

BILL BARRETT CORP

GARFIELD COUNTY, COLORADO NAD 1983

Miller Pad #4

Miller 33D-31-691

Wellbore #1

Plan: Design #1

Standard Planning Report

16 August, 2011

Bill Barrett Corp
Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Miller 33D-31-691
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	Miller Pad #4	North Reference:	True
Well:	Miller 33D-31-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	GARFIELD COUNTY, COLORADO NAD 1983		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	Miller Pad #4				
Site Position:		Northing:	1,608,716.958 ft	Latitude:	39° 29' 9.805 N
From:	Lat/Long	Easting:	2,409,880.228 ft	Longitude:	107° 35' 27.6936 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	-1.32 °

Well	Miller 33D-31-691					
Well Position	+N-S	270.99 ft	Northing:	1,608,988.170 ft	Latitude:	39° 29' 12.483 N
	+E/-W	-12.98 ft	Easting:	2,409,873.486 ft	Longitude:	107° 35' 27.8592 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	0.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	10.34	65.86	52,521

Design	Design #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	216.96	

Plan Sections										
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	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,882.86	27.07	216.96	1,843.02	-200.64	-150.97	2.50	2.50	0.00	216.96	
3,516.45	27.07	216.96	3,297.63	-794.71	-597.96	0.00	0.00	0.00	0.00	
5,321.23	0.00	0.00	5,036.00	-1,129.12	-849.57	1.50	-1.50	0.00	180.00	
7,321.23	0.00	0.00	7,036.00	-1,129.12	-849.57	0.00	0.00	0.00	0.00	Miller 33D-31-691 T

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Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	Miller Pad #4	North Reference:	True
Well:	Miller 33D-31-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	0.00
100.00	0.00	0.00	100.00	0.00	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	0.00
300.00	0.00	0.00	300.00	0.00	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	0.00
500.00	0.00	0.00	500.00	0.00	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	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	2.50	216.96	899.97	-1.74	-1.31	2.18	2.50	2.50	0.00	0.00
1,000.00	5.00	216.96	999.75	-6.97	-5.24	8.72	2.50	2.50	0.00	0.00
1,100.00	7.50	216.96	1,099.14	-15.67	-11.79	19.61	2.50	2.50	0.00	0.00
1,200.00	10.00	216.96	1,197.97	-27.82	-20.93	34.82	2.50	2.50	0.00	0.00
1,300.00	12.50	216.96	1,296.04	-43.41	-32.66	54.33	2.50	2.50	0.00	0.00
1,400.00	15.00	216.96	1,393.17	-62.40	-46.95	78.09	2.50	2.50	0.00	0.00
1,500.00	17.50	216.96	1,489.17	-84.76	-63.77	106.07	2.50	2.50	0.00	0.00
1,600.00	20.00	216.96	1,583.85	-110.44	-83.10	138.21	2.50	2.50	0.00	0.00
1,700.00	22.50	216.96	1,677.05	-139.40	-104.89	174.45	2.50	2.50	0.00	0.00
1,800.00	25.00	216.96	1,768.57	-171.58	-129.10	214.73	2.50	2.50	0.00	0.00
1,882.86	27.07	216.96	1,843.02	-200.64	-150.97	251.10	2.50	2.50	0.00	0.00
1,900.00	27.07	216.96	1,858.28	-206.87	-155.66	258.89	0.00	0.00	0.00	0.00
2,000.00	27.07	216.96	1,947.32	-243.24	-183.02	304.40	0.00	0.00	0.00	0.00
2,100.00	27.07	216.96	2,036.37	-279.61	-210.38	349.92	0.00	0.00	0.00	0.00
2,200.00	27.07	216.96	2,125.41	-315.97	-237.74	395.43	0.00	0.00	0.00	0.00
2,300.00	27.07	216.96	2,214.45	-352.34	-265.11	440.94	0.00	0.00	0.00	0.00
2,400.00	27.07	216.96	2,303.50	-388.70	-292.47	486.45	0.00	0.00	0.00	0.00
2,500.00	27.07	216.96	2,392.54	-425.07	-319.83	531.96	0.00	0.00	0.00	0.00
2,600.00	27.07	216.96	2,481.59	-461.44	-347.19	577.47	0.00	0.00	0.00	0.00
2,700.00	27.07	216.96	2,570.63	-497.80	-374.56	622.98	0.00	0.00	0.00	0.00
2,800.00	27.07	216.96	2,659.67	-534.17	-401.92	668.49	0.00	0.00	0.00	0.00
2,900.00	27.07	216.96	2,748.72	-570.53	-429.28	714.00	0.00	0.00	0.00	0.00
3,000.00	27.07	216.96	2,837.76	-606.90	-456.64	759.51	0.00	0.00	0.00	0.00
3,100.00	27.07	216.96	2,926.81	-643.27	-484.01	805.02	0.00	0.00	0.00	0.00
3,200.00	27.07	216.96	3,015.85	-679.63	-511.37	850.53	0.00	0.00	0.00	0.00
3,300.00	27.07	216.96	3,104.89	-716.00	-538.73	896.04	0.00	0.00	0.00	0.00
3,400.00	27.07	216.96	3,193.94	-752.36	-566.09	941.55	0.00	0.00	0.00	0.00
3,500.00	27.07	216.96	3,282.98	-788.73	-593.46	987.06	0.00	0.00	0.00	0.00
3,516.45	27.07	216.96	3,297.63	-794.71	-597.96	994.55	0.00	0.00	0.00	0.00
3,600.00	25.82	216.96	3,372.44	-824.44	-620.33	1,031.75	1.50	-1.50	0.00	0.00
3,700.00	24.32	216.96	3,463.01	-858.30	-645.80	1,074.12	1.50	-1.50	0.00	0.00
3,800.00	22.82	216.96	3,554.67	-890.25	-669.84	1,114.11	1.50	-1.50	0.00	0.00
3,900.00	21.32	216.96	3,647.34	-920.27	-692.43	1,151.68	1.50	-1.50	0.00	0.00
4,000.00	19.82	216.96	3,740.96	-948.34	-713.55	1,186.81	1.50	-1.50	0.00	0.00
4,100.00	18.32	216.96	3,835.47	-974.45	-733.19	1,219.48	1.50	-1.50	0.00	0.00
4,200.00	16.82	216.96	3,930.81	-998.57	-751.34	1,249.66	1.50	-1.50	0.00	0.00
4,300.00	15.32	216.96	4,026.90	-1,020.68	-767.98	1,277.34	1.50	-1.50	0.00	0.00
4,400.00	13.82	216.96	4,123.68	-1,040.78	-783.11	1,302.49	1.50	-1.50	0.00	0.00
4,500.00	12.32	216.96	4,221.09	-1,058.85	-796.70	1,325.10	1.50	-1.50	0.00	0.00
4,600.00	10.82	216.96	4,319.05	-1,074.87	-808.76	1,345.15	1.50	-1.50	0.00	0.00
4,700.00	9.32	216.96	4,417.51	-1,088.84	-819.27	1,362.64	1.50	-1.50	0.00	0.00
4,800.00	7.82	216.96	4,516.39	-1,100.75	-828.23	1,377.53	1.50	-1.50	0.00	0.00
4,900.00	6.32	216.96	4,615.63	-1,110.58	-835.62	1,389.84	1.50	-1.50	0.00	0.00
5,000.00	4.82	216.96	4,715.15	-1,118.33	-841.46	1,399.54	1.50	-1.50	0.00	0.00

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Site:	Miller Pad #4	North Reference:	True
Well:	Miller 33D-31-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
5,100.00	3.32	216.96	4,814.90	-1,124.00	-845.72	1,406.64	1.50	-1.50	0.00
5,200.00	1.82	216.96	4,914.79	-1,127.58	-848.42	1,411.12	1.50	-1.50	0.00
5,300.00	0.32	216.96	5,014.77	-1,129.07	-849.54	1,412.98	1.50	-1.50	0.00
5,321.23	0.00	0.00	5,036.00	-1,129.12	-849.57	1,413.04	1.50	-1.50	0.00
5,400.00	0.00	0.00	5,114.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
5,500.00	0.00	0.00	5,214.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
5,600.00	0.00	0.00	5,314.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
5,700.00	0.00	0.00	5,414.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
5,800.00	0.00	0.00	5,514.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
5,900.00	0.00	0.00	5,614.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,000.00	0.00	0.00	5,714.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,100.00	0.00	0.00	5,814.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,200.00	0.00	0.00	5,914.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,300.00	0.00	0.00	6,014.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,400.00	0.00	0.00	6,114.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,500.00	0.00	0.00	6,214.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,600.00	0.00	0.00	6,314.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,700.00	0.00	0.00	6,414.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,800.00	0.00	0.00	6,514.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
6,900.00	0.00	0.00	6,614.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
7,000.00	0.00	0.00	6,714.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
7,100.00	0.00	0.00	6,814.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
7,200.00	0.00	0.00	6,914.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
7,300.00	0.00	0.00	7,014.77	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00
7,321.23	0.00	0.00	7,036.00	-1,129.12	-849.57	1,413.04	0.00	0.00	0.00

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

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,334.93	3,136.00	Mesaverde		0.00	
4,236.71	3,966.00	Price Coal		0.00	
4,412.68	4,136.00	Top Gas		0.00	
7,021.23	6,736.00	Rollins		0.00	
7,321.23	7,036.00	TD		0.00	

WELL DETAILS: Miller 33D-31-691

			Ground Level:	0.00						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot				
0.00	0.00	1608988.170	2409873.486	39° 29' 12.483 N	107° 35' 27.8592 W					

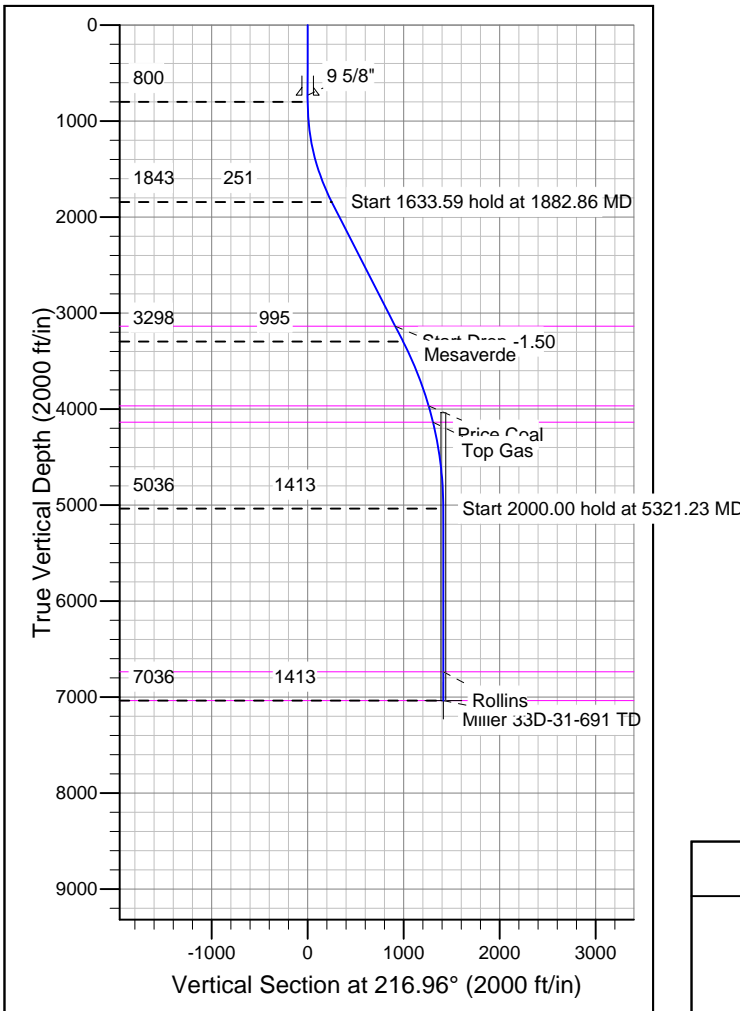
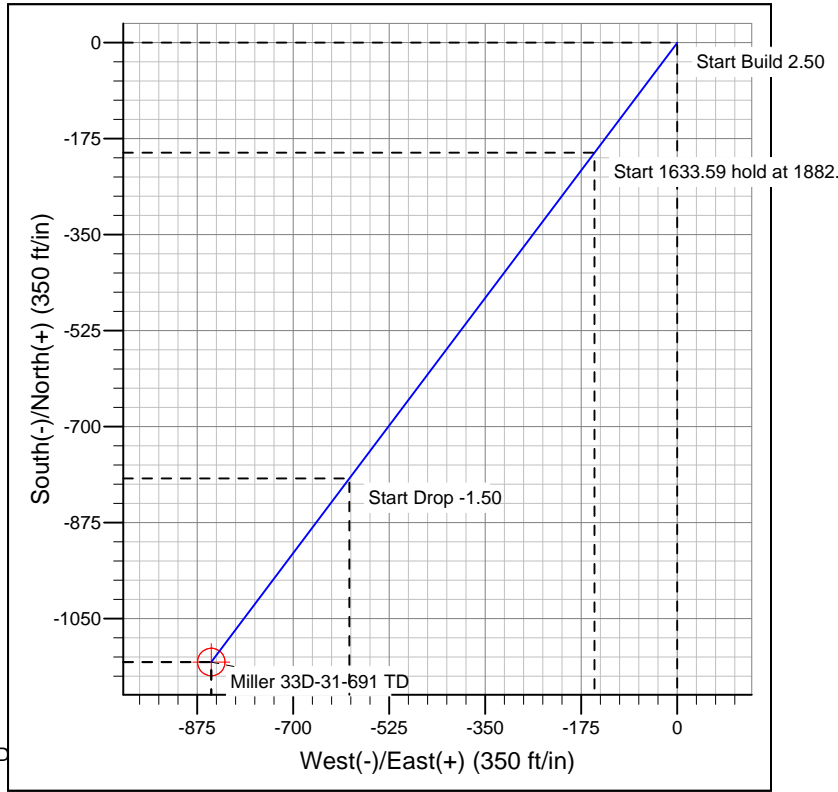
SECTION DETAILS

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	800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	
3	1882.86	27.07	216.96	1843.02	-200.64	-150.97	2.50	216.96	251.10	
4	3516.45	27.07	216.96	3297.63	-794.71	-597.96	0.00	0.00	994.55	
5	5321.23	0.00	0.00	5036.00	-1129.12	-849.57	1.50	180.00	1413.04	
6	7321.23	0.00	0.00	7036.00	-1129.12	-849.57	0.00	0.00	1413.04	Miller 33D-31-691 TD

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Miller 33D-31-691 TD	7036.00	-1129.12	-849.57	Circle (Radius: 25.00)

Azimuths to True North
 Magnetic North: 10.34°
 Magnetic Field Strength: 52521.1snT
 Dip Angle: 65.86°
 Date: 12/31/2009
 Model: IGRF200510



TVDPath	MDPath	Formation
3136.00	3334.93	Mesaverde
3966.00	4236.71	Price Coal
4136.00	4412.68	Top Gas
6736.00	7021.23	Rollins
7036.00	7321.23	TD

Co-ordinate (N/E) Reference:	Well Miller 33D-31-691, True North
Vertical (TVD) Reference:	WELL @ 0.00ft (Original Well Elev)
Section (VS) Reference:	Slot - (0.00N, 0.00E)
Measured Depth Reference:	WELL @ 0.00ft (Original Well Elev)
Calculation Method:	Minimum Curvature