

Bill Barrett Corp.

Garfield Co., CO (NAD83)

Kaufman Pad #4 (Sec.30-T6S-R91W)

Kaufman 42B-25-692

Wellbore #1

Design: Wellbore #1

Standard Survey Report

24 February, 2012



Project: Garfield Co., CO (NAD83)
Site: Kaufman Pad #4 (Sec.30-T6S-R91W)
Well: Kaufman 42B-25-692
Wellbore: Wellbore #1
Design: Wellbore #1
Latitude: 39° 30' 10.99 N
Longitude: 107° 36' 16.31 W
Ground Level: 5786.01
WELL @ 5808.01ft



PROJECT DETAILS: Garfield Co., CO (NAD83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Central Zone
System Datum: Mean Sea Level

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Kaufman 42B-25-692, True North
Vertical (TVD) Reference: WELL @ 5808.01ft
Section (VS) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: WELL @ 5808.01ft
Calculation Method: Minimum Curvature

WELL DETAILS: Kaufman 42B-25-692

+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude	Slot
0.00	0.00	1614993.54	5786.01	2406213.26	39° 30' 10.99 N	107° 36' 16.31 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

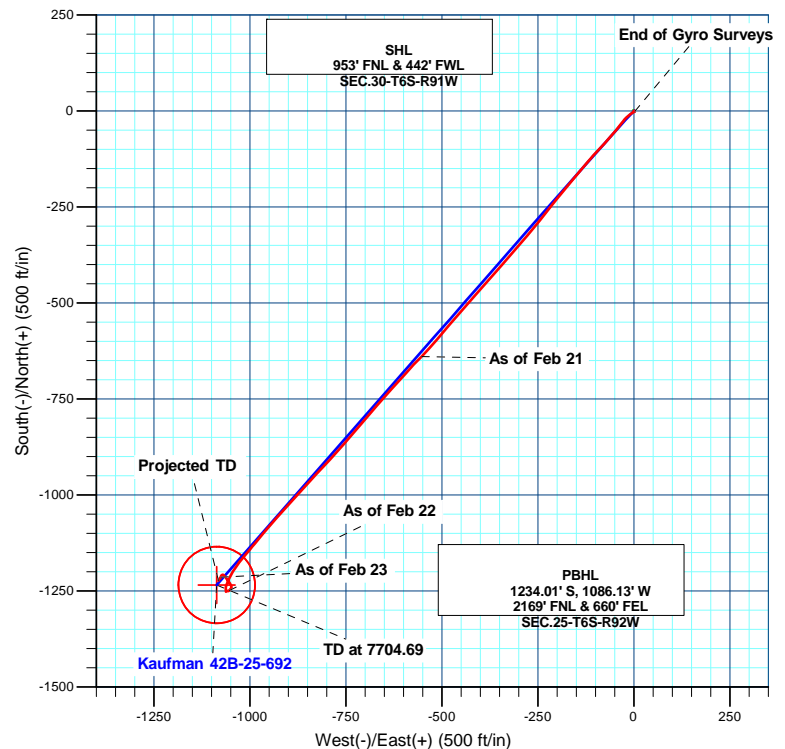
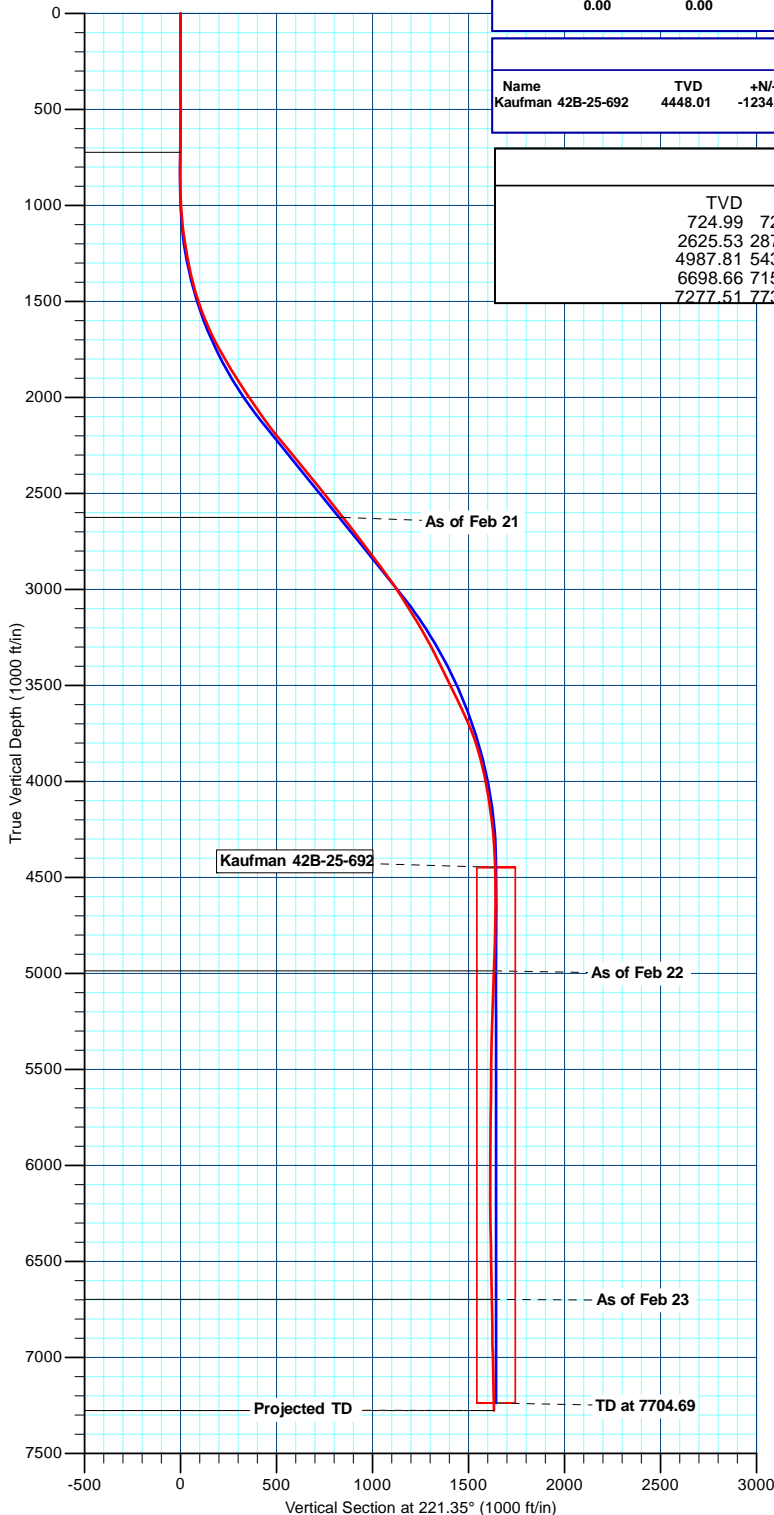
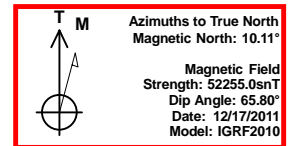
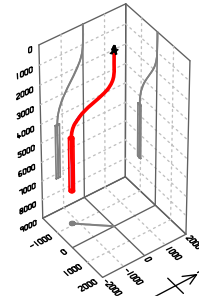
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Kaufman 42B-25-692	4448.01	-1234.02	-1086.14	1613785.02	2405098.83	39° 29' 58.79 N	107° 36' 30.16 W	Circle (Radius: 100.00)

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSDeparture	Annotation
724.99	725.00	0.432	353.69	-0.81	2.00	-0.72 4.72	End of Gyro Surveys
2625.53	2871.00	38.400	224.10	-639.06	-552.98	845.07 852.46	As of Feb 21
4987.81	5439.00	2.500	43.80	-1248.25	-1053.10	1632.78 1665.93	As of Feb 22
6698.66	7151.00	1.800	195.00	-1213.56	-1075.73	1621.70 1725.73	As of Feb 23
7277.51	7730.00	1.500	189.80	-1223.00	-1081.83	1632.81 1738.19	Projected TD

FORMATION TOP DETAILS

No formation data is available



Design: Wellbore #1 (Kaufman 42B-25-692/Wellbore #1)

Created By: Bret Wolford Date: 7:46, February 24 2012

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42B-25-692
Project:	Garfield Co., CO (NAD83)	TVD Reference:	WELL @ 5808.01ft
Site:	Kaufman Pad #4 (Sec.30-T6S-R91W)	MD Reference:	WELL @ 5808.01ft
Well:	Kaufman 42B-25-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

Project	Garfield Co., CO (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 Pad #4 (Sec.30-T6S-R91W)			
Site Position:		Northing:	1,615,037.35 usft	Latitude:	39° 30' 11.42 N
From:	Lat/Long	Easting:	2,406,193.68 usft	Longitude:	107° 36' 16.57 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.33 °

Well	Kaufman 42B-25-692					
Well Position	+N/-S	0.00 ft	Northing:	1,614,993.54 usft	Latitude:	39° 30' 10.99 N
	+E/-W	0.00 ft	Easting:	2,406,213.26 usft	Longitude:	107° 36' 16.31 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,786.01 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/17/2011	10.11	65.80	52,255

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	221.35	

Survey Program	Date	2/24/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	725.00	Survey #1 (Wellbore #1)	MWD	MWD - Standard	
725.00	7,730.00	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	
100.00	0.320	341.27	100.00	0.26	-0.09	-0.14	0.32	0.32	0.00	
200.00	0.370	83.71	200.00	0.56	0.14	-0.52	0.54	0.05	102.44	
300.00	0.560	174.70	300.00	0.11	0.51	-0.42	0.68	0.19	90.99	
400.00	0.140	342.32	400.00	-0.26	0.52	-0.15	0.70	-0.42	167.62	
500.00	0.480	85.02	499.99	-0.10	0.90	-0.51	0.53	0.34	102.70	
600.00	0.660	150.61	599.99	-0.57	1.60	-0.63	0.64	0.18	65.59	
700.00	0.190	42.02	699.99	-0.95	1.99	-0.60	0.74	-0.47	-108.59	
720.00	0.450	354.38	719.99	-0.85	2.00	-0.69	1.76	1.30	-238.20	
875.00	0.200	227.70	874.99	-0.42	1.74	-0.84	0.38	-0.16	-81.73	

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Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42B-25-692
Project:	Garfield Co., CO (NAD83)	TVD Reference:	WELL @ 5808.01ft
Site:	Kaufman Pad #4 (Sec.30-T6S-R91W)	MD Reference:	WELL @ 5808.01ft
Well:	Kaufman 42B-25-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

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)
970.00	1.900	225.50	969.97	-1.64	0.50	0.90	1.79	1.79	-2.32
1,065.00	5.100	238.20	1,064.78	-4.97	-4.21	6.51	3.45	3.37	13.37
1,160.00	8.600	232.40	1,159.09	-11.53	-13.43	17.53	3.75	3.68	-6.11
1,255.00	9.800	220.70	1,252.87	-21.99	-24.34	32.59	2.33	1.26	-12.32
1,350.00	12.400	218.10	1,346.09	-36.15	-35.90	50.86	2.79	2.74	-2.74
1,445.00	15.600	218.40	1,438.25	-54.19	-50.13	73.80	3.37	3.37	0.32
1,540.00	20.000	222.60	1,528.69	-76.17	-69.08	102.82	4.82	4.63	4.42
1,635.00	22.900	223.10	1,617.10	-101.63	-92.71	137.54	3.06	3.05	0.53
1,730.00	26.700	221.00	1,703.32	-131.25	-119.35	177.38	4.11	4.00	-2.21
1,826.00	30.100	219.20	1,787.76	-166.19	-148.72	223.01	3.65	3.54	-1.88
1,921.00	32.300	220.30	1,869.01	-204.02	-180.20	272.20	2.39	2.32	1.16
2,016.00	32.800	218.30	1,949.09	-243.57	-212.56	323.28	1.25	0.53	-2.11
2,111.00	34.300	218.00	2,028.26	-284.86	-244.99	375.69	1.59	1.58	-0.32
2,206.00	35.300	220.40	2,106.27	-326.86	-279.26	429.86	1.79	1.05	2.53
2,301.00	38.100	221.10	2,182.44	-369.85	-316.33	486.63	2.98	2.95	0.74
2,396.00	39.600	222.00	2,256.42	-414.44	-355.86	546.22	1.69	1.58	0.95
2,491.00	40.300	221.00	2,329.25	-460.13	-396.28	607.22	1.00	0.74	-1.05
2,586.00	39.600	221.00	2,402.07	-506.17	-436.30	668.22	0.74	-0.74	0.00
2,681.00	38.200	220.20	2,476.01	-551.46	-475.12	727.87	1.57	-1.47	-0.84
2,776.00	37.900	221.10	2,550.82	-595.88	-513.26	786.41	0.66	-0.32	0.95
2,871.00	38.400	224.10	2,625.53	-639.06	-552.98	845.07	2.02	0.53	3.16
2,966.00	37.600	222.10	2,700.39	-681.76	-592.95	903.52	1.55	-0.84	-2.11
3,061.00	37.400	221.70	2,775.76	-724.80	-631.57	961.35	0.33	-0.21	-0.42
3,156.00	37.000	221.50	2,851.43	-767.75	-669.70	1,018.79	0.44	-0.42	-0.21
3,251.00	36.000	219.80	2,927.80	-810.62	-706.52	1,075.28	1.50	-1.05	-1.79
3,346.00	33.500	221.20	3,005.85	-851.80	-741.66	1,129.42	2.76	-2.63	1.47
3,441.00	31.900	221.70	3,085.79	-890.27	-775.63	1,180.74	1.71	-1.68	0.53
3,536.00	30.800	223.80	3,166.92	-926.57	-809.17	1,230.14	1.63	-1.16	2.21
3,631.00	29.200	221.90	3,249.20	-961.37	-841.48	1,277.62	1.96	-1.68	-2.00
3,726.00	27.200	222.80	3,332.92	-994.56	-871.71	1,322.50	2.15	-2.11	0.95
3,821.00	25.800	221.00	3,417.93	-1,026.09	-900.03	1,364.88	1.70	-1.47	-1.89
3,918.00	26.500	222.90	3,505.01	-1,057.88	-928.61	1,407.63	1.13	0.72	1.96
4,013.00	25.700	219.70	3,590.32	-1,089.25	-956.20	1,449.41	1.70	-0.84	-3.37
4,108.00	24.100	219.60	3,676.49	-1,120.05	-981.72	1,489.39	1.68	-1.68	-0.11
4,203.00	20.200	220.70	3,764.46	-1,147.44	-1,004.79	1,525.19	4.13	-4.11	1.16
4,298.00	15.600	217.70	3,854.84	-1,169.99	-1,023.30	1,554.35	4.94	-4.84	-3.16
4,393.00	12.800	215.90	3,946.93	-1,188.63	-1,037.29	1,577.58	2.98	-2.95	-1.89
4,488.00	10.500	207.90	4,039.97	-1,204.80	-1,047.51	1,596.48	2.95	-2.42	-8.42
4,583.00	8.300	204.80	4,133.69	-1,218.68	-1,054.44	1,611.47	2.38	-2.32	-3.26
4,679.00	7.200	202.60	4,228.81	-1,230.53	-1,059.66	1,623.81	1.19	-1.15	-2.29
4,774.00	4.800	188.20	4,323.29	-1,239.96	-1,062.51	1,632.78	2.96	-2.53	-15.16
4,869.00	3.100	172.50	4,418.06	-1,246.44	-1,062.75	1,637.80	2.10	-1.79	-16.53
4,964.00	1.700	181.80	4,512.98	-1,250.39	-1,062.45	1,640.57	1.52	-1.47	9.79

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42B-25-692
Project:	Garfield Co., CO (NAD83)	TVD Reference:	WELL @ 5808.01ft
Site:	Kaufman Pad #4 (Sec.30-T6S-R91W)	MD Reference:	WELL @ 5808.01ft
Well:	Kaufman 42B-25-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

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)	
5,059.00	0.400	54.60	4,607.97	-1,251.61	-1,062.23	1,641.34	2.07	-1.37	-133.89	
5,154.00	1.700	44.50	4,702.95	-1,250.41	-1,060.97	1,639.61	1.38	1.37	-10.63	
5,249.00	2.000	105.60	4,797.91	-1,249.85	-1,058.39	1,637.48	2.00	0.32	64.32	
5,344.00	1.400	76.10	4,892.87	-1,250.02	-1,055.66	1,635.81	1.10	-0.63	-31.05	
5,439.00	2.500	43.80	4,987.81	-1,248.25	-1,053.10	1,632.78	1.59	1.16	-34.00	
5,534.00	2.100	26.70	5,082.74	-1,245.20	-1,050.89	1,629.03	0.83	-0.42	-18.00	
5,630.00	2.000	52.10	5,178.68	-1,242.60	-1,048.77	1,625.68	0.94	-0.10	26.46	
5,725.00	2.400	349.80	5,273.62	-1,239.62	-1,047.82	1,622.81	2.42	0.42	-65.58	
5,820.00	3.300	336.80	5,368.50	-1,235.15	-1,049.25	1,620.40	1.16	0.95	-13.68	
5,915.00	3.500	328.30	5,463.34	-1,230.17	-1,051.85	1,618.38	0.57	0.21	-8.95	
6,010.00	2.500	321.60	5,558.21	-1,226.08	-1,054.66	1,617.17	1.11	-1.05	-7.05	
6,105.00	2.500	327.00	5,653.11	-1,222.72	-1,057.07	1,616.24	0.25	0.00	5.68	
6,200.00	1.200	323.60	5,748.06	-1,220.18	-1,058.79	1,615.47	1.37	-1.37	-3.58	
6,295.00	2.900	321.30	5,843.00	-1,217.50	-1,060.89	1,614.84	1.79	1.79	-2.42	
6,390.00	2.500	327.70	5,937.89	-1,213.87	-1,063.50	1,613.85	0.53	-0.42	6.74	
6,485.00	1.900	319.00	6,032.82	-1,210.93	-1,065.64	1,613.05	0.72	-0.63	-9.16	
6,580.00	1.400	308.50	6,127.78	-1,209.02	-1,067.58	1,612.90	0.61	-0.53	-11.05	
6,675.00	1.200	292.20	6,222.76	-1,207.93	-1,069.41	1,613.29	0.44	-0.21	-17.16	
6,770.00	1.400	252.20	6,317.74	-1,207.90	-1,071.43	1,614.61	0.96	0.21	-42.11	
6,865.00	0.900	241.20	6,412.72	-1,208.62	-1,073.19	1,616.31	0.57	-0.53	-11.58	
6,961.00	1.000	225.10	6,508.70	-1,209.57	-1,074.45	1,617.85	0.30	0.10	-16.77	
7,056.00	1.200	189.00	6,603.69	-1,211.14	-1,075.19	1,619.52	0.74	0.21	-38.00	
7,151.00	1.800	195.00	6,698.66	-1,213.56	-1,075.73	1,621.70	0.65	0.63	6.32	
7,246.00	0.700	174.80	6,793.63	-1,215.58	-1,076.06	1,623.43	1.23	-1.16	-21.26	
7,341.00	0.500	247.30	6,888.63	-1,216.32	-1,076.39	1,624.20	0.77	-0.21	76.32	
7,436.00	1.800	237.50	6,983.61	-1,217.28	-1,078.03	1,626.01	1.38	1.37	-10.32	
7,531.00	1.300	237.70	7,078.57	-1,218.66	-1,080.20	1,628.48	0.53	-0.53	0.21	
7,627.00	1.400	191.60	7,174.55	-1,220.39	-1,081.36	1,630.54	1.11	0.10	-48.02	
7,680.00	1.500	189.80	7,227.53	-1,221.71	-1,081.61	1,631.69	0.21	0.19	-3.40	
7,730.00	1.500	189.80	7,277.51	-1,223.00	-1,081.83	1,632.81	0.00	0.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)	
816.20	816.19	9 5/8" Csg.	0.80	1.02	

Sharewell
Survey Report

Company: Bill Barrett Corp. Project: Garfield Co., CO (NAD83) Site: Kaufman Pad #4 (Sec.30-T6S-R91W) Well: Kaufman 42B-25-692 Wellbore: Wellbore #1 Design: Wellbore #1	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:	Well Kaufman 42B-25-692 WELL @ 5808.01ft WELL @ 5808.01ft True Minimum Curvature CompassVM
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Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
725.00	724.99	-0.81	2.00	End of Gyro Surveys
2,871.00	2,625.53	-639.06	-552.98	As of Feb 21
5,439.00	4,987.81	-1,248.25	-1,053.10	As of Feb 22
7,151.00	6,698.66	-1,213.56	-1,075.73	As of Feb 23
7,730.00	7,277.51	-1,223.00	-1,081.83	Projected TD

Checked By: _____	Approved By: _____	Date: _____
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