

Bill Barrett Corp.

Garfield County, Colorado [NAD83]

Kaufman 7 Pad

Kaufman 23D-24-692

Wellbore #1

Design: Wellbore #1

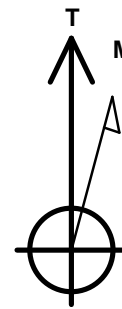
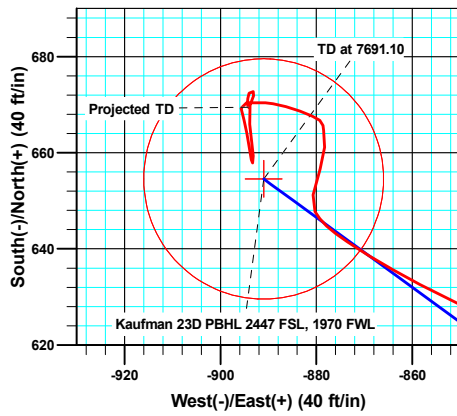
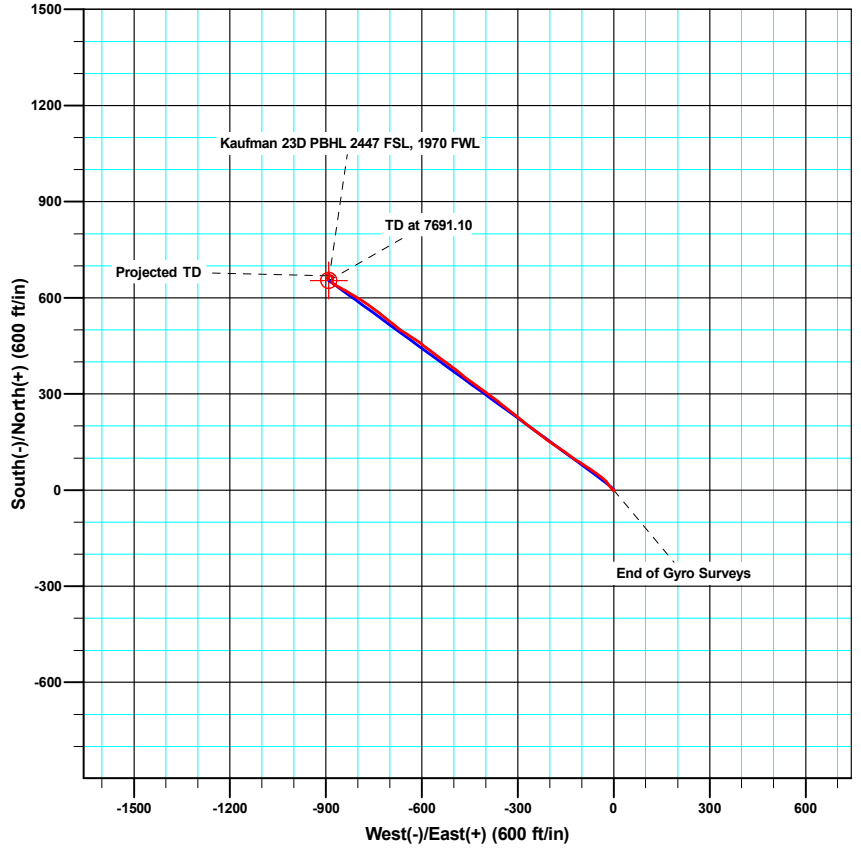
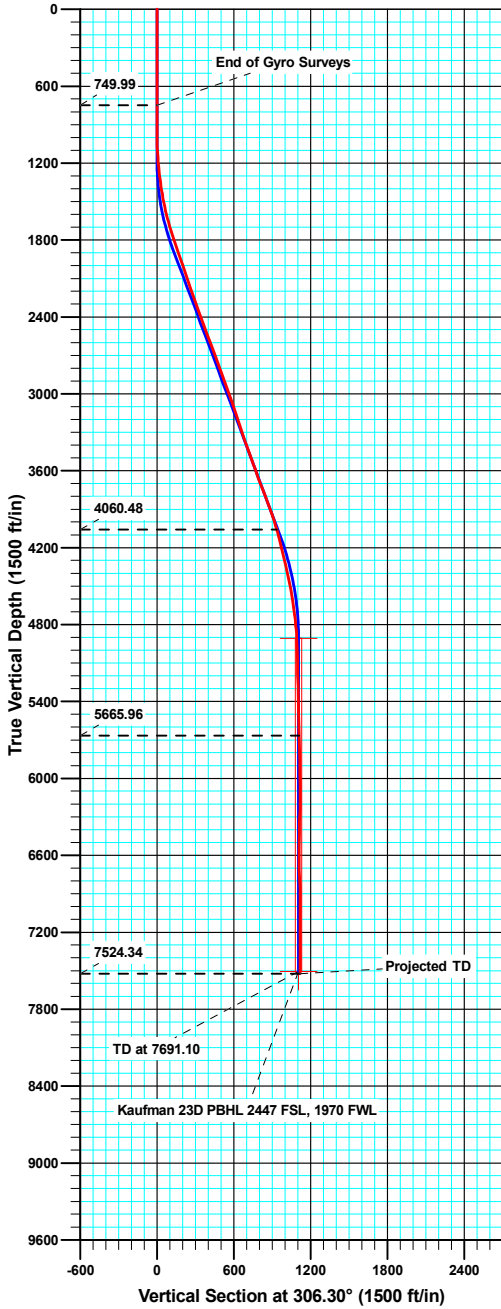
Standard Survey Report

08 August, 2011

Well Details: Kaufman 23D-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 1617746.62 2403399.83 39.510429 -107.614725



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
749.99	750.00	0.14	185.94	0.54	0.90	-0.41	2.55	End of Gyro Surveys
4060.48	4214.00	16.20	306.30	563.27	-747.09	935.57	943.51	As of Aug 4
5665.96	5836.00	2.00	280.00	669.60	-886.35	1110.74	1129.72	As of Aug. 5
7524.34	7695.00	0.40	155.90	669.51	-894.17	1116.99	1172.43	Projected TD



Sharewell Survey Report

Company: Bill Barrett Corp.	Local Co-ordinate Reference: Well Kaufman 23D-24-692
Project: Garfield County, Colorado [NAD83]	TVD Reference: KB @ 5866.00ft
Site: Kaufman 7 Pad	MD Reference: KB @ 5866.00ft
Well: Kaufman 23D-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 23D-24-692			
Well Position	+N/-S 0.00 ft	Northing: 1,617,746.61 usft	Latitude: 39.510429
	+E/-W 0.00 ft	Easting: 2,403,399.84 usft	Longitude: -107.614725
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		306.30

Survey Program		Date 08/08/11		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
100.00	750.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard
884.00	7,695.00	MWD Surveys (Wellbore #1)	MWD	MWD - Standard

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	0.34	339.41	100.00	0.28	-0.10	0.25	0.34	0.34	0.00
200.00	0.36	29.11	200.00	0.83	-0.06	0.54	0.29	0.02	49.70
300.00	0.27	70.54	300.00	1.18	0.32	0.44	0.24	-0.09	41.43
400.00	0.15	125.62	400.00	1.19	0.65	0.18	0.22	-0.12	55.08
500.00	0.17	156.21	500.00	0.97	0.81	-0.08	0.09	0.02	30.59
600.00	0.07	160.48	600.00	0.78	0.89	-0.26	0.10	-0.10	4.27
700.00	0.09	182.64	700.00	0.64	0.91	-0.35	0.04	0.02	22.16
750.00	0.14	185.94	749.99	0.54	0.90	-0.41	0.10	0.10	6.60
884.00	0.40	197.40	883.99	-0.07	0.75	-0.64	0.20	0.19	8.55

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 23D-24-692
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 5866.00ft
Site:	Kaufman 7 Pad	MD Reference:	KB @ 5866.00ft
Well:	Kaufman 23D-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)
977.00	0.90	213.00	976.99	-0.99	0.25	-0.79	0.57	0.54	16.77
1,069.00	2.30	323.50	1,068.96	-0.11	-1.24	0.94	2.99	1.52	120.11
1,161.00	4.30	311.40	1,160.81	3.66	-4.93	6.13	2.29	2.17	-13.15
1,256.00	6.10	321.90	1,255.41	9.98	-10.71	14.54	2.14	1.89	11.05
1,352.00	8.20	325.00	1,350.66	19.61	-17.79	25.94	2.22	2.19	3.23
1,447.00	10.00	315.50	1,444.47	31.04	-27.46	40.51	2.46	1.89	-10.00
1,543.00	12.10	305.20	1,538.69	42.79	-41.52	58.80	2.99	2.19	-10.73
1,638.00	14.70	306.40	1,631.10	55.68	-59.36	80.81	2.75	2.74	1.26
1,734.00	17.30	303.10	1,723.37	70.71	-81.13	107.25	2.87	2.71	-3.44
1,829.00	18.90	302.30	1,813.67	86.65	-105.97	136.70	1.70	1.68	-0.84
1,925.00	18.90	305.70	1,904.50	104.03	-131.74	167.76	1.15	0.00	3.54
2,020.00	19.10	305.20	1,994.32	121.97	-156.94	198.68	0.27	0.21	-0.53
2,115.00	19.20	301.60	2,084.07	139.11	-182.94	229.79	1.25	0.11	-3.79
2,211.00	18.70	307.20	2,174.87	156.69	-208.65	260.92	1.96	-0.52	5.83
2,306.00	19.40	307.60	2,264.67	175.52	-233.28	291.92	0.75	0.74	0.42
2,402.00	19.90	307.20	2,355.08	195.13	-258.92	324.19	0.54	0.52	-0.42
2,497.00	20.70	309.60	2,444.18	215.61	-284.74	357.12	1.22	0.84	2.53
2,592.00	20.20	307.40	2,533.19	236.27	-310.71	390.28	0.97	-0.53	-2.32
2,688.00	21.30	309.40	2,622.96	257.41	-337.35	424.27	1.36	1.15	2.08
2,783.00	20.40	307.50	2,711.74	278.44	-363.82	458.05	1.18	-0.95	-2.00
2,879.00	19.90	306.50	2,801.87	298.34	-390.23	491.12	0.63	-0.52	-1.04
2,974.00	19.20	304.20	2,891.39	316.74	-416.14	522.90	1.09	-0.74	-2.42
3,069.00	19.90	306.00	2,980.91	335.02	-442.14	554.68	0.97	0.74	1.89
3,165.00	19.10	308.90	3,071.41	354.49	-467.59	586.71	1.31	-0.83	3.02
3,260.00	18.80	309.00	3,161.26	373.89	-491.58	617.52	0.32	-0.32	0.11
3,355.00	18.70	305.90	3,251.22	392.45	-515.81	648.04	1.05	-0.11	-3.26
3,451.00	19.00	306.30	3,342.07	410.72	-540.87	679.06	0.34	0.31	0.42
3,546.00	19.60	305.80	3,431.73	429.20	-566.26	710.46	0.66	0.63	-0.53
3,642.00	20.30	309.00	3,521.97	449.10	-592.26	743.20	1.35	0.73	3.33
3,737.00	19.30	302.20	3,611.37	467.84	-618.36	775.32	2.64	-1.05	-7.16
3,832.00	20.70	303.90	3,700.64	485.57	-645.58	807.76	1.60	1.47	1.79
3,928.00	21.00	307.00	3,790.35	505.39	-673.40	841.91	1.19	0.31	3.23
4,023.00	20.10	308.80	3,879.31	525.86	-699.72	875.24	1.16	-0.95	1.89
4,119.00	18.70	308.90	3,969.86	545.86	-724.55	907.10	1.46	-1.46	0.10
4,214.00	16.20	306.30	4,060.48	563.27	-747.09	935.57	2.76	-2.63	-2.74
4,310.00	13.00	305.70	4,153.37	577.51	-766.66	959.76	3.34	-3.33	-0.63
4,405.00	13.70	302.10	4,245.80	589.72	-784.86	981.67	1.14	0.74	-3.79
4,500.00	14.00	301.40	4,338.04	601.69	-804.20	1,004.34	0.36	0.32	-0.74
4,596.00	12.10	301.60	4,431.55	613.01	-822.69	1,025.94	1.98	-1.98	0.21
4,691.00	10.30	299.40	4,524.74	622.40	-838.57	1,044.29	1.95	-1.89	-2.32
4,787.00	8.40	295.40	4,619.46	629.62	-852.38	1,059.70	2.09	-1.98	-4.17
4,882.00	7.50	299.60	4,713.55	635.66	-864.04	1,072.67	1.13	-0.95	4.42
4,978.00	5.80	303.80	4,808.90	641.45	-873.52	1,083.74	1.84	-1.77	4.38

Sharewell

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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)	
5,073.00	3.40	320.20	4,903.59	646.29	-879.31	1,091.27	2.86	-2.53	17.26	
5,168.00	3.40	9.20	4,998.44	651.23	-880.66	1,095.29	2.97	0.00	51.58	
5,264.00	3.30	21.20	5,094.28	656.62	-879.21	1,097.31	0.74	-0.10	12.50	
5,359.00	2.40	358.00	5,189.17	661.16	-878.29	1,099.25	1.52	-0.95	-24.42	
5,454.00	1.80	354.60	5,284.10	664.63	-878.50	1,101.48	0.64	-0.63	-3.58	
5,500.00	0.90	350.70	5,330.09	665.70	-878.63	1,102.22	1.97	-1.96	-8.48	
5,645.00	1.70	290.50	5,475.06	667.58	-880.83	1,105.10	1.02	0.55	-41.52	
5,740.00	1.70	295.80	5,570.01	668.69	-883.41	1,107.84	0.17	0.00	5.58	
5,836.00	2.00	280.00	5,665.96	669.60	-886.35	1,110.74	0.61	0.31	-16.46	
5,931.00	1.30	286.20	5,760.92	670.19	-889.01	1,113.24	0.76	-0.74	6.53	
6,027.00	0.70	261.70	5,856.91	670.41	-890.64	1,114.68	0.75	-0.63	-25.52	
6,122.00	1.30	273.30	5,951.89	670.39	-892.29	1,116.00	0.66	0.63	12.21	
6,217.00	1.40	268.00	6,046.87	670.41	-894.52	1,117.81	0.17	0.11	-5.58	
6,313.00	1.30	179.50	6,142.85	669.28	-895.69	1,118.08	1.96	-0.10	-92.19	
6,408.00	1.70	155.70	6,237.82	666.92	-895.10	1,116.21	0.77	0.42	-25.05	
6,504.00	1.80	178.10	6,333.78	664.11	-894.46	1,114.03	0.72	0.10	23.33	
6,599.00	2.10	165.90	6,428.72	660.93	-893.99	1,111.77	0.54	0.32	-12.84	
6,694.00	0.80	177.00	6,523.69	658.58	-893.53	1,110.01	1.39	-1.37	11.68	
6,790.00	0.30	95.50	6,619.68	657.89	-893.24	1,109.37	0.85	-0.52	-84.90	
6,885.00	3.30	353.40	6,714.63	660.58	-893.31	1,111.02	3.55	3.16	-107.47	
6,980.00	3.20	354.60	6,809.48	665.94	-893.88	1,114.64	0.13	-0.11	1.26	
7,075.00	1.60	13.00	6,904.39	669.87	-893.83	1,116.93	1.85	-1.68	19.37	
7,170.00	1.00	34.20	6,999.37	671.85	-893.06	1,117.49	0.80	-0.63	22.32	
7,266.00	0.70	288.10	7,095.36	672.72	-893.15	1,118.07	1.43	-0.31	-110.52	
7,361.00	0.70	212.10	7,190.36	672.41	-894.01	1,118.58	0.91	0.00	-80.00	
7,456.00	0.80	178.40	7,285.35	671.26	-894.30	1,118.13	0.47	0.11	-35.47	
7,551.00	0.30	199.10	7,380.35	670.36	-894.36	1,117.65	0.56	-0.53	21.79	
7,646.00	0.40	155.90	7,475.34	669.82	-894.31	1,117.29	0.29	0.11	-45.47	
7,695.00	0.40	155.90	7,524.34	669.51	-894.17	1,116.99	0.00	0.00	0.00	

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
750.00	749.99	0.54	0.90	End of Gyro Surveys	
4,214.00	4,060.48	563.27	-747.09	As of Aug 4	
5,836.00	5,665.96	669.60	-886.35	As of Aug. 5	
7,695.00	7,524.34	669.51	-894.17	Projected TD	

Checked By: _____ Approved By: _____ Date: _____