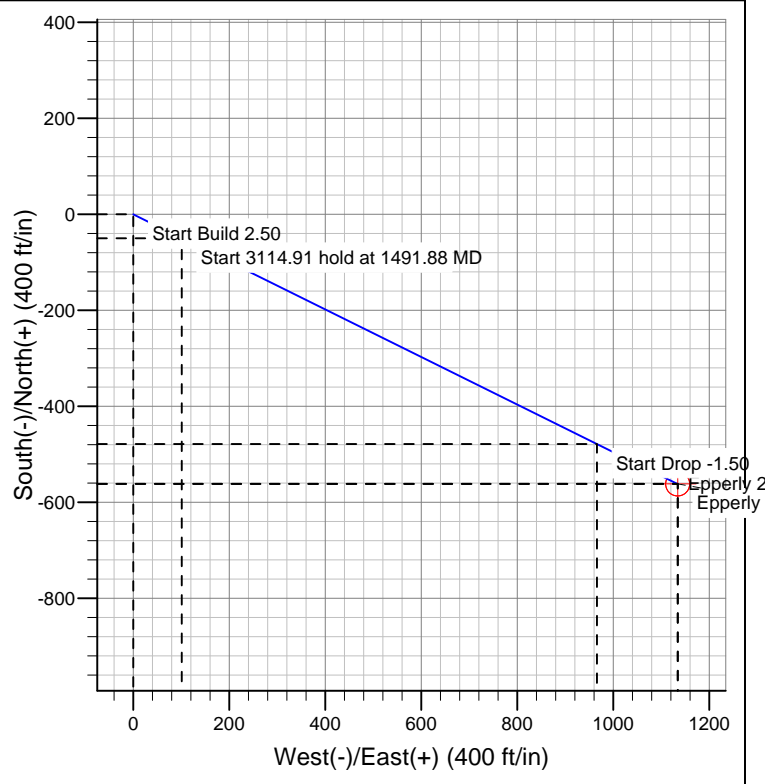
## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Epperly 23B-23-692 (TD)	7625.00	-561.63	1134.22	Circle (Radius: 25.00)



Azimuths to True North  
Magnetic North: 10.36°

Magnetic Field  
Strength: 52481.0snT  
Dip Angle: 65.87°  
Date: 12/31/2009  
Model: IGRF200510



## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3655.00	3779.42	Mesaverde
4550.00	4720.19	Price Coal
5400.00	5584.79	Top Gas
7325.00	7509.92	Rollins
7625.00	7809.92	TD

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Epperly 23B-23-692, True North  
Vertical (TVD) Reference: WELL @ 5853.00ft (Original Well Elev)  
Section (VS) Reference: Slot - (0.00N, 0.00E)  
Measured Depth Reference: WELL @ 5853.00ft (Original Well Elev)  
Calculation Method: Minimum Curvature