

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**Kaufman Pad #1 NESW-25-692**

**Kaufman 23A-25-692**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**16 March, 2010**

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Kaufman 23A-25-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5936.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5936.00ft (Original Well Elev)
<b>Site:</b>	Kaufman Pad #1 NESW-25-692	<b>North Reference:</b>	True
<b>Well:</b>	Kaufman 23A-25-692	<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>	Kaufman Pad #1 NESW-25-692		
<b>Site Position:</b>		<b>Northing:</b>	1,612,955.301 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,402,300.892 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 29' 49.949 N
		<b>Longitude:</b>	107° 37' 5.6028 W
		<b>Grid Convergence:</b>	-1.34 °

<b>Well</b>	Kaufman 23A-25-692		
<b>Well Position</b>	<b>+N/-S</b>	-82.69 ft	<b>Northing:</b>
	<b>+E/-W</b>	-234.79 ft	1,612,878.107 ft
<b>Position Uncertainty</b>		0.00 ft	<b>Easting:</b>
			2,402,064.241 ft
			<b>Latitude:</b>
			39° 29' 49.131 N
			<b>Longitude:</b>
			107° 37' 8.5980 W
			<b>Wellhead Elevation:</b>
			ft
			<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>
	BGGM2007	3/16/2010	10.40
			<b>Dip Angle (°)</b>
			65.83
			<b>Field Strength (nT)</b>
			52,403

<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>
	0.00	0.00	0.00
			<b>Direction (°)</b>
			149.70

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
730.00	0.00	0.00	730.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,251.74	13.04	149.70	1,247.24	-51.05	29.84	2.50	2.50	0.00	149.70	
4,007.53	13.04	149.70	3,931.93	-588.02	343.67	0.00	0.00	0.00	0.00	
4,877.09	0.00	0.00	4,794.00	-673.10	393.39	1.50	-1.50	0.00	180.00	
7,377.09	0.00	0.00	7,294.00	-673.10	393.39	0.00	0.00	0.00	0.00	Kaufman 23A-25-692

**BBC**  
Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Kaufman 23A-25-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5936.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5936.00ft (Original Well Elev)
<b>Site:</b>	Kaufman Pad #1 NESW-25-692	<b>North Reference:</b>	True
<b>Well:</b>	Kaufman 23A-25-692	<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
730.00	0.00	0.00	730.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>9 5/8"</b>									
800.00	1.75	149.70	799.99	-0.92	0.54	1.07	2.50	2.50	0.00
900.00	4.25	149.70	899.84	-5.44	3.18	6.30	2.50	2.50	0.00
1,000.00	6.75	149.70	999.38	-13.72	8.02	15.89	2.50	2.50	0.00
1,100.00	9.25	149.70	1,098.39	-25.73	15.04	29.80	2.50	2.50	0.00
1,200.00	11.75	149.70	1,196.71	-41.46	24.23	48.02	2.50	2.50	0.00
1,251.74	13.04	149.70	1,247.24	-51.05	29.84	59.13	2.50	2.50	0.00
1,300.00	13.04	149.70	1,294.26	-60.46	35.33	70.02	0.00	0.00	0.00
1,400.00	13.04	149.70	1,391.68	-79.94	46.72	92.59	0.00	0.00	0.00
1,500.00	13.04	149.70	1,489.10	-99.43	58.11	115.16	0.00	0.00	0.00
1,600.00	13.04	149.70	1,586.52	-118.91	69.50	137.73	0.00	0.00	0.00
1,700.00	13.04	149.70	1,683.94	-138.40	80.88	160.30	0.00	0.00	0.00
1,800.00	13.04	149.70	1,781.36	-157.88	92.27	182.87	0.00	0.00	0.00
1,900.00	13.04	149.70	1,878.78	-177.37	103.66	205.44	0.00	0.00	0.00
2,000.00	13.04	149.70	1,976.20	-196.85	115.05	228.01	0.00	0.00	0.00
2,100.00	13.04	149.70	2,073.62	-216.34	126.44	250.57	0.00	0.00	0.00
2,200.00	13.04	149.70	2,171.04	-235.82	137.82	273.14	0.00	0.00	0.00
2,300.00	13.04	149.70	2,268.46	-255.31	149.21	295.71	0.00	0.00	0.00
2,400.00	13.04	149.70	2,365.88	-274.79	160.60	318.28	0.00	0.00	0.00
2,500.00	13.04	149.70	2,463.30	-294.28	171.99	340.85	0.00	0.00	0.00
2,600.00	13.04	149.70	2,560.72	-313.76	183.38	363.42	0.00	0.00	0.00
2,700.00	13.04	149.70	2,658.14	-333.25	194.76	385.99	0.00	0.00	0.00
2,800.00	13.04	149.70	2,755.56	-352.73	206.15	408.56	0.00	0.00	0.00
2,900.00	13.04	149.70	2,852.98	-372.22	217.54	431.13	0.00	0.00	0.00
3,000.00	13.04	149.70	2,950.40	-391.70	228.93	453.69	0.00	0.00	0.00
3,100.00	13.04	149.70	3,047.82	-411.19	240.32	476.26	0.00	0.00	0.00
3,200.00	13.04	149.70	3,145.24	-430.67	251.70	498.83	0.00	0.00	0.00
3,300.00	13.04	149.70	3,242.66	-450.16	263.09	521.40	0.00	0.00	0.00
3,400.00	13.04	149.70	3,340.08	-469.64	274.48	543.97	0.00	0.00	0.00
3,486.14	13.04	149.70	3,424.00	-486.43	284.29	563.41	0.00	0.00	0.00
<b>Mesaverde</b>									
3,500.00	13.04	149.70	3,437.50	-489.13	285.87	566.54	0.00	0.00	0.00
3,600.00	13.04	149.70	3,534.92	-508.61	297.26	589.11	0.00	0.00	0.00
3,700.00	13.04	149.70	3,632.34	-528.10	308.64	611.68	0.00	0.00	0.00
3,800.00	13.04	149.70	3,729.76	-547.58	320.03	634.25	0.00	0.00	0.00
3,900.00	13.04	149.70	3,827.18	-567.07	331.42	656.81	0.00	0.00	0.00
4,000.00	13.04	149.70	3,924.60	-586.55	342.81	679.38	0.00	0.00	0.00
4,007.53	13.04	149.70	3,931.93	-588.02	343.67	681.08	0.00	0.00	0.00
4,100.00	11.66	149.70	4,022.26	-605.09	353.65	700.86	1.50	-1.50	0.00
4,200.00	10.16	149.70	4,120.45	-621.43	363.19	719.78	1.50	-1.50	0.00
4,300.00	8.66	149.70	4,219.11	-635.54	371.44	736.12	1.50	-1.50	0.00
4,325.17	8.28	149.70	4,244.00	-638.74	373.31	739.83	1.50	-1.50	0.00
<b>Price Coal</b>									
4,400.00	7.16	149.70	4,318.15	-647.41	378.38	749.88	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 @ 5936.00ft (Original Well Elev)
<b>Site:</b>	Kaufman Pad #1 NESW-25-692	<b>North Reference:</b>	True
<b>Well:</b>	Kaufman 23A-25-692	<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)
4,500.00	5.66	149.70	4,417.53	-657.05	384.01	761.04	1.50	-1.50	0.00
4,600.00	4.16	149.70	4,517.16	-664.43	388.32	769.59	1.50	-1.50	0.00
4,700.00	2.66	149.70	4,616.98	-669.56	391.32	775.53	1.50	-1.50	0.00
4,800.00	1.16	149.70	4,716.92	-672.43	393.00	778.86	1.50	-1.50	0.00
4,827.09	0.75	149.70	4,744.00	-672.82	393.23	779.31	1.50	-1.50	0.00
<b>Top Gas</b>									
4,877.09	0.00	0.00	4,794.00	-673.10	393.39	779.63	1.50	-1.50	0.00
4,900.00	0.00	0.00	4,816.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,000.00	0.00	0.00	4,916.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,100.00	0.00	0.00	5,016.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,200.00	0.00	0.00	5,116.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,300.00	0.00	0.00	5,216.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,400.00	0.00	0.00	5,316.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,500.00	0.00	0.00	5,416.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,600.00	0.00	0.00	5,516.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,700.00	0.00	0.00	5,616.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,800.00	0.00	0.00	5,716.91	-673.10	393.39	779.63	0.00	0.00	0.00
5,900.00	0.00	0.00	5,816.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,000.00	0.00	0.00	5,916.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,100.00	0.00	0.00	6,016.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,200.00	0.00	0.00	6,116.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,300.00	0.00	0.00	6,216.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,400.00	0.00	0.00	6,316.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,500.00	0.00	0.00	6,416.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,600.00	0.00	0.00	6,516.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,700.00	0.00	0.00	6,616.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,800.00	0.00	0.00	6,716.91	-673.10	393.39	779.63	0.00	0.00	0.00
6,900.00	0.00	0.00	6,816.91	-673.10	393.39	779.63	0.00	0.00	0.00
7,000.00	0.00	0.00	6,916.91	-673.10	393.39	779.63	0.00	0.00	0.00
7,077.09	0.00	0.00	6,994.00	-673.10	393.39	779.63	0.00	0.00	0.00
<b>Rollins</b>									
7,100.00	0.00	0.00	7,016.91	-673.10	393.39	779.63	0.00	0.00	0.00
7,200.00	0.00	0.00	7,116.91	-673.10	393.39	779.63	0.00	0.00	0.00
7,300.00	0.00	0.00	7,216.91	-673.10	393.39	779.63	0.00	0.00	0.00
7,377.09	0.00	0.00	7,294.00	-673.10	393.39	779.63	0.00	0.00	0.00
<b>TD</b>									

**Casing Points**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
730.00	730.00	9 5/8"	9-5/8	12-1/4

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Kaufman 23A-25-692
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 5936.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 5936.00ft (Original Well Elev)
<b>Site:</b>	Kaufman Pad #1 NESW-25-692	<b>North Reference:</b>	True
<b>Well:</b>	Kaufman 23A-25-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

### Formations

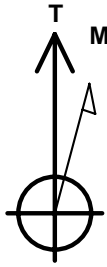
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,486.14	3,424.00	Mesaverde		0.00	
4,325.17	4,244.00	Price Coal		0.00	
4,827.09	4,744.00	Top Gas		0.00	
7,077.09	6,994.00	Rollins		0.00	
7,377.09	7,294.00	TD		0.00	

WELL DETAILS: Kaufman 23A-25-692

Ground Level: 0.00  
 +N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.00 0.00 1612878.107 2402064.297 29° 49.1307' N 107° 37' 8.5980 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	
	730.00	0.00	0.00	730.00	0.00	0.00	0.00	0.00	0.00	
	1251.74	13.04	149.70	1247.24	-51.05	29.84	2.50	149.70	59.13	
	4007.53	13.04	149.70	3931.93	-588.02	343.67	0.00	0.00	681.08	
	4877.09	0.00	0.00	4794.00	-673.10	393.39	1.50	180.00	779.63	
	7377.09	0.00	0.00	7294.00	-673.10	393.39	0.00	0.00	779.63	Kaufman 23A-25-692 (TD)

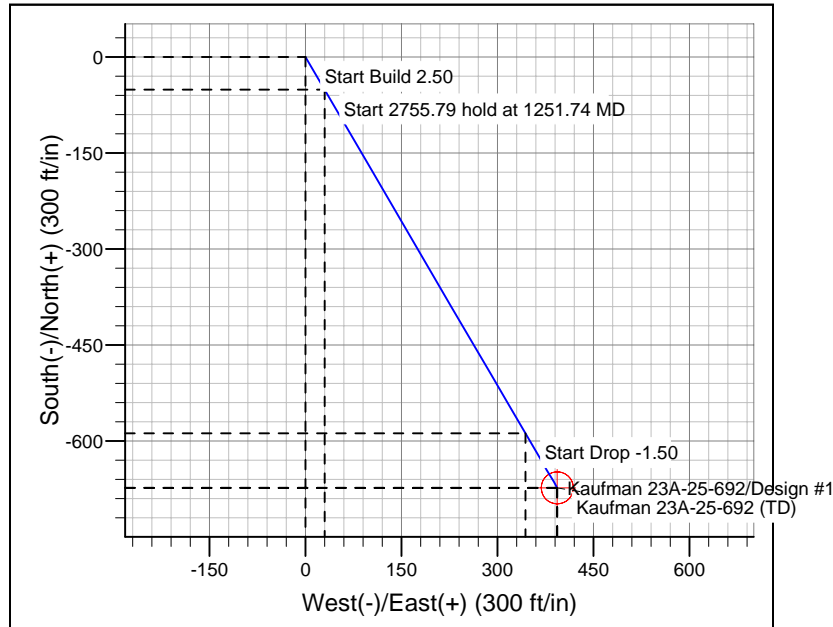
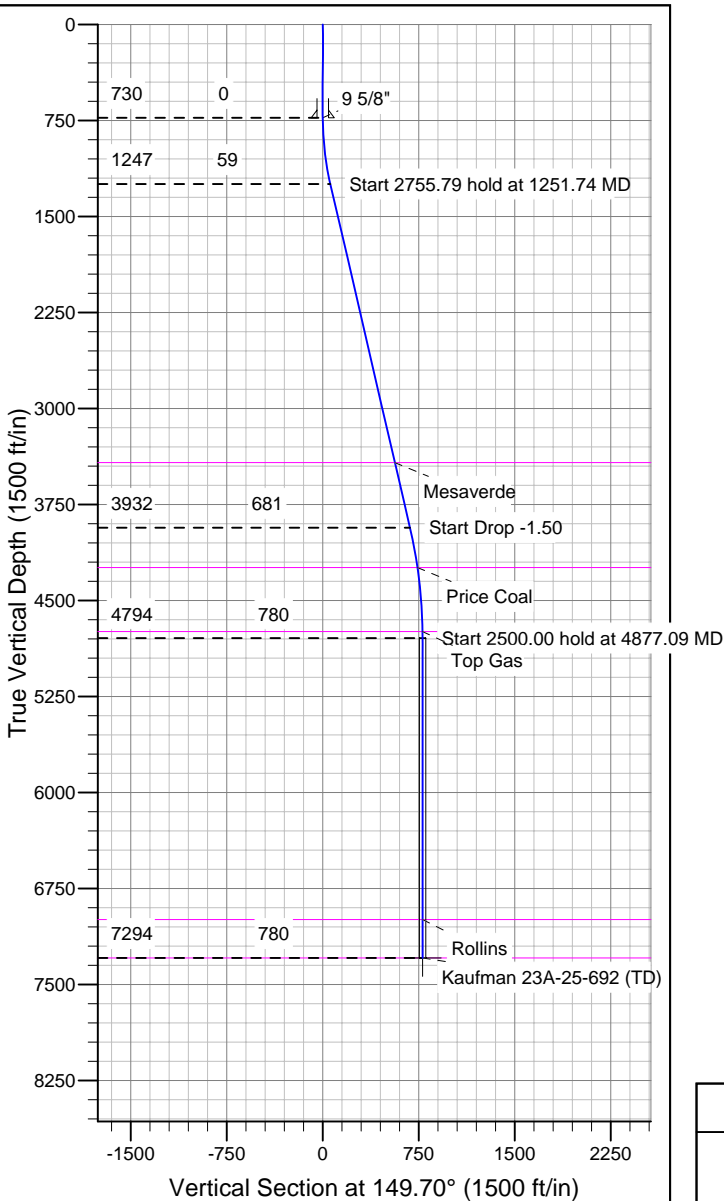


Azimuths to True North  
 Magnetic North: 10.40°

Magnetic Field  
 Strength: 52402.5snT  
 Dip Angle: 65.83°  
 Date: 3/16/2010  
 Model: BGGM2007

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Kaufman 23A-25-692 (TD)	7377.09	-673.10	393.39	Circle (Radius: 25.00)



CASING DETAILS

TVD	MD	Name	Size
730.00	730.00	9 5/8"	9-5/8

FORMATION TOP DETAILS

TVDP	MD	Formation
3424.00	3486.14	Mesaverde
4244.00	4325.17	Price Coal
4744.00	4827.09	Top Gas
6994.00	7077.09	Rollins
7294.00	7377.09	TD

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Kaufman 23A-25-692, True North  
 Vertical (TVD) Reference: WELL @ 5936.00ft (Original Well Elev)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: WELL @ 5936.00ft (Original Well Elev)  
 Calculation Method: Minimum Curvature