

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**Miller Pad #9**

**Miller 13D-6-791**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**16 May, 2011**

# Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Miller 13D-6-791
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6091.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6091.00ft (Original Well Elev)
<b>Site:</b>	Miller Pad #9	<b>North Reference:</b>	True
<b>Well:</b>	Miller 13D-6-791	<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>	Miller Pad #9		
<b>Site Position:</b>		<b>Northing:</b>	1,604,898.699 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,405,969.198 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 28' 31.184 N
		<b>Longitude:</b>	107° 36' 16.4376 W
		<b>Grid Convergence:</b>	-1.33 °

<b>Well</b>	Miller 13D-6-791		
<b>Well Position</b>	<b>+N/-S</b>	-9.11 ft	<b>Northing:</b>
	<b>+E/-W</b>	9.03 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<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	10.34	65.85	52,464

<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	70.84

<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	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
866.35	4.16	70.84	866.20	1.98	5.70	2.50	2.50	0.00	70.84	
4,546.83	4.16	70.84	4,536.99	89.59	257.82	0.00	0.00	0.00	0.00	
4,824.08	0.00	0.00	4,814.00	92.89	267.32	1.50	-1.50	0.00	180.00	
6,824.08	0.00	0.00	6,814.00	92.89	267.32	0.00	0.00	0.00	0.00	Miller 13D-6-791 (T

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<b>Site:</b>	Miller Pad #9	<b>North Reference:</b>	True
<b>Well:</b>	Miller 13D-6-791	<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	
800.00	2.50	70.84	799.97	0.72	2.06	2.18	2.50	2.50	0.00	
866.35	4.16	70.84	866.20	1.98	5.70	6.03	2.50	2.50	0.00	
900.00	4.16	70.84	899.77	2.78	8.01	8.47	0.00	0.00	0.00	
1,000.00	4.16	70.84	999.50	5.16	14.86	15.73	0.00	0.00	0.00	
1,100.00	4.16	70.84	1,099.24	7.54	21.71	22.98	0.00	0.00	0.00	
1,200.00	4.16	70.84	1,198.98	9.92	28.56	30.23	0.00	0.00	0.00	
1,300.00	4.16	70.84	1,298.71	12.30	35.41	37.48	0.00	0.00	0.00	
1,400.00	4.16	70.84	1,398.45	14.68	42.26	44.73	0.00	0.00	0.00	
1,500.00	4.16	70.84	1,498.19	17.06	49.11	51.99	0.00	0.00	0.00	
1,600.00	4.16	70.84	1,597.92	19.44	55.96	59.24	0.00	0.00	0.00	
1,700.00	4.16	70.84	1,697.66	21.82	62.81	66.49	0.00	0.00	0.00	
1,800.00	4.16	70.84	1,797.40	24.21	69.66	73.74	0.00	0.00	0.00	
1,900.00	4.16	70.84	1,897.13	26.59	76.51	81.00	0.00	0.00	0.00	
2,000.00	4.16	70.84	1,996.87	28.97	83.36	88.25	0.00	0.00	0.00	
2,100.00	4.16	70.84	2,096.61	31.35	90.21	95.50	0.00	0.00	0.00	
2,200.00	4.16	70.84	2,196.34	33.73	97.06	102.75	0.00	0.00	0.00	
2,300.00	4.16	70.84	2,296.08	36.11	103.91	110.00	0.00	0.00	0.00	
2,400.00	4.16	70.84	2,395.82	38.49	110.76	117.26	0.00	0.00	0.00	
2,500.00	4.16	70.84	2,495.55	40.87	117.61	124.51	0.00	0.00	0.00	
2,600.00	4.16	70.84	2,595.29	43.25	124.46	131.76	0.00	0.00	0.00	
2,700.00	4.16	70.84	2,695.03	45.63	131.31	139.01	0.00	0.00	0.00	
2,800.00	4.16	70.84	2,794.76	48.01	138.16	146.26	0.00	0.00	0.00	
2,900.00	4.16	70.84	2,894.50	50.39	145.01	153.52	0.00	0.00	0.00	
3,000.00	4.16	70.84	2,994.24	52.77	151.86	160.77	0.00	0.00	0.00	
3,100.00	4.16	70.84	3,093.97	55.15	158.71	168.02	0.00	0.00	0.00	
3,200.00	4.16	70.84	3,193.71	57.53	165.56	175.27	0.00	0.00	0.00	
3,300.00	4.16	70.84	3,293.45	59.91	172.41	182.52	0.00	0.00	0.00	
3,400.00	4.16	70.84	3,393.18	62.29	179.26	189.78	0.00	0.00	0.00	
3,500.00	4.16	70.84	3,492.92	64.67	186.11	197.03	0.00	0.00	0.00	
3,600.00	4.16	70.84	3,592.66	67.05	192.96	204.28	0.00	0.00	0.00	
3,700.00	4.16	70.84	3,692.39	69.43	199.81	211.53	0.00	0.00	0.00	
3,800.00	4.16	70.84	3,792.13	71.81	206.66	218.78	0.00	0.00	0.00	
3,900.00	4.16	70.84	3,891.87	74.19	213.51	226.04	0.00	0.00	0.00	
4,000.00	4.16	70.84	3,991.60	76.57	220.36	233.29	0.00	0.00	0.00	
4,100.00	4.16	70.84	4,091.34	78.95	227.21	240.54	0.00	0.00	0.00	
4,200.00	4.16	70.84	4,191.08	81.33	234.06	247.79	0.00	0.00	0.00	
4,300.00	4.16	70.84	4,290.81	83.71	240.91	255.04	0.00	0.00	0.00	
4,400.00	4.16	70.84	4,390.55	86.09	247.76	262.30	0.00	0.00	0.00	
4,500.00	4.16	70.84	4,490.29	88.47	254.61	269.55	0.00	0.00	0.00	
4,546.83	4.16	70.84	4,536.99	89.59	257.82	272.94	0.00	0.00	0.00	
4,600.00	3.36	70.84	4,590.05	90.73	261.12	276.43	1.50	-1.50	0.00	
4,700.00	1.86	70.84	4,689.94	92.23	265.42	280.99	1.50	-1.50	0.00	
4,800.00	0.36	70.84	4,789.92	92.87	267.25	282.93	1.50	-1.50	0.00	
4,824.08	0.00	0.00	4,814.00	92.89	267.32	283.00	1.50	-1.50	0.00	
4,900.00	0.00	0.00	4,889.92	92.89	267.32	283.00	0.00	0.00	0.00	

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<b>Site:</b>	Miller Pad #9	<b>North Reference:</b>	True
<b>Well:</b>	Miller 13D-6-791	<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	0.00	0.00	4,989.92	92.89	267.32	283.00	0.00	0.00	0.00	
5,100.00	0.00	0.00	5,089.92	92.89	267.32	283.00	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,189.92	92.89	267.32	283.00	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,289.92	92.89	267.32	283.00	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,389.92	92.89	267.32	283.00	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,489.92	92.89	267.32	283.00	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,589.92	92.89	267.32	283.00	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,689.92	92.89	267.32	283.00	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,789.92	92.89	267.32	283.00	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,889.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,989.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,089.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,189.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,289.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,389.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,489.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,589.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,689.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,789.92	92.89	267.32	283.00	0.00	0.00	0.00	
6,824.08	0.00	0.00	6,814.00	92.89	267.32	283.00	0.00	0.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
700.00	700.00	9 5/8"	9-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,879.45	2,874.00	Mesaverde		0.00		
3,646.47	3,639.00	Price Coal		0.00		
4,222.98	4,214.00	Top Gas		0.00		
6,524.08	6,514.00	Rollins		0.00		
6,824.08	6,814.00	TD		0.00		

WELL DETAILS: Miller 13D-6-791							
Ground Level: 0.00							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
0.00	0.00	1604889.377	2405978.017	39° 28' 31.094 N	107° 36' 16.3224 W		



Azimuths to True North

Magnetic North 10.34°

1 0.00 MD

Inc 0.00

Azi 0.00

TVD 0.00

2 0.00 MD

Inc 0.00

Azi 0.00

TVD 700.00

3 866.35 MD

Inc 4.16

Azi 70.84

TVD 866.20

4 866.35 MD

Inc 4.16

Azi 70.84

TVD 4536.99

5 4536.99 MD

Inc 0.00

Azi 0.00

TVD 4814.00

6 4814.00 MD

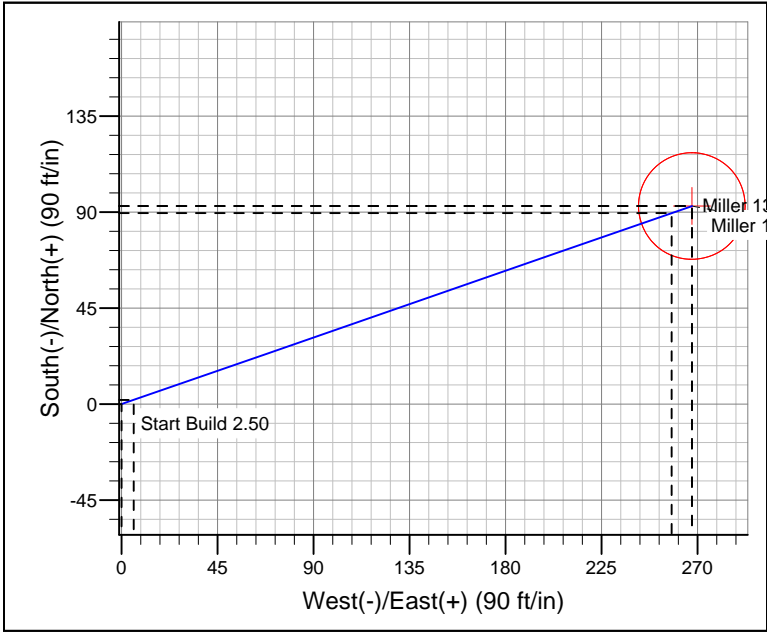
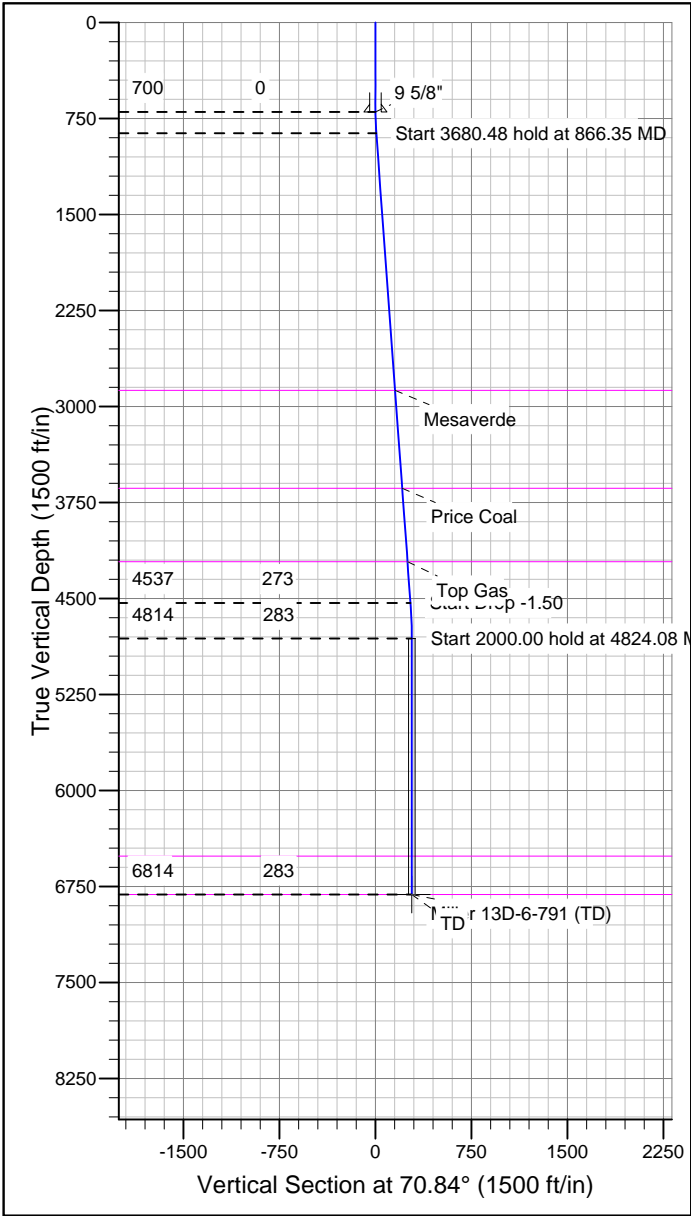
Inc 0.00

Azi 0.00

TVD 6814.00

SECTION DETAILS											
+N/-S	+E/-W	DLeg	TFace	VSec	Target						
0.00	0.00	0.00	0.00	0.00							
1.98	5.70	2.50	70.84	6.03							
89.59	257.82	0.00	0.00	272.94							
92.89	267.32	1.50	180.00	283.00							
92.89	267.32	0.00	0.00	283.00	Miller 13D-6-791 (TD)						

WELLBORE TARGET DETAILS				
Name	TVD	+N/-S	+E/-W	Shape
Miller 13D-6-791 (TD)	6814.00	92.89	267.32	Circle (Radius: 25.00)



CASING DETAILS			
TVD	MD	Name	Size
700.00	700.00	9 5/8"	9-5/8

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2874.00	2879.45	Mesaverde
3639.00	3646.47	Price Coal
4214.00	4222.98	Top Gas
6514.00	6524.08	Rollins
6814.00	6824.08	TD

REFERENCE INFORMATION	
Co-ordinate (N/E) Reference: Well Miller 13D-6-791, True North	
Vertical (TVD) Reference: WELL @ 6091.00ft (Original Well Elev)	
Section (VS) Reference: Slot - (0.00N, 0.00E)	
Measured Depth Reference: WELL @ 6091.00ft (Original Well Elev)	
Calculation Method: Minimum Curvature	