

Bill Barrett Corp. (III)

Garfield County, Colorado [NAD83]

MDP Pad #10

GGU Federal 24B-20-691

Wellbore #1

Design: Wellbore #1

Standard Survey Report

14 November, 2011

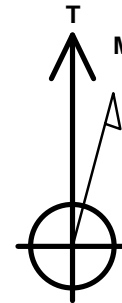
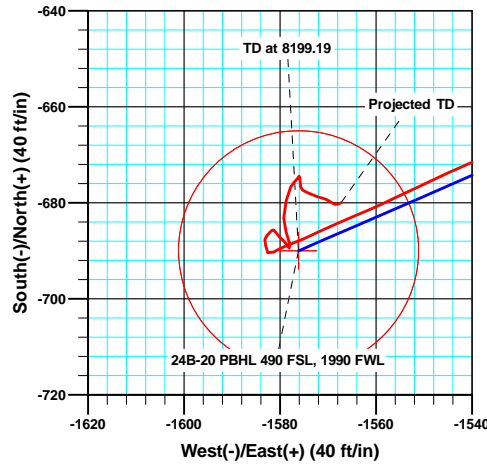
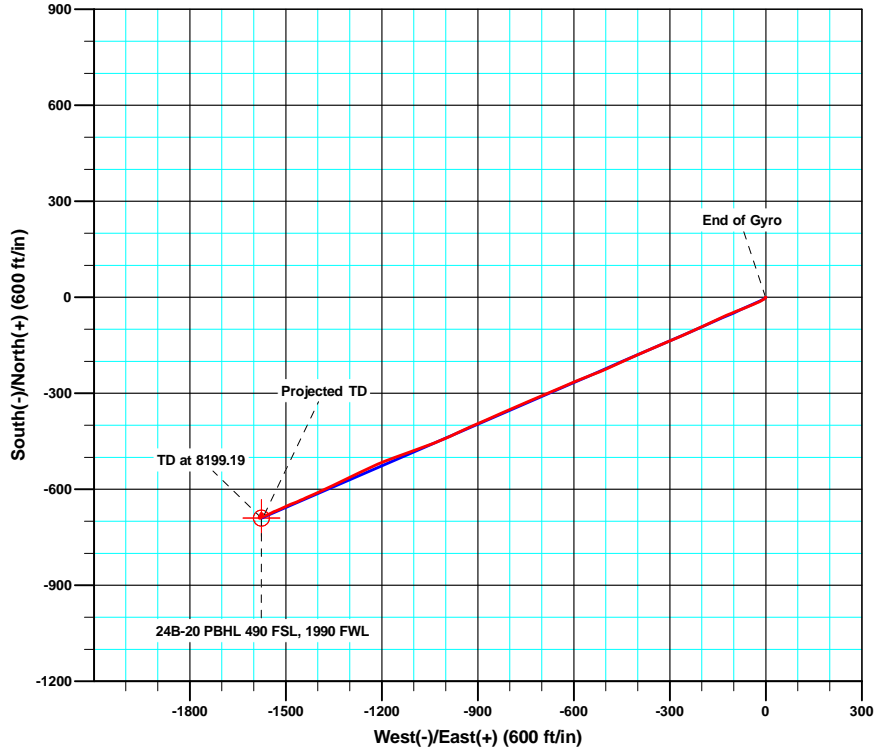
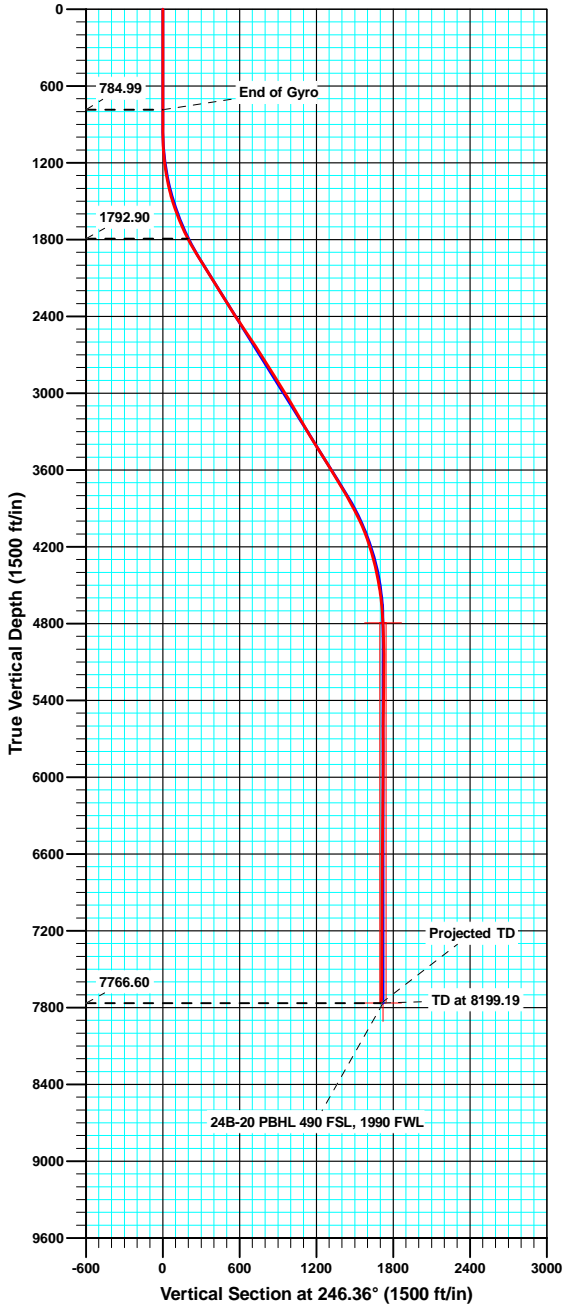
WELL DETAILS: GGU Federal 24B-20-691



North American Datum 1983 , US State Plane 1983 , Colorado Central Zone

+N/-S +E/-W Northing Easting Latitude Longitude
 0.00 0.00 1617067.08 2414633.73 39° 30' 33.39 N 107° 34' 29.51 W

GL@ 6471.81 MDP Pad #10



Azimuths to True North
 Magnetic North: 10.14°

Magnetic Field
 Strength: 52287.0snT
 Dip Angle: 65.82°
 Date: 8/30/2011
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
784.99	785.00	0.450	153.50	-0.11	-0.57	0.56	3.13	End of Gyro
1792.90	1824.00	27.600	245.30	-82.17	-177.85	195.87	199.61	As of Nov 11
7766.60	8202.00	0.700	65.80	-679.99	-1567.27	1708.42	1772.63	Projected TD



Sharewell Survey Report

Company: Bill Barrett Corp. (III)	Local Co-ordinate Reference: Well GGU Federal 24B-20-691
Project: Garfield County, Colorado [NAD83]	TVD Reference: KB @ 6493.81ft (KB=22')
Site: MDP Pad #10	MD Reference: KB @ 6493.81ft (KB=22')
Well: GGU Federal 24B-20-691	North Reference: True
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature
Design: Wellbore #1	Database: Compass VM

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 MDP Pad #10		
Site Position:	Northing: 1,617,054.04 usft	Latitude: 39° 30' 33.26 N
From: Lat/Long	Easting: 2,414,646.98 usft	Longitude: 107° 34' 29.34 W
Position Uncertainty: 0.00 ft	Slot Radius: 1.10 ft	Grid Convergence: -1.31 °

Well GGU Federal 24B-20-691		
Well Position +N/-S 0.00 ft	Northing: 1,617,067.07 usft	Latitude: 39° 30' 33.39 N
+E/-W 0.00 ft	Easting: 2,414,633.73 usft	Longitude: 107° 34' 29.51 W
Position Uncertainty 0.00 ft	Wellhead Elevation: ft	Ground Level: 6,471.81 ft

Wellbore Wellbore #1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/30/2011	10.14	65.82	52,287

Design Wellbore #1				
Audit Notes:				
Version: 1.0	Phase: ACTUAL	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	246.36

Survey Program		Date 11/14/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
22.00	785.00	Survey #1 Gyro (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s
878.00	8,202.00	MWD (Wellbore #1)	MWD	MWD - Standard

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	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
22.00	0.000	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00	
72.00	0.290	203.36	72.00	-0.12	-0.05	0.09	0.58	0.58	0.00	
122.00	0.350	226.32	122.00	-0.34	-0.21	0.33	0.28	0.12	45.92	
172.00	0.460	234.34	172.00	-0.56	-0.48	0.67	0.25	0.22	16.04	
222.00	0.310	285.38	222.00	-0.64	-0.78	0.97	0.72	-0.30	102.08	
272.00	0.280	270.01	272.00	-0.61	-1.03	1.19	0.17	-0.06	-30.74	
322.00	0.170	12.94	322.00	-0.53	-1.14	1.25	0.72	-0.22	205.86	
372.00	0.090	10.40	372.00	-0.42	-1.11	1.19	0.16	-0.16	-5.08	
422.00	0.140	264.24	422.00	-0.39	-1.17	1.22	0.37	0.10	-212.32	

Sharewell
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Site:	MDP Pad #10	MD Reference:	KB @ 6493.81ft (KB=22')
Well:	GGU Federal 24B-20-691	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass VM

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)
472.00	0.170	152.98	472.00	-0.46	-1.19	1.28	0.51	0.06	-222.52
522.00	0.300	58.78	522.00	-0.46	-1.05	1.14	0.71	0.26	-188.40
572.00	0.230	8.61	572.00	-0.29	-0.92	0.96	0.47	-0.14	-100.34
622.00	0.020	302.05	622.00	-0.19	-0.91	0.91	0.45	-0.42	-133.12
672.00	0.270	137.43	672.00	-0.27	-0.84	0.88	0.58	0.50	-329.24
722.00	0.390	38.84	722.00	-0.23	-0.65	0.69	1.01	0.24	-197.18
772.00	0.100	306.59	772.00	-0.07	-0.58	0.56	0.81	-0.58	-184.50
785.00	0.450	153.50	785.00	-0.11	-0.57	0.56	4.16	2.69	-1,177.61
878.00	0.000	1.60	877.99	-0.43	-0.41	0.55	0.48	-0.48	0.00
970.00	0.800	207.60	969.99	-1.00	-0.70	1.05	0.87	0.87	0.00
1,065.00	2.500	223.90	1,064.95	-3.08	-2.45	3.48	1.84	1.79	17.16
1,159.00	5.400	238.00	1,158.72	-6.90	-7.62	9.75	3.23	3.09	15.00
1,254.00	8.500	243.50	1,253.01	-12.41	-17.70	21.19	3.33	3.26	5.79
1,349.00	11.600	246.10	1,346.54	-19.41	-32.72	37.76	3.30	3.26	2.74
1,444.00	14.900	248.00	1,439.00	-27.86	-52.78	59.52	3.50	3.47	2.00
1,539.00	18.300	248.60	1,530.02	-37.88	-78.00	86.64	3.58	3.58	0.63
1,635.00	20.800	247.50	1,620.48	-49.90	-107.78	118.75	2.63	2.60	-1.15
1,729.00	24.000	244.30	1,707.38	-64.59	-140.44	154.55	3.64	3.40	-3.40
1,824.00	27.600	245.30	1,792.90	-82.17	-177.85	195.87	3.82	3.79	1.05
1,919.00	30.500	245.60	1,875.94	-101.32	-219.81	241.99	3.06	3.05	0.32
2,014.00	32.500	246.80	1,956.94	-121.34	-265.23	291.63	2.21	2.11	1.26
2,109.00	32.200	247.00	2,037.19	-141.28	-311.98	342.46	0.34	-0.32	0.21
2,204.00	31.700	246.40	2,117.80	-161.17	-358.16	392.73	0.62	-0.53	-0.63
2,298.00	31.400	245.60	2,197.91	-181.17	-403.09	441.91	0.55	-0.32	-0.85
2,393.00	31.800	246.00	2,278.82	-201.57	-448.49	491.69	0.48	0.42	0.42
2,488.00	32.700	246.20	2,359.16	-222.11	-494.84	542.38	0.95	0.95	0.21
2,583.00	34.200	248.30	2,438.43	-242.34	-543.13	594.73	1.99	1.58	2.21
2,678.00	33.600	247.70	2,517.28	-262.19	-592.26	647.69	0.72	-0.63	-0.63
2,772.00	33.300	247.00	2,595.71	-282.14	-640.07	699.50	0.52	-0.32	-0.74
2,867.00	33.000	246.80	2,675.25	-302.52	-687.86	751.44	0.34	-0.32	-0.21
2,962.00	32.500	246.80	2,755.15	-322.77	-735.10	802.83	0.53	-0.53	0.00
3,057.00	31.800	246.60	2,835.58	-342.76	-781.53	853.39	0.75	-0.74	-0.21
3,152.00	31.900	246.30	2,916.27	-362.79	-827.48	903.52	0.20	0.11	-0.32
3,247.00	31.700	246.40	2,997.01	-382.87	-873.34	953.58	0.22	-0.21	0.11
3,342.00	30.400	246.00	3,078.40	-402.64	-918.17	1,002.58	1.39	-1.37	-0.42
3,436.00	30.000	244.60	3,159.64	-422.40	-961.13	1,049.85	0.86	-0.43	-1.49
3,531.00	29.800	246.40	3,242.00	-442.04	-1,004.21	1,097.19	0.97	-0.21	1.89
3,627.00	31.000	249.00	3,324.80	-460.45	-1,049.16	1,145.75	1.85	1.25	2.71
3,721.00	31.800	250.80	3,405.04	-477.27	-1,095.15	1,194.62	1.31	0.85	1.91
3,816.00	31.800	250.60	3,485.78	-493.81	-1,142.39	1,244.54	0.11	0.00	-0.21
3,910.00	31.900	248.30	3,565.63	-511.22	-1,188.83	1,294.06	1.30	0.11	-2.45
4,005.00	32.100	244.80	3,646.20	-531.25	-1,235.00	1,344.39	1.96	0.21	-3.68
4,099.00	30.200	243.30	3,726.64	-552.51	-1,278.72	1,392.97	2.18	-2.02	-1.60

Sharewell

Survey Report

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Site:	MDP Pad #10	MD Reference:	KB @ 6493.81ft (KB=22')
Well:	GGU Federal 24B-20-691	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass VM

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)	
4,194.00	29.100	244.10	3,809.20	-573.34	-1,320.85	1,439.91	1.23	-1.16	0.84	
4,289.00	28.400	245.50	3,892.49	-592.80	-1,362.19	1,485.59	1.02	-0.74	1.47	
4,384.00	26.000	245.70	3,976.98	-610.74	-1,401.73	1,529.00	2.53	-2.53	0.21	
4,479.00	22.700	245.50	4,063.52	-626.91	-1,437.40	1,568.16	3.47	-3.47	-0.21	
4,574.00	19.200	248.00	4,152.23	-640.37	-1,468.57	1,602.12	3.80	-3.68	2.63	
4,669.00	16.200	246.10	4,242.72	-651.60	-1,495.18	1,630.99	3.22	-3.16	-2.00	
4,764.00	14.000	245.40	4,334.43	-661.75	-1,517.75	1,655.74	2.32	-2.32	-0.74	
4,859.00	11.200	247.10	4,427.14	-670.13	-1,536.70	1,676.45	2.97	-2.95	1.79	
4,954.00	9.300	244.00	4,520.62	-677.08	-1,552.10	1,693.35	2.08	-2.00	-3.26	
5,049.00	6.300	247.30	4,614.73	-682.46	-1,563.81	1,706.24	3.19	-3.16	3.47	
5,144.00	4.500	244.50	4,709.30	-686.07	-1,571.98	1,715.17	1.91	-1.89	-2.95	
5,238.00	3.300	249.50	4,803.08	-688.61	-1,577.84	1,721.56	1.33	-1.28	5.32	
5,333.00	1.400	233.10	4,898.00	-690.26	-1,581.33	1,725.42	2.10	-2.00	-17.26	
5,427.00	0.800	332.20	4,991.99	-690.37	-1,582.56	1,726.59	1.83	-0.64	105.43	
5,522.00	1.100	353.90	5,086.98	-688.88	-1,582.96	1,726.36	0.49	0.32	22.84	
5,617.00	0.400	343.40	5,181.97	-687.66	-1,583.16	1,726.04	0.75	-0.74	-11.05	
5,712.00	0.700	48.80	5,276.96	-686.96	-1,582.81	1,725.45	0.68	0.32	68.84	
5,807.00	0.500	27.90	5,371.96	-686.21	-1,582.18	1,724.57	0.31	-0.21	-22.00	
5,901.00	0.400	61.60	5,465.96	-685.69	-1,581.70	1,723.92	0.30	-0.11	35.85	
5,996.00	0.200	134.40	5,560.96	-685.65	-1,581.29	1,723.53	0.41	-0.21	76.63	
6,091.00	0.700	144.40	5,655.95	-686.23	-1,580.84	1,723.35	0.53	0.53	10.53	
6,185.00	0.600	133.80	5,749.95	-687.04	-1,580.15	1,723.04	0.17	-0.11	-11.28	
6,280.00	1.100	134.00	5,844.94	-688.02	-1,579.13	1,722.50	0.53	0.53	0.21	
6,375.00	1.000	150.00	5,939.92	-689.37	-1,578.06	1,722.07	0.32	-0.11	16.84	
6,470.00	1.700	347.60	6,034.91	-688.71	-1,577.95	1,721.70	2.81	0.74	-170.95	
6,565.00	1.800	341.10	6,129.86	-685.92	-1,578.74	1,721.30	0.23	0.11	-6.84	
6,660.00	1.600	359.90	6,224.82	-683.19	-1,579.22	1,720.65	0.62	-0.21	19.79	
6,755.00	2.800	13.00	6,319.75	-679.60	-1,578.70	1,718.73	1.36	1.26	13.79	
6,850.00	0.900	31.10	6,414.70	-676.70	-1,577.79	1,716.74	2.07	-2.00	19.05	
6,945.00	0.500	44.20	6,509.69	-675.76	-1,577.12	1,715.75	0.45	-0.42	13.79	
7,040.00	0.600	44.10	6,604.69	-675.11	-1,576.48	1,714.90	0.11	0.11	-0.11	
7,135.00	0.400	22.50	6,699.68	-674.45	-1,576.01	1,714.20	0.29	-0.21	-22.74	
7,230.00	0.700	177.90	6,794.68	-674.72	-1,575.86	1,714.18	1.13	0.32	163.58	
7,325.00	0.600	172.10	6,889.68	-675.79	-1,575.77	1,714.52	0.13	-0.11	-6.11	
7,420.00	0.500	172.30	6,984.67	-676.70	-1,575.65	1,714.77	0.11	-0.11	0.21	
7,515.00	0.500	121.90	7,079.67	-677.33	-1,575.24	1,714.65	0.45	0.00	-53.05	
7,609.00	1.100	116.00	7,173.66	-677.94	-1,574.08	1,713.84	0.64	0.64	-6.28	
7,704.00	1.400	108.40	7,268.64	-678.70	-1,572.16	1,712.38	0.36	0.32	-8.00	
7,799.00	0.800	107.20	7,363.62	-679.27	-1,570.43	1,711.02	0.63	-0.63	-1.26	
7,893.00	0.400	138.00	7,457.61	-679.70	-1,569.58	1,710.42	0.53	-0.43	32.77	
7,988.00	0.400	111.60	7,552.61	-680.07	-1,569.05	1,710.08	0.19	0.00	-27.79	
8,082.00	0.400	112.50	7,646.61	-680.32	-1,568.44	1,709.62	0.01	0.00	0.96	
8,152.00	0.700	65.80	7,716.61	-680.24	-1,567.83	1,709.03	0.74	0.43	-66.71	

Sharewell
Survey Report

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Site:	MDP Pad #10	MD Reference:	KB @ 6493.81ft (KB=22')
Well:	GGU Federal 24B-20-691	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass VM

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)	
8,202.00	0.700	65.80	7,766.60	-679.99	-1,567.27	1,708.42	0.00	0.00	0.00	

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
785.00	784.99	-0.11	-0.57	End of Gyro	
1,824.00	1,792.90	-82.17	-177.85	As of Nov 11	
8,202.00	7,766.60	-679.99	-1,567.27	Projected TD	

Checked By: _____ Approved By: _____ Date: _____