

BILL BARRETT CORP

GARFIELD COUNTY, COLORADO NAD 1983

MDP #22

GGU Federal 33D-19-691

Wellbore #1

Plan: Design #1

Standard Planning Report

06 October, 2011

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well GGU Federal 33D-19-691
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:	MDP #22	North Reference:	True
Well:	GGU Federal 33D-19-691	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	MDP #22		
Site Position:		Northing:	1,617,744.730 ft
From:	Lat/Long	Easting:	2,409,758.995 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	39° 30' 38.981 N
		Longitude:	107° 35' 31.8912 W
		Grid Convergence:	-1.32 °

Well	GGU Federal 33D-19-691		
Well Position	+N/-S	878.16 ft	Northing:
	+E/-W	912.73 ft	Easting:
Position Uncertainty		0.00 ft	Wellhead Elevation:
			ft
			Latitude:
			39° 30' 47.660 N
			Longitude:
			107° 35' 20.2452 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	65.88	52,536

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	261.44

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	
1,898.18	27.45	261.44	1,856.64	-38.43	-255.24	2.50	2.50	0.00	261.44	
3,906.69	27.45	261.44	3,638.94	-176.29	-1,170.92	0.00	0.00	0.00	0.00	
5,736.99	0.00	0.00	5,400.00	-240.34	-1,596.32	1.50	-1.50	0.00	180.00	
7,736.99	0.00	0.00	7,400.00	-240.34	-1,596.32	0.00	0.00	0.00	0.00	GGU Federal 33D-

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Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	MDP #22	North Reference:	True
Well:	GGU Federal 33D-19-691	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	261.44	899.97	-0.32	-2.16	2.18	2.50	2.50	0.00	
1,000.00	5.00	261.44	999.75	-1.30	-8.62	8.72	2.50	2.50	0.00	
1,100.00	7.50	261.44	1,099.14	-2.92	-19.39	19.61	2.50	2.50	0.00	
1,200.00	10.00	261.44	1,197.97	-5.18	-34.43	34.82	2.50	2.50	0.00	
1,300.00	12.50	261.44	1,296.04	-8.09	-53.72	54.33	2.50	2.50	0.00	
1,400.00	15.00	261.44	1,393.17	-11.63	-77.22	78.09	2.50	2.50	0.00	
1,500.00	17.50	261.44	1,489.17	-15.79	-104.89	106.07	2.50	2.50	0.00	
1,600.00	20.00	261.44	1,583.85	-20.58	-136.67	138.21	2.50	2.50	0.00	
1,700.00	22.50	261.44	1,677.05	-25.97	-172.51	174.45	2.50	2.50	0.00	
1,800.00	25.00	261.44	1,768.57	-31.97	-212.33	214.73	2.50	2.50	0.00	
1,898.18	27.45	261.44	1,856.64	-38.43	-255.24	258.11	2.50	2.50	0.00	
1,900.00	27.45	261.44	1,858.25	-38.55	-256.06	258.95	0.00	0.00	0.00	
2,000.00	27.45	261.44	1,946.99	-45.42	-301.66	305.06	0.00	0.00	0.00	
2,100.00	27.45	261.44	2,035.73	-52.28	-347.25	351.16	0.00	0.00	0.00	
2,200.00	27.45	261.44	2,124.46	-59.15	-392.84	397.26	0.00	0.00	0.00	
2,300.00	27.45	261.44	2,213.20	-66.01	-438.43	443.37	0.00	0.00	0.00	
2,400.00	27.45	261.44	2,301.94	-72.87	-484.02	489.47	0.00	0.00	0.00	
2,500.00	27.45	261.44	2,390.68	-79.74	-529.61	535.58	0.00	0.00	0.00	
2,600.00	27.45	261.44	2,479.41	-86.60	-575.20	581.68	0.00	0.00	0.00	
2,700.00	27.45	261.44	2,568.15	-93.47	-620.79	627.79	0.00	0.00	0.00	
2,800.00	27.45	261.44	2,656.89	-100.33	-666.38	673.89	0.00	0.00	0.00	
2,900.00	27.45	261.44	2,745.63	-107.19	-711.97	719.99	0.00	0.00	0.00	
3,000.00	27.45	261.44	2,834.37	-114.06	-757.56	766.10	0.00	0.00	0.00	
3,100.00	27.45	261.44	2,923.10	-120.92	-803.15	812.20	0.00	0.00	0.00	
3,200.00	27.45	261.44	3,011.84	-127.79	-848.74	858.31	0.00	0.00	0.00	
3,300.00	27.45	261.44	3,100.58	-134.65	-894.33	904.41	0.00	0.00	0.00	
3,400.00	27.45	261.44	3,189.32	-141.51	-939.92	950.52	0.00	0.00	0.00	
3,500.00	27.45	261.44	3,278.05	-148.38	-985.51	996.62	0.00	0.00	0.00	
3,600.00	27.45	261.44	3,366.79	-155.24	-1,031.10	1,042.73	0.00	0.00	0.00	
3,700.00	27.45	261.44	3,455.53	-162.11	-1,076.69	1,088.83	0.00	0.00	0.00	
3,800.00	27.45	261.44	3,544.27	-168.97	-1,122.29	1,134.93	0.00	0.00	0.00	
3,900.00	27.45	261.44	3,633.01	-175.84	-1,167.88	1,181.04	0.00	0.00	0.00	
3,906.69	27.45	261.44	3,638.94	-176.29	-1,170.92	1,184.12	0.00	0.00	0.00	
4,000.00	26.05	261.44	3,722.26	-182.55	-1,212.46	1,226.13	1.50	-1.50	0.00	
4,100.00	24.55	261.44	3,812.66	-188.91	-1,254.73	1,268.87	1.50	-1.50	0.00	
4,200.00	23.05	261.44	3,904.15	-194.92	-1,294.64	1,309.23	1.50	-1.50	0.00	
4,300.00	21.55	261.44	3,996.67	-200.57	-1,332.17	1,347.18	1.50	-1.50	0.00	
4,400.00	20.05	261.44	4,090.14	-205.86	-1,367.29	1,382.70	1.50	-1.50	0.00	
4,500.00	18.55	261.44	4,184.52	-210.78	-1,399.98	1,415.76	1.50	-1.50	0.00	
4,600.00	17.05	261.44	4,279.73	-215.33	-1,430.22	1,446.34	1.50	-1.50	0.00	
4,700.00	15.55	261.44	4,375.70	-219.51	-1,457.98	1,474.41	1.50	-1.50	0.00	
4,800.00	14.05	261.44	4,472.38	-223.32	-1,483.24	1,499.96	1.50	-1.50	0.00	
4,900.00	12.55	261.44	4,569.69	-226.74	-1,506.00	1,522.97	1.50	-1.50	0.00	
5,000.00	11.05	261.44	4,667.57	-229.79	-1,526.23	1,543.43	1.50	-1.50	0.00	

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Well:	GGU Federal 33D-19-691	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	9.55	261.44	4,765.96	-232.45	-1,543.92	1,561.32	1.50	-1.50	0.00
5,200.00	8.05	261.44	4,864.78	-234.73	-1,559.05	1,576.63	1.50	-1.50	0.00
5,300.00	6.55	261.44	4,963.96	-236.62	-1,571.63	1,589.34	1.50	-1.50	0.00
5,400.00	5.05	261.44	5,063.45	-238.13	-1,581.63	1,599.45	1.50	-1.50	0.00
5,500.00	3.55	261.44	5,163.16	-239.25	-1,589.05	1,606.96	1.50	-1.50	0.00
5,600.00	2.05	261.44	5,263.04	-239.98	-1,593.89	1,611.85	1.50	-1.50	0.00
5,700.00	0.55	261.44	5,363.01	-240.31	-1,596.14	1,614.13	1.50	-1.50	0.00
5,736.99	0.00	0.00	5,400.00	-240.34	-1,596.32	1,614.31	1.50	-1.50	0.00
5,800.00	0.00	0.00	5,463.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
5,900.00	0.00	0.00	5,563.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,000.00	0.00	0.00	5,663.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,100.00	0.00	0.00	5,763.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,200.00	0.00	0.00	5,863.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,300.00	0.00	0.00	5,963.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,400.00	0.00	0.00	6,063.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,500.00	0.00	0.00	6,163.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,600.00	0.00	0.00	6,263.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,700.00	0.00	0.00	6,363.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,800.00	0.00	0.00	6,463.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
6,900.00	0.00	0.00	6,563.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
7,000.00	0.00	0.00	6,663.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
7,100.00	0.00	0.00	6,763.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
7,200.00	0.00	0.00	6,863.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
7,300.00	0.00	0.00	6,963.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
7,400.00	0.00	0.00	7,063.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
7,500.00	0.00	0.00	7,163.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
7,600.00	0.00	0.00	7,263.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
7,700.00	0.00	0.00	7,363.01	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00
7,736.99	0.00	0.00	7,400.00	-240.34	-1,596.32	1,614.31	0.00	0.00	0.00

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
760.00	760.00	9 5/8"	9-5/8	12-1/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,716.31	3,470.00	Mesaverde		0.00	
4,673.29	4,350.00	Price Coal		0.00	
4,807.85	4,480.00	Top Gas		0.00	
7,436.99	7,100.00	Rollins		0.00	
7,736.99	7,400.00	TD		0.00	

WELL DETAILS: GGU Federal 33D-19-691

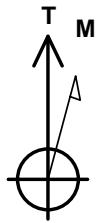
			Ground Level: 0.00			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1618601.673	2410691.671	39° 30' 47.660 N	107° 35' 20.2452 W	

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	1898.18	27.45	261.44	1856.64	-38.43	-255.24	2.50	261.44	258.11	
4	3906.69	27.45	261.44	3638.94	-176.29	-1170.92	0.00	0.00	1184.12	
5	5736.99	0.00	0.00	5400.00	-240.34	-1596.32	1.50	180.00	1614.31	
6	7736.99	0.00	0.00	7400.00	-240.34	-1596.32	0.00	0.00	1614.31	GGU Federal 33D-19-691 (TD)

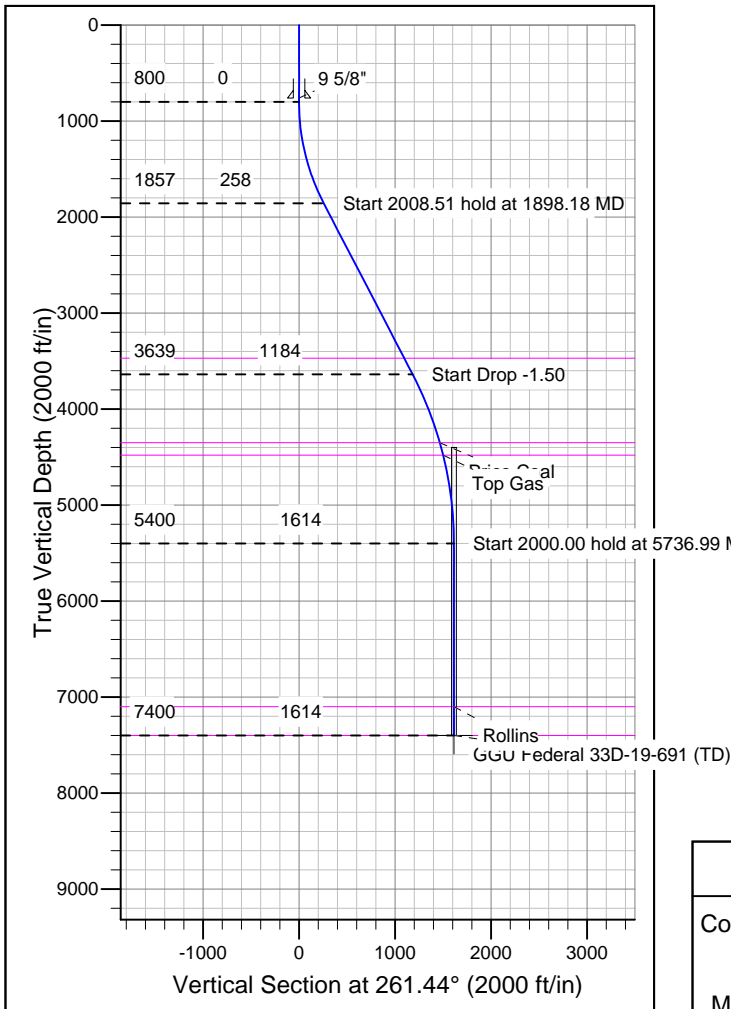
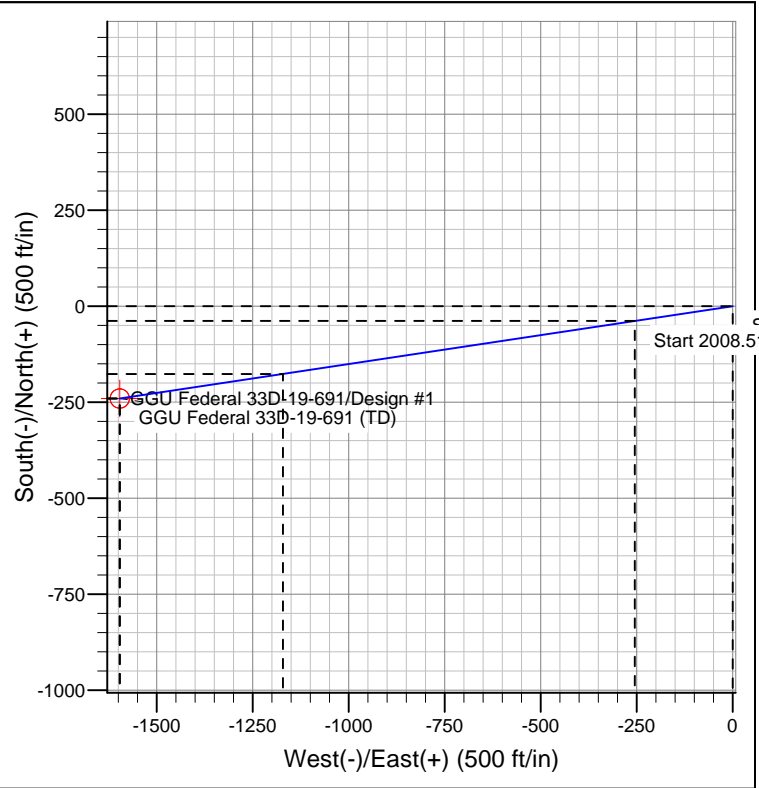
WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
GGU Federal 33D-19-691 (TD)	7400.00	-240.34	-1596.32	Circle (Radius: 25.00)



Azimuths to True North
Magnetic North: 10.34°

Magnetic Field
Strength: 52535.7snT
Dip Angle: 65.88°
Date: 12/31/2009
Model: IGRF200510



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3470.00	3716.31	Mesaverde
4350.00	4673.29	Price Coal
4480.00	4807.85	Top Gas
7100.00	7436.99	Rollins
7400.00	7736.99	TD

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GGU Federal 33D-19-691, 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