

BILL BARRETT CORP

GARFIELD COUNTY, COLORADO NAD 1983

MDP #21

GGU Federal 23D-19-691

Wellbore #1

Plan: Design #1

Standard Planning Report

29 December, 2011

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well GGU Federal 23D-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 #21	North Reference:	True
Well:	GGU Federal 23D-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 #21		
Site Position:		Northing:	1,617,563.978 ft
From:	Lat/Long	Easting:	2,407,991.814 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	39° 30' 36.792 N
		Longitude:	107° 35' 54.3804 W
		Grid Convergence:	-1.32 °

Well	GGU Federal 23D-19-691		
Well Position	+N/-S	156.61 ft	Northing:
	+E/-W	-691.25 ft	Easting:
Position Uncertainty		0.00 ft	Wellhead Elevation:
			ft
			Latitude:
			39° 30' 38.340 N
			Longitude:
			107° 36' 3.2004 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	52,533

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	35.46

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	
1,366.40	14.16	35.46	1,360.65	56.72	40.40	2.50	2.50	0.00	35.46	
4,014.80	14.16	35.46	3,928.58	584.43	416.25	0.00	0.00	0.00	0.00	
4,958.80	0.00	0.00	4,863.00	678.96	483.58	1.50	-1.50	0.00	180.00	
7,458.80	0.00	0.00	7,363.00	678.96	483.58	0.00	0.00	0.00	0.00	GGU Federal 23D-

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Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	MDP #21	North Reference:	True
Well:	GGU Federal 23D-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	35.46	899.97	1.78	1.27	2.18	2.50	2.50	0.00	
1,000.00	5.00	35.46	999.75	7.10	5.06	8.72	2.50	2.50	0.00	
1,100.00	7.50	35.46	1,099.14	15.97	11.37	19.61	2.50	2.50	0.00	
1,200.00	10.00	35.46	1,197.97	28.36	20.20	34.82	2.50	2.50	0.00	
1,300.00	12.50	35.46	1,296.04	44.25	31.52	54.33	2.50	2.50	0.00	
1,366.40	14.16	35.46	1,360.65	56.72	40.40	69.63	2.50	2.50	0.00	
1,400.00	14.16	35.46	1,393.23	63.41	45.17	77.85	0.00	0.00	0.00	
1,500.00	14.16	35.46	1,490.19	83.34	59.36	102.32	0.00	0.00	0.00	
1,600.00	14.16	35.46	1,587.15	103.26	73.55	126.78	0.00	0.00	0.00	
1,700.00	14.16	35.46	1,684.12	123.19	87.74	151.24	0.00	0.00	0.00	
1,800.00	14.16	35.46	1,781.08	143.12	101.93	175.71	0.00	0.00	0.00	
1,900.00	14.16	35.46	1,878.04	163.04	116.12	200.17	0.00	0.00	0.00	
2,000.00	14.16	35.46	1,975.00	182.97	130.32	224.63	0.00	0.00	0.00	
2,100.00	14.16	35.46	2,071.96	202.89	144.51	249.09	0.00	0.00	0.00	
2,200.00	14.16	35.46	2,168.92	222.82	158.70	273.56	0.00	0.00	0.00	
2,300.00	14.16	35.46	2,265.89	242.74	172.89	298.02	0.00	0.00	0.00	
2,400.00	14.16	35.46	2,362.85	262.67	187.08	322.48	0.00	0.00	0.00	
2,500.00	14.16	35.46	2,459.81	282.60	201.27	346.95	0.00	0.00	0.00	
2,600.00	14.16	35.46	2,556.77	302.52	215.47	371.41	0.00	0.00	0.00	
2,700.00	14.16	35.46	2,653.73	322.45	229.66	395.87	0.00	0.00	0.00	
2,800.00	14.16	35.46	2,750.69	342.37	243.85	420.34	0.00	0.00	0.00	
2,900.00	14.16	35.46	2,847.66	362.30	258.04	444.80	0.00	0.00	0.00	
3,000.00	14.16	35.46	2,944.62	382.22	272.23	469.26	0.00	0.00	0.00	
3,100.00	14.16	35.46	3,041.58	402.15	286.43	493.72	0.00	0.00	0.00	
3,200.00	14.16	35.46	3,138.54	422.08	300.62	518.19	0.00	0.00	0.00	
3,300.00	14.16	35.46	3,235.50	442.00	314.81	542.65	0.00	0.00	0.00	
3,400.00	14.16	35.46	3,332.46	461.93	329.00	567.11	0.00	0.00	0.00	
3,500.00	14.16	35.46	3,429.43	481.85	343.19	591.58	0.00	0.00	0.00	
3,600.00	14.16	35.46	3,526.39	501.78	357.38	616.04	0.00	0.00	0.00	
3,700.00	14.16	35.46	3,623.35	521.70	371.58	640.50	0.00	0.00	0.00	
3,800.00	14.16	35.46	3,720.31	541.63	385.77	664.97	0.00	0.00	0.00	
3,900.00	14.16	35.46	3,817.27	561.56	399.96	689.43	0.00	0.00	0.00	
4,000.00	14.16	35.46	3,914.23	581.48	414.15	713.89	0.00	0.00	0.00	
4,014.80	14.16	35.46	3,928.58	584.43	416.25	717.51	0.00	0.00	0.00	
4,100.00	12.88	35.46	4,011.42	600.66	427.81	737.43	1.50	-1.50	0.00	
4,200.00	11.38	35.46	4,109.18	617.77	440.00	758.45	1.50	-1.50	0.00	
4,300.00	9.88	35.46	4,207.47	632.80	450.70	776.90	1.50	-1.50	0.00	
4,400.00	8.38	35.46	4,306.20	645.73	459.91	792.77	1.50	-1.50	0.00	
4,500.00	6.88	35.46	4,405.31	656.54	467.61	806.05	1.50	-1.50	0.00	
4,600.00	5.38	35.46	4,504.73	665.24	473.81	816.73	1.50	-1.50	0.00	
4,700.00	3.88	35.46	4,604.40	671.82	478.50	824.80	1.50	-1.50	0.00	
4,800.00	2.38	35.46	4,704.25	676.27	481.66	830.27	1.50	-1.50	0.00	
4,900.00	0.88	35.46	4,804.21	678.59	483.32	833.12	1.50	-1.50	0.00	
4,958.80	0.00	0.00	4,863.00	678.96	483.58	833.57	1.50	-1.50	0.00	

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Well:	GGU Federal 23D-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)	
5,000.00	0.00	0.00	4,904.20	678.96	483.58	833.57	0.00	0.00	0.00	
5,100.00	0.00	0.00	5,004.20	678.96	483.58	833.57	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,104.20	678.96	483.58	833.57	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,204.20	678.96	483.58	833.57	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,304.20	678.96	483.58	833.57	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,404.20	678.96	483.58	833.57	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,504.20	678.96	483.58	833.57	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,604.20	678.96	483.58	833.57	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,704.20	678.96	483.58	833.57	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,804.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,904.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,004.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,104.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,204.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,304.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,404.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,504.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,604.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,704.20	678.96	483.58	833.57	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,804.20	678.96	483.58	833.57	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,904.20	678.96	483.58	833.57	0.00	0.00	0.00	
7,100.00	0.00	0.00	7,004.20	678.96	483.58	833.57	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,104.20	678.96	483.58	833.57	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,204.20	678.96	483.58	833.57	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,304.20	678.96	483.58	833.57	0.00	0.00	0.00	
7,458.80	0.00	0.00	7,363.00	678.96	483.58	833.57	0.00	0.00	0.00	

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
800.00	800.00	9 5/8"	9-5/8	12-1/4

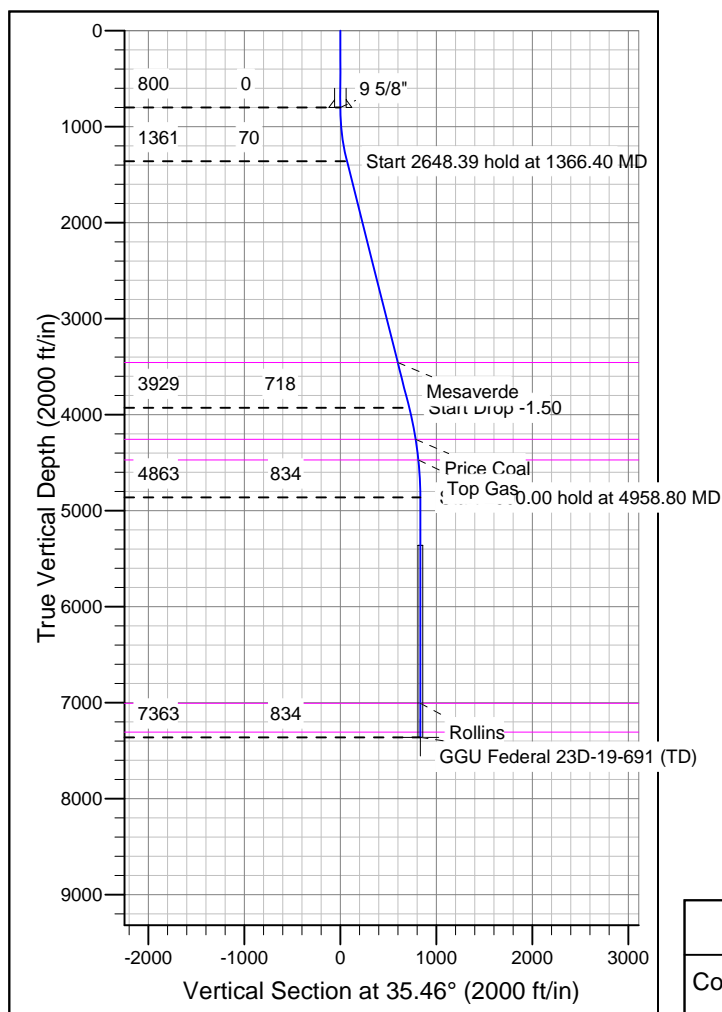
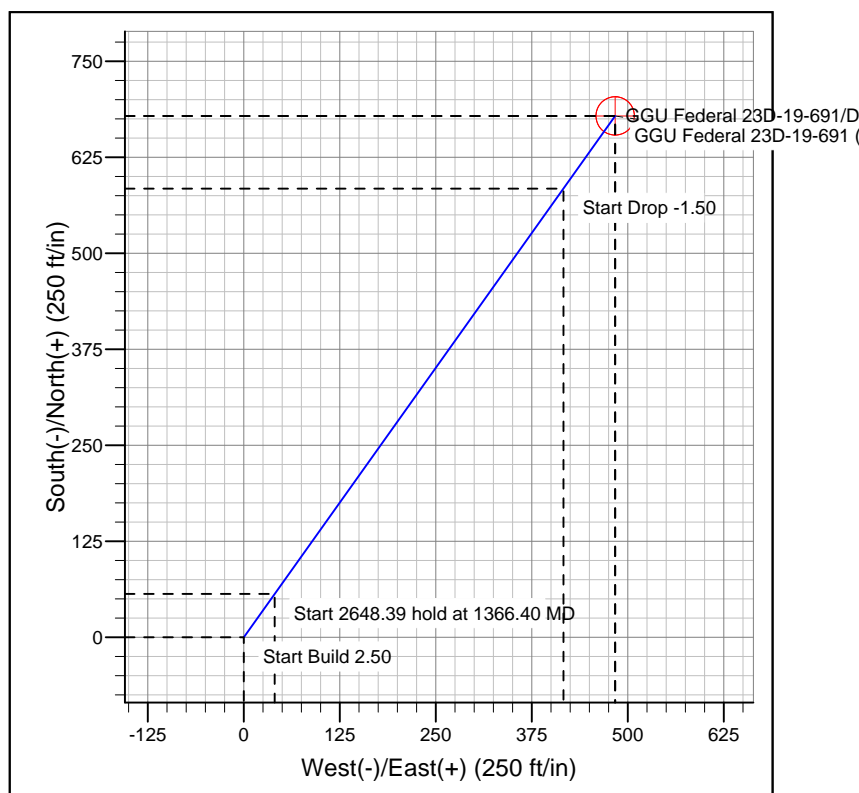
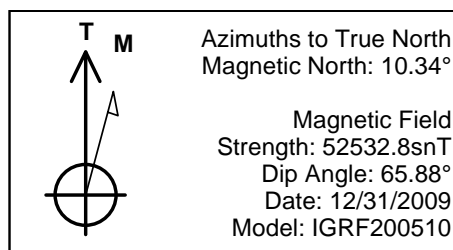
Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,528.44	3,457.00	Mesaverde		0.00		
4,350.22	4,257.00	Price Coal		0.00		
4,567.11	4,472.00	Top Gas		0.00		
7,102.80	7,007.00	Rollins		0.00		
7,402.80	7,307.00	TD		0.00		

WELL DETAILS: GGU Federal 23D-19-691

Ground Level: 0.00							Slot
+N/-S 0.00	+E/-W 0.00	Northing 1617736.527	Easting 2407304.369	Latitude 39° 30' 38.340 N	Longitude 107° 36' 3.2004 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	1366.40	14.16	35.46	1360.65	56.72	40.40	2.50	35.46	69.63	
4	4014.80	14.16	35.46	3928.58	584.43	416.25	0.00	0.00	717.51	
5	4958.80	0.00	0.00	4863.00	678.96	483.58	1.50	180.00	833.57	
6	7458.80	0.00	0.00	7363.00	678.96	483.58	0.00	0.00	833.57	GGU Federal 23D-19-691 (TD)



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3457.00	3528.44	Mesaverde
4257.00	4350.22	Price Coal
4472.00	4567.11	Top Gas
7007.00	7102.80	Rollins
7307.00	7402.80	TD

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GGU Federal 23D-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