

Bill Barrett Corp.

Garfield County, Colorado [NAD83]

Kaufman 7 Pad

Kaufman 23A-24-692

Wellbore #1

Design: Wellbore #1

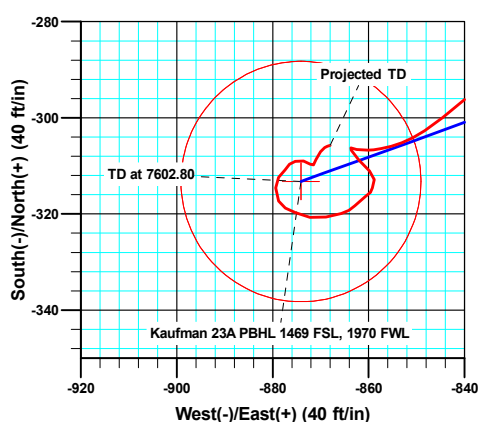
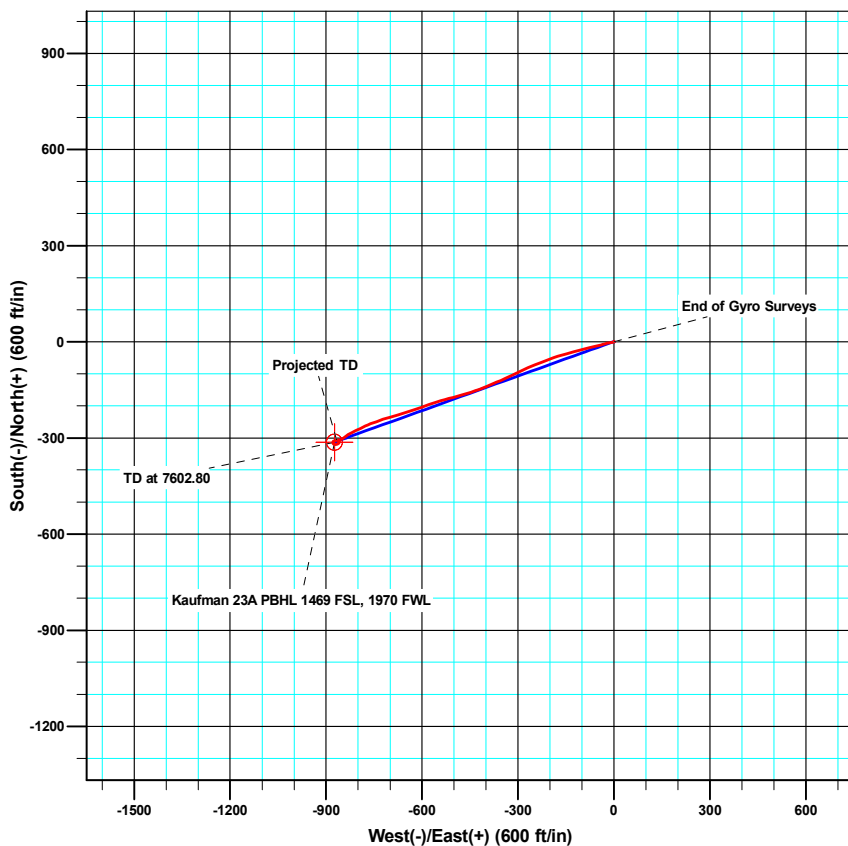
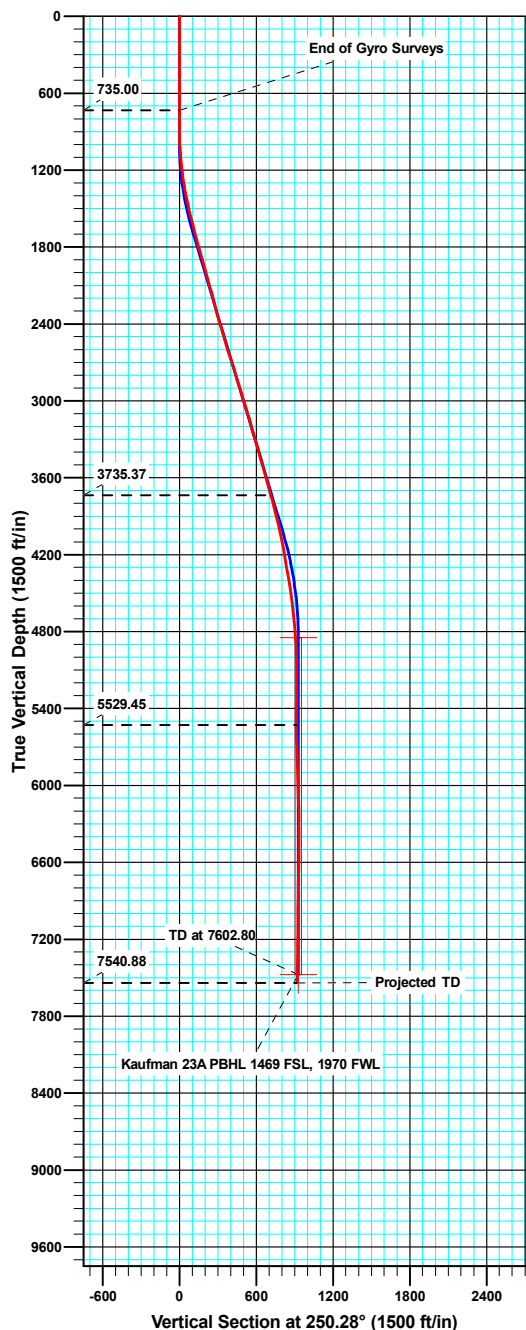
Standard Survey Report

16 August, 2011

Well Details: Kaufman 23A-24-692



Ground Level: 5843.00
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 +N/-S +E/-W Northing Easting Latitude Longitude
 0.00 0.00 1617736.60 2403391.98 39.510401 -107.614752



Azimuths to True North
 Magnetic North: 10.20°

Magnetic Field
 Strength: 52320.6snT
 Dip Angle: 65.83°
 Date: 05/03/2011
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
735.00	735.00	0.10	333.30	0.03	0.27	-0.26	2.30	End of Gyro Surveys
3735.37	3832.00	16.30	254.20	-228.42	-676.34	713.75	718.76	As of Aug. 13
5529.45	5645.00	0.90	191.40	-312.87	-858.83	914.03	932.91	As of Aug. 14
7540.88	7657.00	0.80	73.00	-305.75	-867.96	920.23	978.52	Projected TD



Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 23A-24-692
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 5866.00ft
Site:	Kaufman 7 Pad	MD Reference:	KB @ 5866.00ft
Well:	Kaufman 23A-24-692	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		Kaufman 7 Pad			
Site Position:		Northing:	1,617,736.60 usft	Latitude:	39.510401
From:	Lat/Long	Easting:	2,403,391.98 usft	Longitude:	-107.614752
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.33 °

Well	Kaufman 23A-24-692					
Well Position	+N/-S	0.00 ft	Northing:	1,617,736.60 usft	Latitude:	39.510401
	+E/-W	0.00 ft	Easting:	2,403,391.98 usft	Longitude:	-107.614752
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,843.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	05/03/11	10.20	65.83	52,321

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	250.28	

Survey Program	Date	08/16/11			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	735.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard	
884.00	7,657.00	MWD Surveys (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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.29	58.86	100.00	0.13	0.22	-0.25	0.29	0.29	0.00	
200.00	0.28	82.52	200.00	0.29	0.68	-0.73	0.12	-0.01	23.66	
300.00	0.14	138.80	300.00	0.23	1.00	-1.02	0.23	-0.14	56.28	
400.00	0.18	204.82	400.00	0.00	1.01	-0.95	0.18	0.04	66.02	
500.00	0.23	271.66	500.00	-0.14	0.75	-0.66	0.23	0.05	66.84	
600.00	0.10	278.94	600.00	-0.12	0.46	-0.39	0.13	-0.13	7.28	
700.00	0.12	319.97	700.00	-0.02	0.31	-0.28	0.08	0.02	41.03	
735.00	0.10	333.30	735.00	0.03	0.27	-0.26	0.09	-0.06	38.09	
884.00	0.20	153.40	884.00	-0.09	0.33	-0.28	0.20	0.07	-120.74	

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Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 23A-24-692
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 5866.00ft
Site:	Kaufman 7 Pad	MD Reference:	KB @ 5866.00ft
Well:	Kaufman 23A-24-692	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)
976.00	2.20	251.60	975.97	-0.79	-1.28	1.47	2.43	2.17	106.74
1,069.00	4.20	261.80	1,068.82	-1.84	-6.34	6.59	2.23	2.15	10.97
1,161.00	5.90	261.00	1,160.46	-3.06	-14.35	14.54	1.85	1.85	-0.87
1,256.00	8.30	253.30	1,254.73	-5.79	-25.74	26.18	2.71	2.53	-8.11
1,352.00	10.20	257.30	1,349.48	-9.65	-40.67	41.54	2.09	1.98	4.17
1,447.00	11.70	255.80	1,442.75	-13.86	-58.22	59.48	1.61	1.58	-1.58
1,543.00	14.30	255.40	1,536.28	-19.24	-79.13	80.98	2.71	2.71	-0.42
1,638.00	14.00	255.80	1,628.40	-25.02	-101.62	104.10	0.33	-0.32	0.42
1,733.00	15.50	255.00	1,720.26	-31.12	-125.03	128.20	1.59	1.58	-0.84
1,829.00	15.60	254.00	1,812.75	-38.00	-149.82	153.86	0.30	0.10	-1.04
1,924.00	16.40	252.70	1,904.07	-45.51	-174.91	180.01	0.92	0.84	-1.37
2,020.00	15.30	250.40	1,996.42	-53.79	-199.78	206.21	1.32	-1.15	-2.40
2,115.00	15.40	249.40	2,088.03	-62.43	-223.39	231.36	0.30	0.11	-1.05
2,211.00	15.10	247.60	2,180.65	-71.68	-246.89	256.60	0.58	-0.31	-1.88
2,306.00	15.10	246.10	2,272.37	-81.41	-269.64	281.30	0.41	0.00	-1.58
2,401.00	15.70	244.40	2,363.96	-91.98	-292.55	306.42	0.79	0.63	-1.79
2,497.00	16.70	244.90	2,456.15	-103.44	-316.75	333.08	1.05	1.04	0.52
2,592.00	16.50	244.70	2,547.19	-115.00	-341.31	360.09	0.22	-0.21	-0.21
2,688.00	17.70	247.10	2,638.94	-126.50	-367.08	388.23	1.45	1.25	2.50
2,783.00	18.10	249.00	2,729.34	-137.41	-394.16	417.41	0.75	0.42	2.00
2,878.00	17.30	247.10	2,819.85	-148.19	-420.95	446.27	1.04	-0.84	-2.00
2,974.00	17.00	252.60	2,911.58	-157.95	-447.49	474.54	1.72	-0.31	5.73
3,069.00	18.10	254.20	3,002.16	-166.12	-474.94	503.14	1.26	1.16	1.68
3,164.00	17.20	254.40	3,092.69	-173.91	-502.67	531.88	0.95	-0.95	0.21
3,260.00	15.40	256.40	3,184.83	-180.73	-528.74	558.71	1.96	-1.88	2.08
3,355.00	16.20	252.30	3,276.24	-187.72	-553.62	584.50	1.45	0.84	-4.32
3,451.00	15.90	251.80	3,368.50	-195.90	-578.87	611.03	0.34	-0.31	-0.52
3,546.00	15.20	249.80	3,460.02	-204.27	-602.92	636.49	0.93	-0.74	-2.11
3,641.00	15.50	251.70	3,551.63	-212.55	-626.66	661.63	0.62	0.32	2.00
3,737.00	15.80	251.60	3,644.07	-220.71	-651.24	687.52	0.31	0.31	-0.10
3,832.00	16.30	254.20	3,735.37	-228.42	-676.34	713.75	0.92	0.53	2.74
3,928.00	14.00	253.50	3,828.03	-235.39	-700.44	738.79	2.40	-2.40	-0.73
4,023.00	13.70	251.30	3,920.27	-242.26	-722.12	761.51	0.64	-0.32	-2.32
4,119.00	12.20	250.80	4,013.82	-249.24	-742.47	783.02	1.57	-1.56	-0.52
4,214.00	11.60	249.00	4,106.78	-255.96	-760.86	802.61	0.74	-0.63	-1.89
4,309.00	9.90	243.70	4,200.11	-263.00	-777.10	820.27	2.07	-1.79	-5.58
4,405.00	10.00	245.30	4,294.67	-270.14	-792.07	836.77	0.31	0.10	1.67
4,500.00	9.10	245.10	4,388.35	-276.75	-806.38	852.47	0.95	-0.95	-0.21
4,596.00	8.60	241.40	4,483.21	-283.39	-819.57	867.13	0.79	-0.52	-3.85
4,691.00	7.70	238.90	4,577.25	-290.07	-831.26	880.38	1.02	-0.95	-2.63
4,787.00	6.20	229.20	4,672.54	-296.78	-840.69	891.53	1.98	-1.56	-10.10
4,882.00	5.40	236.30	4,767.06	-302.62	-848.29	900.65	1.13	-0.84	7.47
4,977.00	4.10	256.20	4,861.74	-305.91	-855.31	908.37	2.19	-1.37	20.95

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Survey									
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5,073.00	1.80	270.00	4,957.60	-306.73	-860.15	913.20	2.49	-2.40	14.38
5,168.00	1.00	280.20	5,052.57	-306.58	-862.46	915.32	0.88	-0.84	10.74
5,264.00	0.50	298.70	5,148.57	-306.23	-863.65	916.33	0.57	-0.52	19.27
5,359.00	1.00	148.10	5,243.56	-306.73	-863.57	916.43	1.53	0.53	-158.53
5,454.00	2.00	139.30	5,338.53	-308.69	-862.05	915.66	1.08	1.05	-9.26
5,549.00	1.90	133.50	5,433.47	-311.03	-859.83	914.36	0.23	-0.11	-6.11
5,645.00	0.90	191.40	5,529.45	-312.87	-858.83	914.03	1.68	-1.04	60.31
5,740.00	1.20	191.30	5,624.43	-314.58	-859.17	914.93	0.32	0.32	-0.11
5,836.00	1.80	238.50	5,720.40	-316.35	-860.65	916.92	1.38	0.63	49.17
5,931.00	1.80	221.60	5,815.36	-318.25	-862.91	919.69	0.56	0.00	-17.79
6,027.00	2.20	253.20	5,911.30	-319.91	-865.68	922.85	1.20	0.42	32.92
6,122.00	1.80	262.80	6,006.24	-320.62	-868.90	926.13	0.55	-0.42	10.11
6,217.00	2.20	273.50	6,101.18	-320.70	-872.21	929.26	0.57	0.42	11.26
6,313.00	1.80	306.10	6,197.13	-319.69	-875.26	931.80	1.24	-0.42	33.96
6,408.00	1.10	273.20	6,292.10	-318.76	-877.38	933.48	1.12	-0.74	-34.63
6,503.00	1.80	340.50	6,387.07	-317.31	-878.79	934.32	1.80	0.74	70.84
6,599.00	1.60	356.10	6,483.03	-314.55	-879.38	933.94	0.52	-0.21	16.25
6,694.00	1.30	39.50	6,578.00	-312.39	-878.79	932.66	1.17	-0.32	45.68
6,790.00	1.20	41.80	6,673.98	-310.80	-877.42	930.84	0.12	-0.10	2.40
6,885.00	0.60	37.00	6,768.97	-309.67	-876.46	929.55	0.64	-0.63	-5.05
6,980.00	1.10	73.80	6,863.96	-309.01	-875.29	928.22	0.75	0.53	38.74
7,075.00	1.10	103.40	6,958.94	-308.97	-873.52	926.55	0.59	0.00	31.16
7,170.00	0.80	130.40	7,053.93	-309.61	-872.13	925.45	0.56	-0.32	28.42
7,265.00	0.40	32.10	7,148.93	-309.76	-871.45	924.86	0.99	-0.42	-103.47
7,361.00	1.10	22.10	7,244.92	-308.62	-870.93	923.99	0.74	0.73	-10.42
7,456.00	1.10	39.30	7,339.90	-307.07	-870.00	922.60	0.35	0.00	18.11
7,551.00	0.40	55.50	7,434.89	-306.18	-869.15	921.49	0.76	-0.74	17.05
7,610.00	0.80	73.00	7,493.89	-305.94	-868.59	920.88	0.74	0.68	29.66
7,657.00	0.80	73.00	7,540.88	-305.75	-867.96	920.23	0.00	0.00	0.00

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
735.00	735.00	0.03	0.27	End of Gyro Surveys
3,832.00	3,735.37	-228.42	-676.34	As of Aug. 13
5,645.00	5,529.45	-312.87	-858.83	As of Aug. 14
7,657.00	7,540.88	-305.75	-867.96	Projected TD

Checked By: _____ Approved By: _____ Date: _____