

BILL BARRETT CORP

GARFIELD COUNTY, COLORADO NAD 1983

Miller #5

Miller 14C-31-691

Wellbore #1

Plan: Design #1

Standard Planning Report

22 October, 2009

BBC

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Miller 14C-31-691
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 6035.00ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 6035.00ft (Original Well Elev)
Site:	Miller #5	North Reference:	True
Well:	Miller 14C-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 #5		
Site Position:		Northing:	1,607,064.787 ft
From:	Lat/Long	Easting:	2,407,107.914 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	39° 28' 52.848 N
		Longitude:	107° 36' 2.5580 W
		Grid Convergence:	-1.32 °

Well	Miller 14C-31-691		
Well Position	+N/-S	-62.54 ft	Northing:
	+E/-W	-102.59 ft	Easting:
Position Uncertainty		0.00 ft	Wellhead Elevation:
			ft
			Latitude:
			39° 28' 52.230 N
			Longitude:
			107° 36' 3.8664 W
			Ground Level:
			0.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/4/2008	10.49	65.88	52,581

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	222.20

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	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,681.22	23.28	222.20	1,655.80	-138.23	-125.34	2.50	2.50	0.00	222.20	
3,027.34	23.28	222.20	2,892.33	-532.37	-482.71	0.00	0.00	0.00	0.00	
4,579.37	0.00	0.00	4,402.00	-762.76	-691.61	1.50	-1.50	0.00	180.00	
7,079.37	0.00	0.00	6,902.00	-762.76	-691.61	0.00	0.00	0.00	0.00	TOG 14C-31-691

BBC

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Miller 14C-31-691
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 6035.00ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 6035.00ft (Original Well Elev)
Site:	Miller #5	North Reference:	True
Well:	Miller 14C-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
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
800.00	1.25	222.20	800.00	-0.40	-0.37	0.55	2.50	2.50	0.00
900.00	3.75	222.20	899.89	-3.64	-3.30	4.91	2.50	2.50	0.00
1,000.00	6.25	222.20	999.50	-10.09	-9.15	13.62	2.50	2.50	0.00
1,100.00	8.75	222.20	1,098.64	-19.76	-17.92	26.67	2.50	2.50	0.00
1,200.00	11.25	222.20	1,197.11	-32.62	-29.58	44.04	2.50	2.50	0.00
1,300.00	13.75	222.20	1,294.74	-48.66	-44.12	65.68	2.50	2.50	0.00
1,400.00	16.25	222.20	1,391.32	-67.83	-61.50	91.56	2.50	2.50	0.00
1,500.00	18.75	222.20	1,486.69	-90.10	-81.70	121.63	2.50	2.50	0.00
1,600.00	21.25	222.20	1,580.65	-115.44	-104.67	155.83	2.50	2.50	0.00
1,681.22	23.28	222.20	1,655.80	-138.23	-125.34	186.60	2.50	2.50	0.00
1,700.00	23.28	222.20	1,673.06	-143.73	-130.33	194.02	0.00	0.00	0.00
1,800.00	23.28	222.20	1,764.92	-173.01	-156.87	233.54	0.00	0.00	0.00
1,900.00	23.28	222.20	1,856.77	-202.29	-183.42	273.07	0.00	0.00	0.00
2,000.00	23.28	222.20	1,948.63	-231.57	-209.97	312.59	0.00	0.00	0.00
2,100.00	23.28	222.20	2,040.49	-260.85	-236.52	352.11	0.00	0.00	0.00
2,200.00	23.28	222.20	2,132.35	-290.13	-263.07	391.64	0.00	0.00	0.00
2,300.00	23.28	222.20	2,224.21	-319.41	-289.61	431.16	0.00	0.00	0.00
2,400.00	23.28	222.20	2,316.07	-348.69	-316.16	470.68	0.00	0.00	0.00
2,500.00	23.28	222.20	2,407.92	-377.97	-342.71	510.21	0.00	0.00	0.00
2,600.00	23.28	222.20	2,499.78	-407.25	-369.26	549.73	0.00	0.00	0.00
2,700.00	23.28	222.20	2,591.64	-436.53	-395.81	589.25	0.00	0.00	0.00
2,800.00	23.28	222.20	2,683.50	-465.81	-422.35	628.77	0.00	0.00	0.00
2,900.00	23.28	222.20	2,775.36	-495.09	-448.90	668.30	0.00	0.00	0.00
3,000.00	23.28	222.20	2,867.21	-524.36	-475.45	707.82	0.00	0.00	0.00
3,027.34	23.28	222.20	2,892.33	-532.37	-482.71	718.63	0.00	0.00	0.00
3,100.00	22.19	222.20	2,959.34	-553.17	-501.57	746.71	1.50	-1.50	0.00
3,178.15	21.02	222.20	3,032.00	-574.49	-520.90	775.48	1.50	-1.50	0.00
Mesaverde									
3,200.00	20.69	222.20	3,052.42	-580.25	-526.12	783.26	1.50	-1.50	0.00
3,300.00	19.19	222.20	3,146.42	-605.51	-549.03	817.36	1.50	-1.50	0.00
3,400.00	17.69	222.20	3,241.28	-628.95	-570.28	848.99	1.50	-1.50	0.00
3,500.00	16.19	222.20	3,336.94	-650.53	-589.85	878.13	1.50	-1.50	0.00
3,600.00	14.69	222.20	3,433.33	-670.26	-607.73	904.75	1.50	-1.50	0.00
3,700.00	13.19	222.20	3,530.38	-688.10	-623.91	928.84	1.50	-1.50	0.00
3,800.00	11.69	222.20	3,628.03	-704.06	-638.38	950.39	1.50	-1.50	0.00
3,900.00	10.19	222.20	3,726.21	-718.12	-651.13	969.36	1.50	-1.50	0.00
4,000.00	8.69	222.20	3,824.85	-730.27	-662.15	985.77	1.50	-1.50	0.00
4,002.17	8.66	222.20	3,827.00	-730.51	-662.37	986.09	1.50	-1.50	0.00
Price Coal									
4,100.00	7.19	222.20	3,923.89	-740.50	-671.43	999.58	1.50	-1.50	0.00
4,200.00	5.69	222.20	4,023.26	-748.81	-678.96	1,010.80	1.50	-1.50	0.00
4,228.87	5.26	222.20	4,052.00	-750.85	-680.81	1,013.55	1.50	-1.50	0.00
Top Gas									

BBC

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Miller 14C-31-691
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 6035.00ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 6035.00ft (Original Well Elev)
Site:	Miller #5	North Reference:	True
Well:	Miller 14C-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)
4,300.00	4.19	222.20	4,122.88	-755.19	-684.75	1,019.41	1.50	-1.50	0.00
4,400.00	2.69	222.20	4,222.70	-759.64	-688.78	1,025.41	1.50	-1.50	0.00
4,500.00	1.19	222.20	4,322.64	-762.15	-691.05	1,028.80	1.50	-1.50	0.00
4,579.37	0.00	0.00	4,402.00	-762.76	-691.61	1,029.62	1.50	-1.50	0.00
4,600.00	0.00	0.00	4,422.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
4,700.00	0.00	0.00	4,522.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
4,800.00	0.00	0.00	4,622.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
4,900.00	0.00	0.00	4,722.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,000.00	0.00	0.00	4,822.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,100.00	0.00	0.00	4,922.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,200.00	0.00	0.00	5,022.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,300.00	0.00	0.00	5,122.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,400.00	0.00	0.00	5,222.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,500.00	0.00	0.00	5,322.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,600.00	0.00	0.00	5,422.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,700.00	0.00	0.00	5,522.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,800.00	0.00	0.00	5,622.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
5,900.00	0.00	0.00	5,722.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,000.00	0.00	0.00	5,822.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,100.00	0.00	0.00	5,922.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,200.00	0.00	0.00	6,022.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,300.00	0.00	0.00	6,122.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,400.00	0.00	0.00	6,222.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,500.00	0.00	0.00	6,322.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,600.00	0.00	0.00	6,422.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,700.00	0.00	0.00	6,522.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,779.37	0.00	0.00	6,602.00	-762.76	-691.61	1,029.62	0.00	0.00	0.00
Rollins									
6,800.00	0.00	0.00	6,622.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
6,900.00	0.00	0.00	6,722.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
7,000.00	0.00	0.00	6,822.63	-762.76	-691.61	1,029.62	0.00	0.00	0.00
7,079.37	0.00	0.00	6,902.00	-762.76	-691.61	1,029.62	0.00	0.00	0.00
TD									

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
750.00	750.00	9 5/8"	9-5/8	12-1/4

BBC

Planning Report

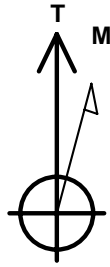
Database:	Compass	Local Co-ordinate Reference:	Well Miller 14C-31-691
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 6035.00ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 6035.00ft (Original Well Elev)
Site:	Miller #5	North Reference:	True
Well:	Miller 14C-31-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,178.15	3,032.00	Mesaverde		0.00		
4,002.17	3,827.00	Price Coal		0.00		
4,228.87	4,052.00	Top Gas		0.00		
6,779.37	6,602.00	Rollins		0.00		
7,079.37	6,902.00	TD		0.00		

WELL DETAILS: Miller 14C-31-691

Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1607004.640	2407003.903	29° 28' 52.2301 N	107° 36' 3.8664 W	



Azimuths to True North
Magnetic North: 10.49°

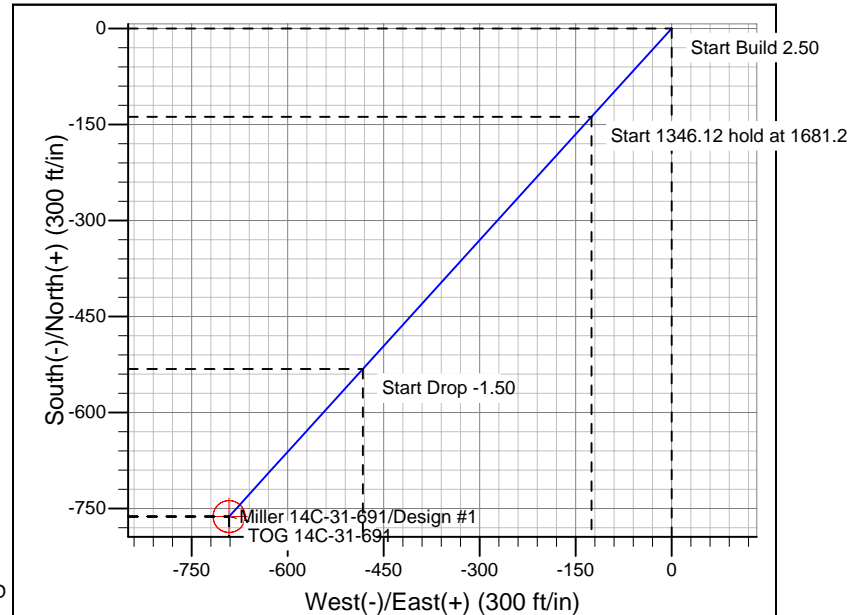
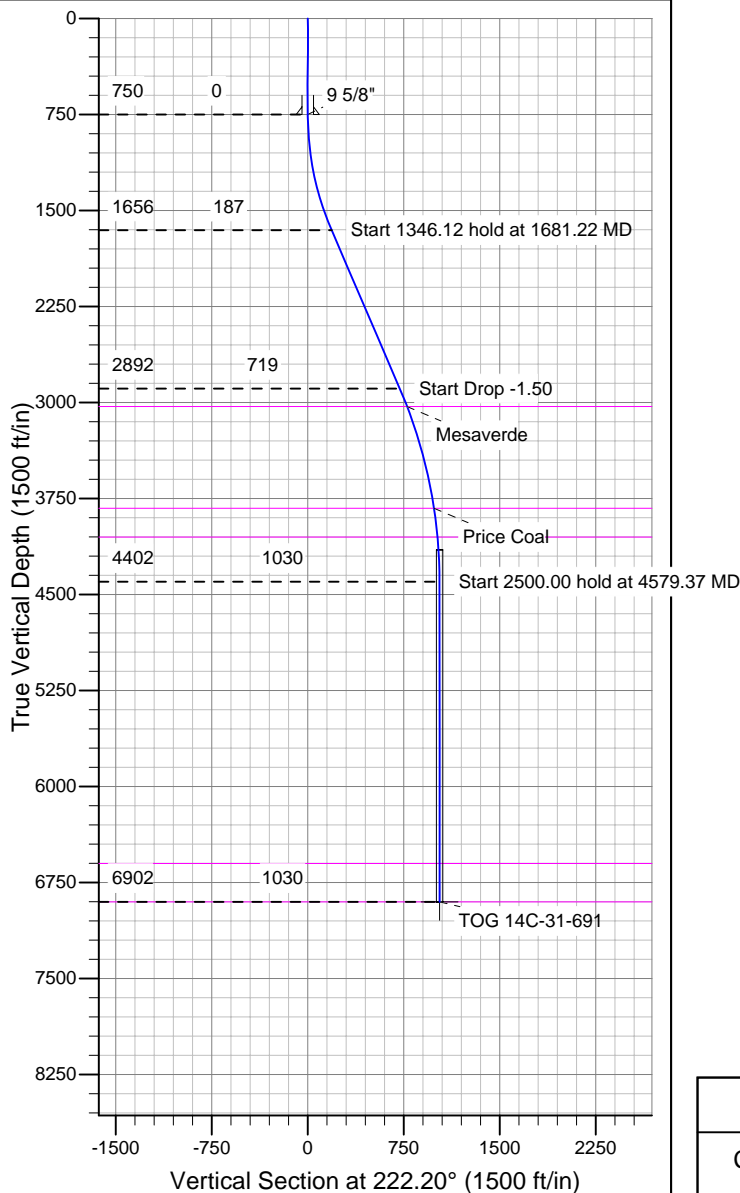
Magnetic Field
Strength: 52581.3snT
Dip Angle: 65.88°
Date: 11/4/2008
Model: IGRF200510

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	750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	
3	1681.22	23.28	222.20	1655.80	-138.23	-125.34	2.50	222.20	186.60	
4	2892.34	23.28	222.20	2892.33	-532.37	-482.71	0.00	0.00	718.63	
5	4402.00	0.00	0.00	4402.00	-762.76	-691.61	1.50	180.00	1029.62	
6	6707.37	0.00	0.00	6902.00	-762.76	-691.61	0.00	0.00	1029.62	TOG 14C-31-691

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
TOG 14C-31-691	6902.00	-762.76	-691.61	Circle (Radius: 25.00)



CASING DETAILS

TVD	MD	Name	Size
750.00	750.00	9 5/8"	9-5/8

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3032.00	3178.15	Mesaverde
3827.00	4002.17	Price Coal
4052.00	4228.87	Top Gas
6602.00	6779.37	Rollins
6902.00	7079.37	TD

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Miller 14C-31-691, True North
 Vertical (TVD) Reference: WELL @ 6035.00ft (Original Well Elev)
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: WELL @ 6035.00ft (Original Well Elev)
 Calculation Method: Minimum Curvature