

BILL BARRETT CORP

GARFIELD COUNTY, COLORADO NAD 1983

Miller Pad #4

Miller 32D-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 32D-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 32D-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
From:	Lat/Long	Easting:	2,409,880.228 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	39° 29' 9.805 N
		Longitude:	107° 35' 27.6936 W
		Grid Convergence:	-1.32 °

Well	Miller 32D-31-691		
Well Position	+N/-S	303.04 ft	Northing:
	+E/-W	-13.27 ft	Easting:
Position Uncertainty		0.00 ft	Wellhead Elevation:
			ft
			Latitude:
			39° 29' 12.800 N
			Longitude:
			107° 35' 27.8628 W
			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	283.37

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	
1,434.95	15.87	283.37	1,426.85	20.21	-85.02	2.50	2.50	0.00	283.37	
4,204.96	15.87	283.37	4,091.24	195.45	-822.13	0.00	0.00	0.00	0.00	
5,263.21	0.00	0.00	5,136.00	229.13	-963.83	1.50	-1.50	0.00	180.00	
7,263.21	0.00	0.00	7,136.00	229.13	-963.83	0.00	0.00	0.00	0.00	Miller 32D-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 32D-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	
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	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	2.50	283.37	899.97	0.50	-2.12	2.18	2.50	2.50	0.00	
1,000.00	5.00	283.37	999.75	2.02	-8.48	8.72	2.50	2.50	0.00	
1,100.00	7.50	283.37	1,099.14	4.53	-19.08	19.61	2.50	2.50	0.00	
1,200.00	10.00	283.37	1,197.97	8.05	-33.87	34.82	2.50	2.50	0.00	
1,300.00	12.50	283.37	1,296.04	12.56	-52.85	54.33	2.50	2.50	0.00	
1,400.00	15.00	283.37	1,393.17	18.06	-75.97	78.09	2.50	2.50	0.00	
1,434.95	15.87	283.37	1,426.85	20.21	-85.02	87.39	2.50	2.50	0.00	
1,500.00	15.87	283.37	1,489.43	24.33	-102.34	105.19	0.00	0.00	0.00	
1,600.00	15.87	283.37	1,585.61	30.65	-128.95	132.54	0.00	0.00	0.00	
1,700.00	15.87	283.37	1,681.80	36.98	-155.56	159.89	0.00	0.00	0.00	
1,800.00	15.87	283.37	1,777.99	43.31	-182.17	187.24	0.00	0.00	0.00	
1,900.00	15.87	283.37	1,874.17	49.63	-208.78	214.59	0.00	0.00	0.00	
2,000.00	15.87	283.37	1,970.36	55.96	-235.39	241.95	0.00	0.00	0.00	
2,100.00	15.87	283.37	2,066.55	62.28	-262.00	269.30	0.00	0.00	0.00	
2,200.00	15.87	283.37	2,162.74	68.61	-288.61	296.65	0.00	0.00	0.00	
2,300.00	15.87	283.37	2,258.92	74.94	-315.22	324.00	0.00	0.00	0.00	
2,400.00	15.87	283.37	2,355.11	81.26	-341.83	351.35	0.00	0.00	0.00	
2,500.00	15.87	283.37	2,451.30	87.59	-368.44	378.70	0.00	0.00	0.00	
2,600.00	15.87	283.37	2,547.48	93.91	-395.05	406.06	0.00	0.00	0.00	
2,700.00	15.87	283.37	2,643.67	100.24	-421.66	433.41	0.00	0.00	0.00	
2,800.00	15.87	283.37	2,739.86	106.57	-448.27	460.76	0.00	0.00	0.00	
2,900.00	15.87	283.37	2,836.04	112.89	-474.88	488.11	0.00	0.00	0.00	
3,000.00	15.87	283.37	2,932.23	119.22	-501.49	515.46	0.00	0.00	0.00	
3,100.00	15.87	283.37	3,028.42	125.54	-528.10	542.81	0.00	0.00	0.00	
3,200.00	15.87	283.37	3,124.60	131.87	-554.71	570.16	0.00	0.00	0.00	
3,300.00	15.87	283.37	3,220.79	138.20	-581.32	597.52	0.00	0.00	0.00	
3,400.00	15.87	283.37	3,316.98	144.52	-607.93	624.87	0.00	0.00	0.00	
3,500.00	15.87	283.37	3,413.16	150.85	-634.54	652.22	0.00	0.00	0.00	
3,600.00	15.87	283.37	3,509.35	157.18	-661.15	679.57	0.00	0.00	0.00	
3,700.00	15.87	283.37	3,605.54	163.50	-687.76	706.92	0.00	0.00	0.00	
3,800.00	15.87	283.37	3,701.72	169.83	-714.37	734.27	0.00	0.00	0.00	
3,900.00	15.87	283.37	3,797.91	176.15	-740.98	761.63	0.00	0.00	0.00	
4,000.00	15.87	283.37	3,894.10	182.48	-767.59	788.98	0.00	0.00	0.00	
4,100.00	15.87	283.37	3,990.28	188.81	-794.20	816.33	0.00	0.00	0.00	
4,200.00	15.87	283.37	4,086.47	195.13	-820.81	843.68	0.00	0.00	0.00	
4,204.96	15.87	283.37	4,091.24	195.45	-822.13	845.04	0.00	0.00	0.00	
4,300.00	14.45	283.37	4,182.97	201.19	-846.31	869.89	1.50	-1.50	0.00	
4,400.00	12.95	283.37	4,280.12	206.67	-869.34	893.57	1.50	-1.50	0.00	
4,500.00	11.45	283.37	4,377.86	211.56	-889.90	914.70	1.50	-1.50	0.00	
4,600.00	9.95	283.37	4,476.12	215.85	-907.96	933.26	1.50	-1.50	0.00	
4,700.00	8.45	283.37	4,574.83	219.55	-923.51	949.25	1.50	-1.50	0.00	
4,800.00	6.95	283.37	4,673.93	222.65	-936.54	962.64	1.50	-1.50	0.00	
4,900.00	5.45	283.37	4,773.34	225.14	-947.05	973.44	1.50	-1.50	0.00	
5,000.00	3.95	283.37	4,873.00	227.04	-955.01	981.63	1.50	-1.50	0.00	

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Site:	Miller Pad #4	North Reference:	True
Well:	Miller 32D-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	2.45	283.37	4,972.84	228.33	-960.44	987.21	1.50	-1.50	0.00
5,200.00	0.95	283.37	5,072.80	229.01	-963.32	990.17	1.50	-1.50	0.00
5,263.21	0.00	0.00	5,136.00	229.13	-963.83	990.69	1.50	-1.50	0.00
5,300.00	0.00	0.00	5,172.79	229.13	-963.83	990.69	0.00	0.00	0.00
5,400.00	0.00	0.00	5,272.79	229.13	-963.83	990.69	0.00	0.00	0.00
5,500.00	0.00	0.00	5,372.79	229.13	-963.83	990.69	0.00	0.00	0.00
5,600.00	0.00	0.00	5,472.79	229.13	-963.83	990.69	0.00	0.00	0.00
5,700.00	0.00	0.00	5,572.79	229.13	-963.83	990.69	0.00	0.00	0.00
5,800.00	0.00	0.00	5,672.79	229.13	-963.83	990.69	0.00	0.00	0.00
5,900.00	0.00	0.00	5,772.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,000.00	0.00	0.00	5,872.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,100.00	0.00	0.00	5,972.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,200.00	0.00	0.00	6,072.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,300.00	0.00	0.00	6,172.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,400.00	0.00	0.00	6,272.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,500.00	0.00	0.00	6,372.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,600.00	0.00	0.00	6,472.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,700.00	0.00	0.00	6,572.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,800.00	0.00	0.00	6,672.79	229.13	-963.83	990.69	0.00	0.00	0.00
6,900.00	0.00	0.00	6,772.79	229.13	-963.83	990.69	0.00	0.00	0.00
7,000.00	0.00	0.00	6,872.79	229.13	-963.83	990.69	0.00	0.00	0.00
7,100.00	0.00	0.00	6,972.79	229.13	-963.83	990.69	0.00	0.00	0.00
7,200.00	0.00	0.00	7,072.79	229.13	-963.83	990.69	0.00	0.00	0.00
7,263.21	0.00	0.00	7,136.00	229.13	-963.83	990.69	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 (°)
3,263.83	3,186.00	Mesaverde		0.00
4,105.94	3,996.00	Price Coal		0.00
4,251.41	4,136.00	Top Gas		0.00
6,963.21	6,836.00	Rollins		0.00
7,263.21	7,136.00	TD		0.00

WELL DETAILS: Miller 32D-31-691

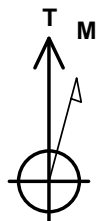
+N/-S	+E/-W	Northing	Easting	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1609020.221	2409873.941	0.00	39° 29' 12.800 N	107° 35' 27.8628 W	

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	1434.95	15.87	283.37	1426.85	20.21	-85.02	2.50	283.37	87.39	
4	4204.96	15.87	283.37	4091.24	195.45	-822.13	0.00	0.00	845.04	
5	5263.21	0.00	0.00	5136.00	229.13	-963.83	1.50	180.00	990.69	
6	7263.21	0.00	0.00	7136.00	229.13	-963.83	0.00	0.00	990.69	Miller 32D-31-691 TD

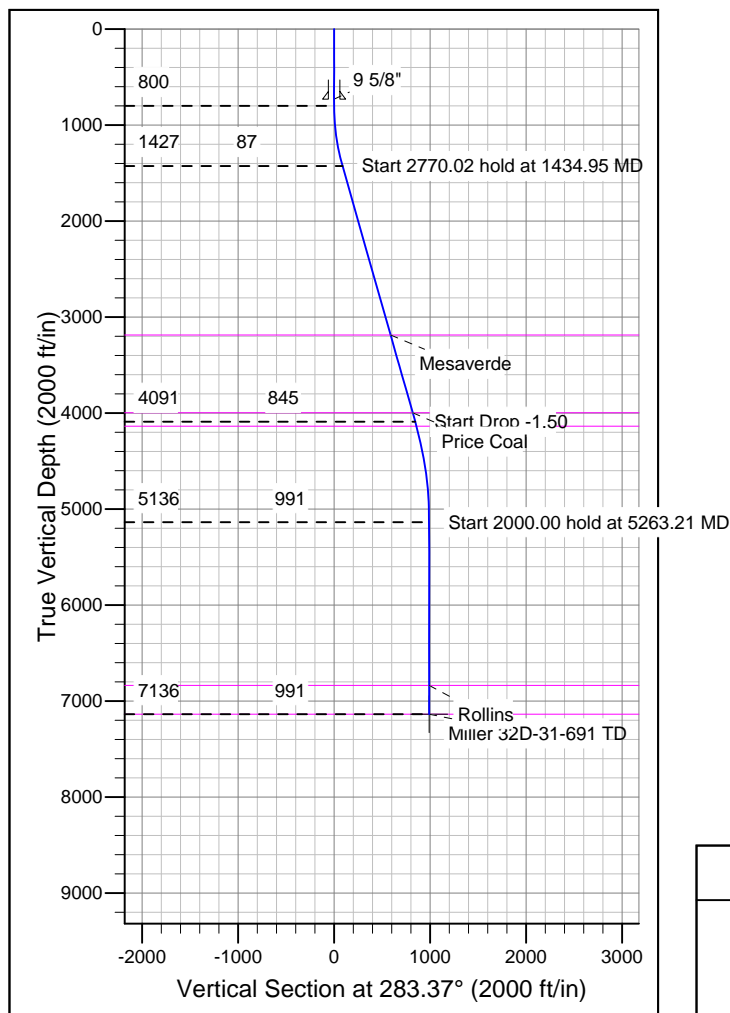
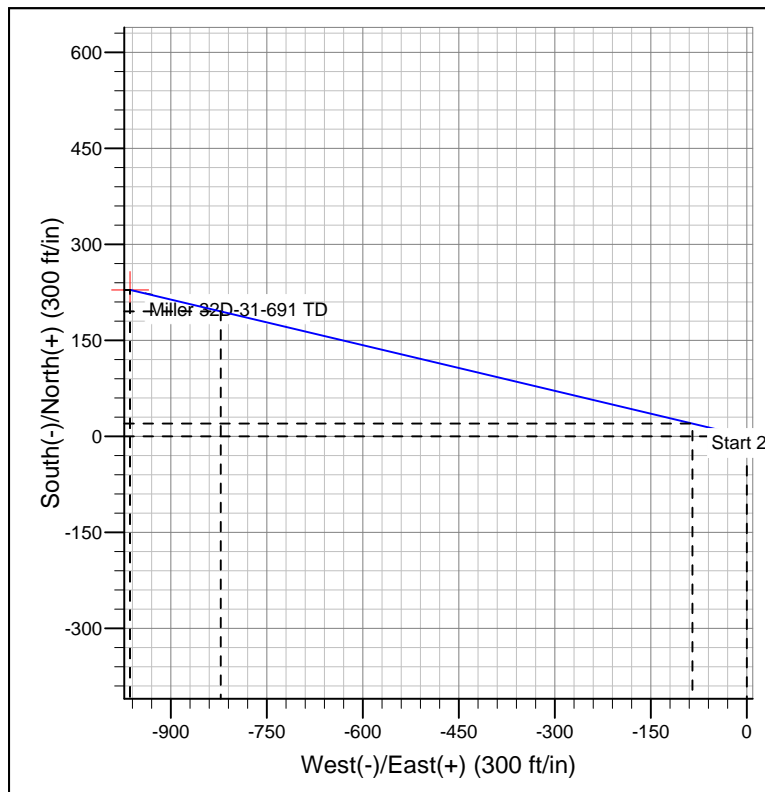
WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Miller 32D-31-691 TD	7136.00	229.13	-963.83	Point



Azimuths to True North
Magnetic North: 10.34°

Magnetic Field
Strength: 52521.1 snT
Dip Angle: 65.86°
Date: 12/31/2009
Model: IGRF200510



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3186.00	3263.83	Mesaverde
3996.00	4105.94	Price Coal
4136.00	4251.41	Top Gas
6836.00	6963.21	Rollins
7136.00	7263.21	TD

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Miller 32D-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