



Bill Barrett Corp.

Garfield County, Colorado [NAD83]

Kaufman 3 Pad

GGU Kaufman 32D-30-691

Wellbore #1

Plan: plan1 15mar11 smw

Standard Planning Report

16 March, 2011

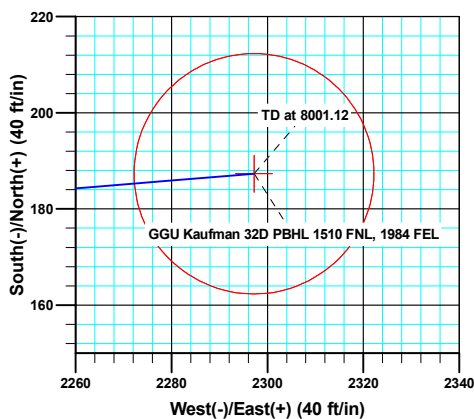
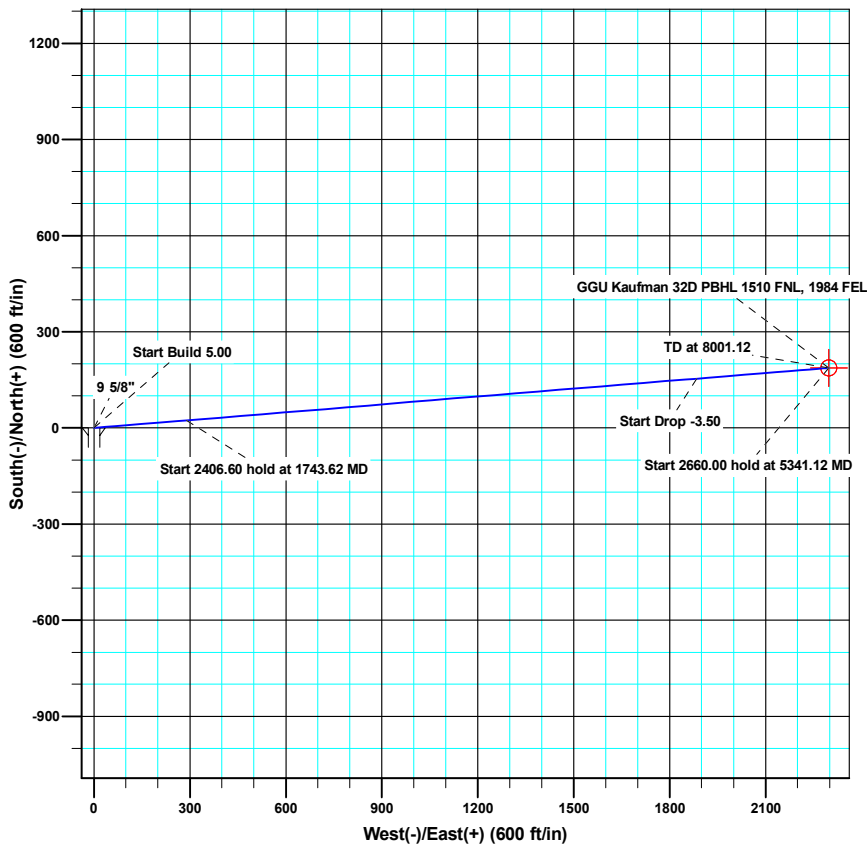
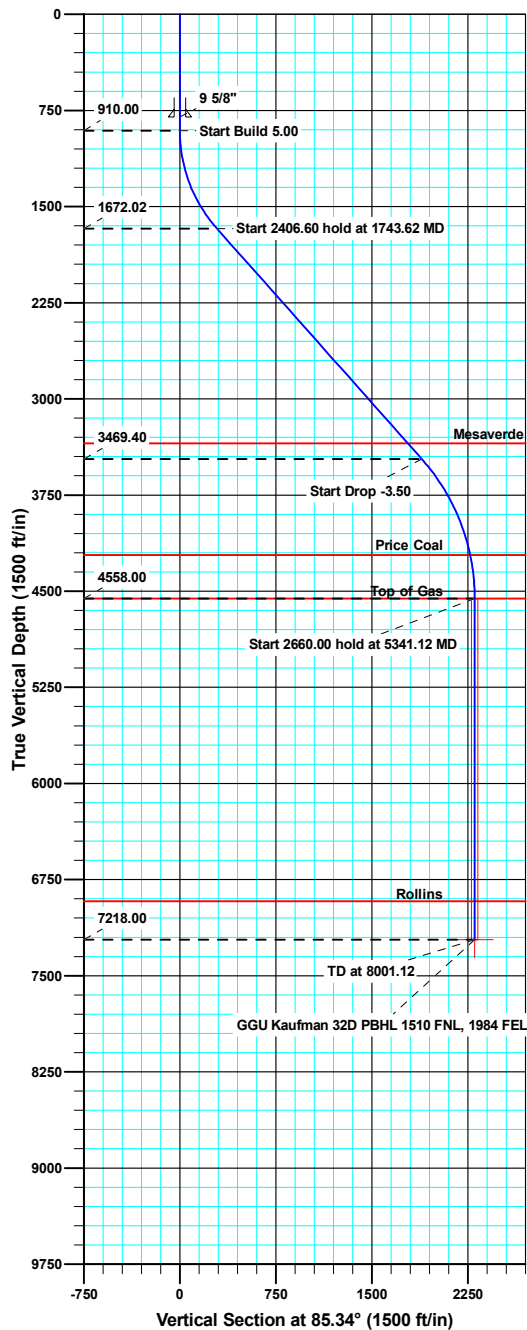




WELL DETAILS: GGU Kaufman 32D-30-691

Ground Level: 5835.00

North American Datum 1983	US State Plane 1983	Colorado Central Zone			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1614290.28	2406752.16	39° 30' 4.16 N	107° 36' 9.23 W



Azimuths to True North
Magnetic North: 10.18°

Magnetic Field
Strength: 52362.1nT
Dip Angle: 65.84°
Date: 03/15/2011
Model: IGRF200510

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
910.00	0.000	0.00	910.00	0.00	0.00	0.00	0.00	0.00	
1743.62	41.681	85.34	1672.02	23.58	289.12	5.00	85.34	290.08	
4150.23	41.681	85.34	3469.40	153.65	1884.18	0.00	0.00	1890.44	
5341.12	0.000	0.00	4558.00	187.33	2297.21	3.50	180.00	2304.84	GGU Kaufman 32D Top of Gas
8001.12	0.000	0.00	7218.00	187.33	2297.21	0.00	0.00	2304.84	GGU Kaufman 32D PBHL 1510 FNL, 1984 FEL



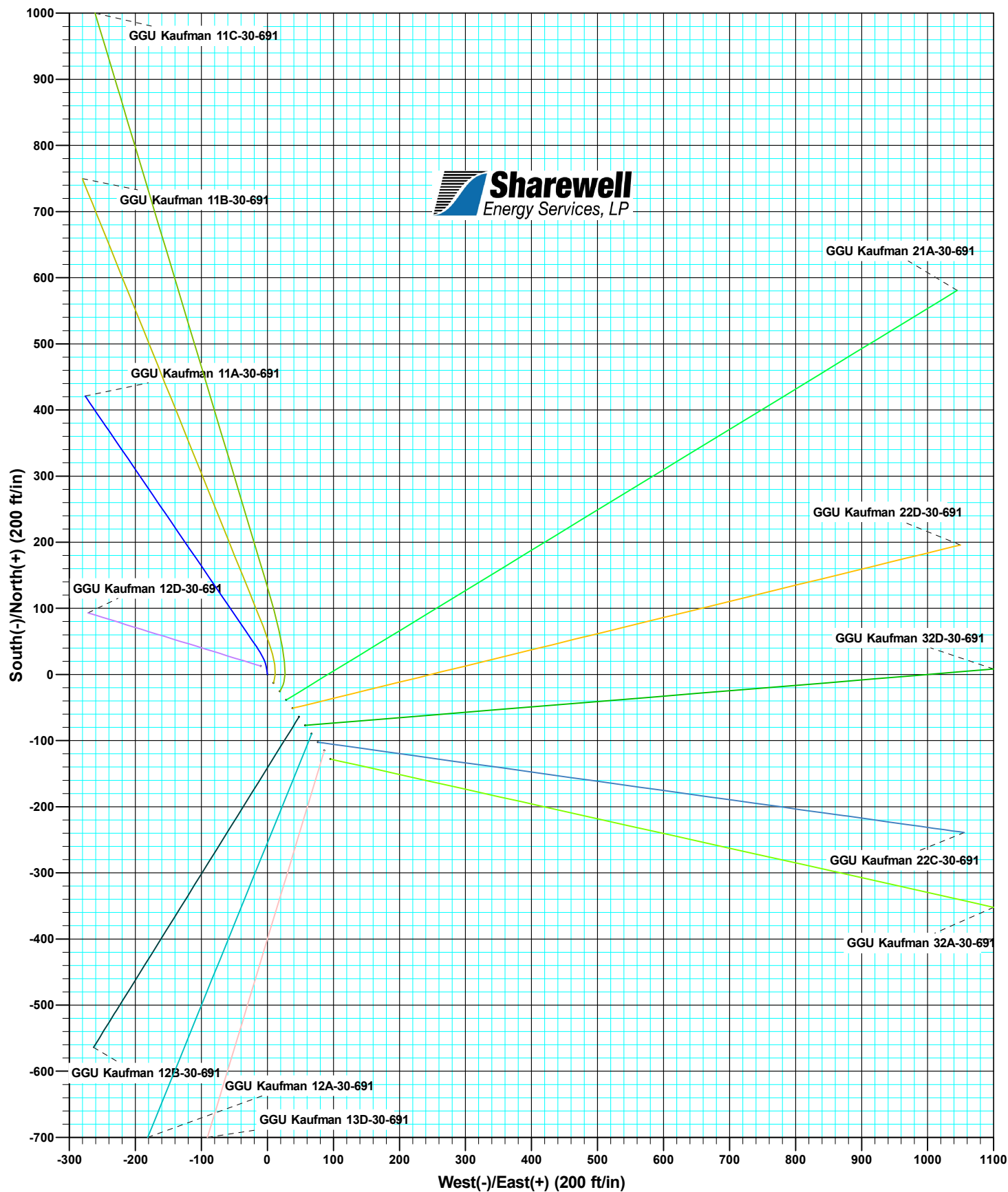


Bill Barrett Corporation

WELL DETAILS: Kaufman 3 Pad

Ground Level: 5835.00

North American Datum 1983		US State Plane 1983		Colorado Central Zone	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1614368.45	2406696.39	39° 30' 4.92 N	107° 36' 9.96 W



Database:	Compass VM	Local Co-ordinate Reference:	Well GGU Kaufman 32D-30-691
Company:	Bill Barrett Corp.	TVD Reference:	KB @ 5858.00ft
Project:	Garfield County, Colorado [NAD83]	MD Reference:	KB @ 5858.00ft
Site:	Kaufman 3 Pad	North Reference:	True
Well:	GGU Kaufman 32D-30-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 15mar11 smw		

Project	Garfield County, Colorado [NAD83]		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		Kaufman 3 Pad			
Site Position: From:		Northing:	1,614,368.45 usft	Latitude:	39° 30' 4.92 N
	Lat/Long	Easting:	2,406,696.40 usft	Longitude:	107° 36' 9.96 W
	Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:

Well	GGU Kaufman 32D-30-691					
Well Position	+N/-S	-76.86 ft	Northing:	1,614,290.27 usft	Latitude:	39° 30' 4.16 N
	+E/-W	57.56 ft	Easting:	2,406,752.17 usft	Longitude:	107° 36' 9.23 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,835.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	03/15/11	10.18	65.84	52,362

Design	plan1 15mar11 smw			
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	85.34

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	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
910.00	0.000	0.00	910.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,743.62	41.681	85.34	1,672.02	23.58	289.12	5.00	5.00	0.00	85.34	
4,150.23	41.681	85.34	3,469.40	153.65	1,884.18	0.00	0.00	0.00	0.00	
5,341.12	0.000	0.00	4,558.00	187.33	2,297.21	3.50	-3.50	0.00	180.00	GGU Kaufman 32D T
8,001.12	0.000	0.00	7,218.00	187.33	2,297.21	0.00	0.00	0.00	0.00	GGU Kaufman 32D P

Database:	Compass VM	Local Co-ordinate Reference:	Well GGU Kaufman 32D-30-691
Company:	Bill Barrett Corp.	TVD Reference:	KB @ 5858.00ft
Project:	Garfield County, Colorado [NAD83]	MD Reference:	KB @ 5858.00ft
Site:	Kaufman 3 Pad	North Reference:	True
Well:	GGU Kaufman 32D-30-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 15mar11 smw		

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)
910.00	0.000	0.00	910.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 5.00									
1,000.00	4.500	85.34	999.91	0.29	3.52	3.53	5.00	5.00	0.00
1,100.00	9.500	85.34	1,099.13	1.28	15.66	15.72	5.00	5.00	0.00
1,200.00	14.500	85.34	1,196.91	2.97	36.38	36.50	5.00	5.00	0.00
1,300.00	19.500	85.34	1,292.51	5.34	65.51	65.73	5.00	5.00	0.00
1,400.00	24.500	85.34	1,385.20	8.39	102.84	103.18	5.00	5.00	0.00
1,500.00	29.500	85.34	1,474.28	12.07	148.07	148.56	5.00	5.00	0.00
1,600.00	34.500	85.34	1,559.05	16.38	200.87	201.54	5.00	5.00	0.00
1,700.00	39.500	85.34	1,638.89	21.27	260.83	261.70	5.00	5.00	0.00
1,743.62	41.681	85.34	1,672.02	23.58	289.12	290.08	5.00	5.00	0.00
Start 2406.60 hold at 1743.62 MD									
1,800.00	41.681	85.34	1,714.12	26.62	326.49	327.57	0.00	0.00	0.00
1,900.00	41.681	85.34	1,788.81	32.03	392.77	394.07	0.00	0.00	0.00
2,000.00	41.681	85.34	1,863.49	37.43	459.04	460.57	0.00	0.00	0.00
2,100.00	41.681	85.34	1,938.18	42.84	525.32	527.07	0.00	0.00	0.00
2,200.00	41.681	85.34	2,012.86	48.24	591.60	593.56	0.00	0.00	0.00
2,300.00	41.681	85.34	2,087.55	53.65	657.88	660.06	0.00	0.00	0.00
2,400.00	41.681	85.34	2,162.24	59.05	724.16	726.56	0.00	0.00	0.00
2,500.00	41.681	85.34	2,236.92	64.46	790.44	793.06	0.00	0.00	0.00
2,600.00	41.681	85.34	2,311.61	69.86	856.71	859.56	0.00	0.00	0.00
2,700.00	41.681	85.34	2,386.29	75.27	922.99	926.06	0.00	0.00	0.00
2,800.00	41.681	85.34	2,460.98	80.67	989.27	992.56	0.00	0.00	0.00
2,900.00	41.681	85.34	2,535.66	86.08	1,055.55	1,059.05	0.00	0.00	0.00
3,000.00	41.681	85.34	2,610.35	91.48	1,121.83	1,125.55	0.00	0.00	0.00
3,100.00	41.681	85.34	2,685.04	96.89	1,188.11	1,192.05	0.00	0.00	0.00
3,200.00	41.681	85.34	2,759.72	102.29	1,254.39	1,258.55	0.00	0.00	0.00
3,300.00	41.681	85.34	2,834.41	107.70	1,320.66	1,325.05	0.00	0.00	0.00
3,400.00	41.681	85.34	2,909.09	113.10	1,386.94	1,391.55	0.00	0.00	0.00
3,500.00	41.681	85.34	2,983.78	118.51	1,453.22	1,458.05	0.00	0.00	0.00
3,600.00	41.681	85.34	3,058.46	123.91	1,519.50	1,524.54	0.00	0.00	0.00
3,700.00	41.681	85.34	3,133.15	129.32	1,585.78	1,591.04	0.00	0.00	0.00
3,800.00	41.681	85.34	3,207.83	134.72	1,652.06	1,657.54	0.00	0.00	0.00
3,900.00	41.681	85.34	3,282.52	140.13	1,718.34	1,724.04	0.00	0.00	0.00
3,987.67	41.681	85.34	3,348.00	144.86	1,776.44	1,782.34	0.00	0.00	0.00
Mesaverde									
4,000.00	41.681	85.34	3,357.21	145.53	1,784.61	1,790.54	0.00	0.00	0.00
4,100.00	41.681	85.34	3,431.89	150.94	1,850.89	1,857.04	0.00	0.00	0.00
4,150.23	41.681	85.34	3,469.40	153.65	1,884.18	1,890.44	0.00	0.00	0.00
Start Drop -3.50									
4,200.00	39.939	85.34	3,507.07	156.29	1,916.60	1,922.97	3.50	-3.50	0.00
4,300.00	36.439	85.34	3,585.66	161.32	1,978.21	1,984.78	3.50	-3.50	0.00
4,400.00	32.939	85.34	3,667.87	165.94	2,034.93	2,041.69	3.50	-3.50	0.00
4,500.00	29.439	85.34	3,753.40	170.15	2,086.54	2,093.46	3.50	-3.50	0.00
4,600.00	25.939	85.34	3,841.94	173.93	2,132.84	2,139.92	3.50	-3.50	0.00
4,700.00	22.439	85.34	3,933.14	177.26	2,173.68	2,180.89	3.50	-3.50	0.00
4,800.00	18.939	85.34	4,026.68	180.13	2,208.88	2,216.22	3.50	-3.50	0.00
4,900.00	15.439	85.34	4,122.20	182.53	2,238.33	2,245.76	3.50	-3.50	0.00
4,998.63	11.987	85.34	4,218.00	184.43	2,261.63	2,269.14	3.50	-3.50	0.00
Price Coal									
5,000.00	11.939	85.34	4,219.34	184.45	2,261.92	2,269.43	3.50	-3.50	0.00
5,100.00	8.439	85.34	4,317.75	185.89	2,279.55	2,287.11	3.50	-3.50	0.00
5,200.00	4.939	85.34	4,417.06	186.84	2,291.15	2,298.76	3.50	-3.50	0.00
5,300.00	1.439	85.34	4,516.89	187.29	2,296.70	2,304.32	3.50	-3.50	0.00

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Project:	Garfield County, Colorado [NAD83]	MD Reference:	KB @ 5858.00ft
Site:	Kaufman 3 Pad	North Reference:	True
Well:	GGU Kaufman 32D-30-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 15mar11 smw		

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)
5,341.12	0.000	0.00	4,558.00	187.33	2,297.21	2,304.84	3.50	-3.50	0.00
Start 2660.00 hold at 5341.12 MD - Top of Gas - GGU Kaufman 32D Top of Gas									
5,400.00	0.000	0.00	4,616.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
5,500.00	0.000	0.00	4,716.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
5,600.00	0.000	0.00	4,816.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
5,700.00	0.000	0.00	4,916.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
5,800.00	0.000	0.00	5,016.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
5,900.00	0.000	0.00	5,116.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,000.00	0.000	0.00	5,216.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,100.00	0.000	0.00	5,316.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,200.00	0.000	0.00	5,416.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,300.00	0.000	0.00	5,516.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,400.00	0.000	0.00	5,616.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,500.00	0.000	0.00	5,716.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,600.00	0.000	0.00	5,816.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,700.00	0.000	0.00	5,916.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,800.00	0.000	0.00	6,016.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
6,900.00	0.000	0.00	6,116.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,000.00	0.000	0.00	6,216.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,100.00	0.000	0.00	6,316.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,200.00	0.000	0.00	6,416.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,300.00	0.000	0.00	6,516.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,400.00	0.000	0.00	6,616.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,500.00	0.000	0.00	6,716.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,600.00	0.000	0.00	6,816.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,700.00	0.000	0.00	6,916.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,701.12	0.000	0.00	6,918.00	187.33	2,297.21	2,304.84	0.00	0.00	0.00
Rollins									
7,800.00	0.000	0.00	7,016.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
7,900.00	0.000	0.00	7,116.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
8,000.00	0.000	0.00	7,216.88	187.33	2,297.21	2,304.84	0.00	0.00	0.00
8,001.12	0.000	0.00	7,218.00	187.33	2,297.21	2,304.84	0.00	0.00	0.00
TD at 8001.12 - GGU Kaufman 32D PBHL 1510 FNL, 1984 FEL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
GGU Kaufman 32D Top	0.000	0.00	4,558.00	187.33	2,297.21	1,614,424.39	2,409,053.10	39° 30' 6.01 N	107° 35' 39.92 W
- plan hits target center									
- Circle (radius 25.00)									
GGU Kaufman 32D PBH	0.000	0.00	7,218.00	187.33	2,297.21	1,614,424.39	2,409,053.10	39° 30' 6.01 N	107° 35' 39.92 W
- plan hits target center									
- Point									

Database:	Compass VM	Local Co-ordinate Reference:	Well GGU Kaufman 32D-30-691
Company:	Bill Barrett Corp.	TVD Reference:	KB @ 5858.00ft
Project:	Garfield County, Colorado [NAD83]	MD Reference:	KB @ 5858.00ft
Site:	Kaufman 3 Pad	North Reference:	True
Well:	GGU Kaufman 32D-30-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 15mar11 smw		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)	
802.00	802.00	9 5/8"	0.80	1.02	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,987.67	3,348.00	Mesaverde		0.00	
4,998.63	4,218.00	Price Coal		0.00	
5,341.12	4,558.00	Top of Gas		0.00	
7,701.12	6,918.00	Rollins		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
910.00	910.00	0.00	0.00	Start Build 5.00	
1,743.62	1,672.02	23.58	289.12	Start 2406.60 hold at 1743.62 MD	
4,150.23	3,469.40	153.65	1,884.18	Start Drop -3.50	
5,341.12	4,558.00	187.33	2,297.21	Start 2660.00 hold at 5341.12 MD	
8,001.12	7,218.00	187.33	2,297.21	TD at 8001.12	