

Bill Barrett Corp.

Garfield Co., CO (NAD83)

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

Kaufman 42C-25-692

Wellbore #1

Design: Wellbore #1

Standard Survey Report

28 February, 2012



Project: Garfield Co., CO (NAD83)
Site: Kaufman Pad #4 (Sec.30-T6S-R91W)
Well: Kaufman 42C-25-692
Wellbore: Wellbore #1
Design: Wellbore #1
Latitude: 39° 30' 11.06 N
Longitude: 107° 36' 16.35 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 42C-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 42C-25-692

+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude	Slot
0.00	0.00	1615000.90	5786.01	2406210.04	39° 30' 11.06 N	107° 36' 16.35 W	

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

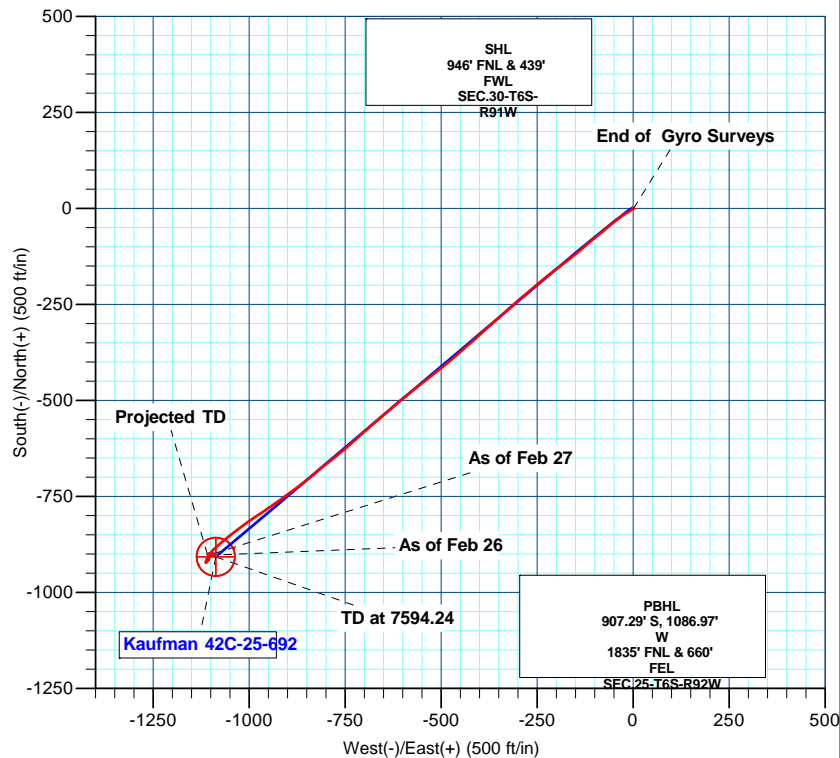
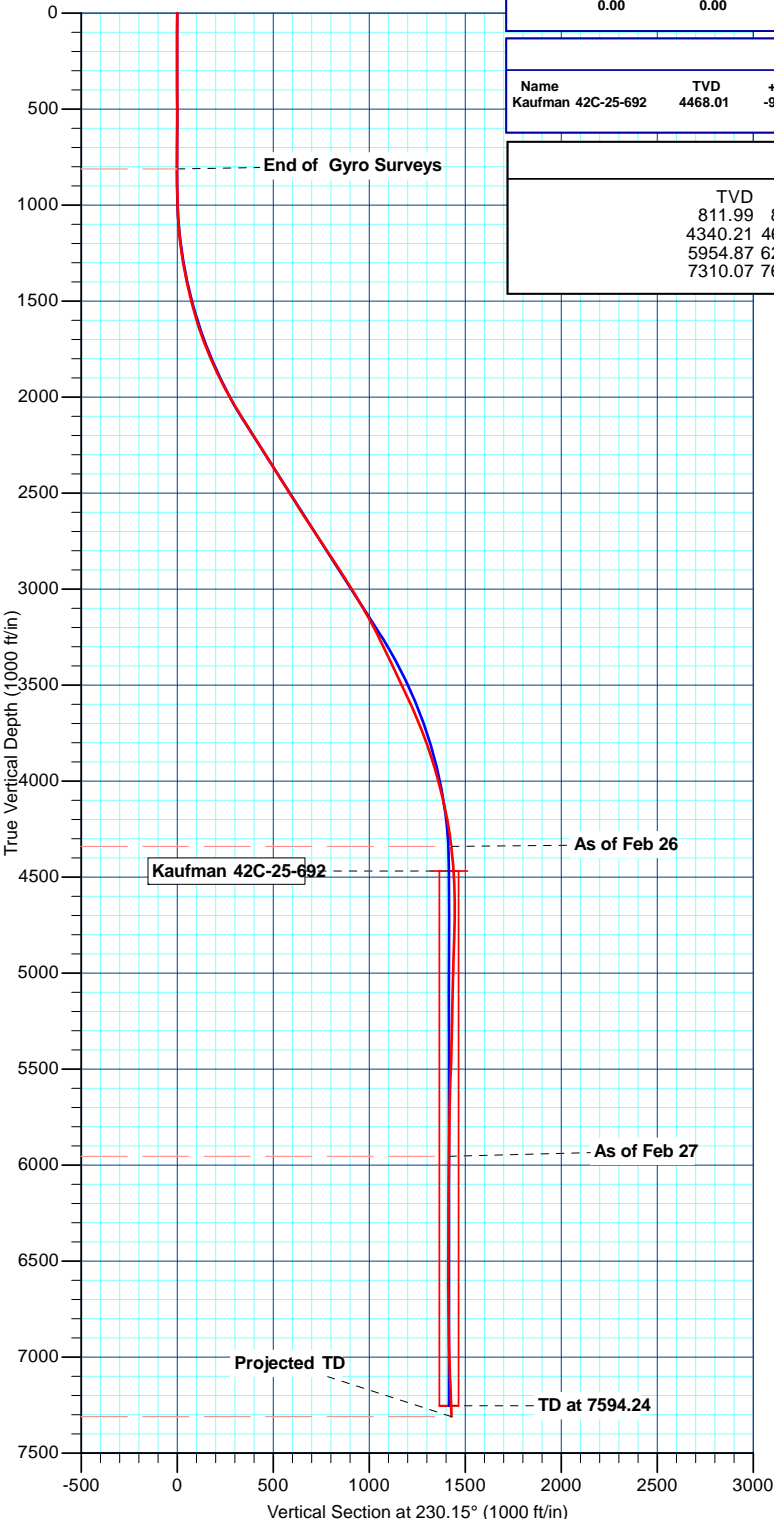
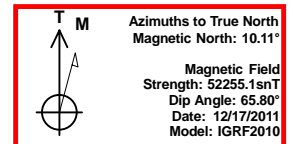
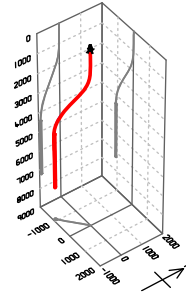
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Kaufman 42C-25-692	4468.01	-907.29	-1086.97	1614119.03	2405102.35	39° 30' 2.09 N	107° 36' 30.22 W	Circle (Radius: 50.00)

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSDeparture	Annotation
811.99	812.00	0.073	46.01	-0.03	0.58	-0.42	4.86
4340.21	4679.00	6.800	209.40	-903.21	-1105.15	1427.21	1435.69
5954.87	6295.00	1.200	76.00	-899.01	-1092.32	1414.67	1492.06
7310.07	7651.00	2.200	239.80	-900.54	-1108.98	1428.44	1535.99

FORMATION TOP DETAILS

No formation data is available



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

Created By: Bret Wolford Date: 6:14, February 28 2012

Sharewell
Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42C-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 42C-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 42C-25-692					
Well Position	+N/-S	0.00 ft	Northing:	1,615,000.90 usft	Latitude:	39° 30' 11.06 N
	+E/-W	0.00 ft	Easting:	2,406,210.05 usft	Longitude:	107° 36' 16.35 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	230.15	

Survey Program	Date	2/28/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	812.00	Survey #1 (Wellbore #1)	MWD	MWD - Standard	
812.00	7,651.00	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	0.340	21.89	100.00	0.28	0.11	-0.26	0.34	0.34	0.00	
200.00	0.420	97.49	200.00	0.50	0.58	-0.77	0.47	0.08	75.60	
300.00	0.420	172.72	300.00	0.09	0.99	-0.82	0.51	0.00	75.23	
400.00	0.220	307.54	400.00	-0.16	0.89	-0.58	0.60	-0.20	134.82	
500.00	0.250	85.76	500.00	-0.02	0.95	-0.72	0.44	0.03	138.22	
600.00	0.430	187.06	599.99	-0.38	1.13	-0.62	0.54	0.18	101.30	
700.00	0.270	324.47	699.99	-0.56	0.94	-0.37	0.65	-0.16	137.41	
710.00	0.630	319.42	709.99	-0.50	0.89	-0.37	3.62	3.60	-50.50	
875.00	0.400	122.20	874.99	-0.12	0.79	-0.53	0.62	-0.14	98.66	

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42C-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 42C-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	1.500	249.40	969.98	-0.73	-0.09	0.54	1.86	1.16	133.89
1,065.00	3.500	226.10	1,064.89	-3.18	-3.35	4.61	2.32	2.11	-24.53
1,160.00	6.000	241.60	1,159.56	-7.55	-9.81	12.37	2.93	2.63	16.32
1,255.00	8.200	237.60	1,253.82	-13.54	-19.89	23.95	2.37	2.32	-4.21
1,350.00	10.700	235.80	1,347.53	-22.13	-32.91	39.45	2.65	2.63	-1.89
1,445.00	12.900	228.60	1,440.52	-34.10	-48.16	58.83	2.78	2.32	-7.58
1,540.00	15.200	231.50	1,532.67	-48.87	-65.87	81.88	2.53	2.42	3.05
1,635.00	17.500	230.50	1,623.82	-65.71	-86.64	108.62	2.44	2.42	-1.05
1,730.00	20.800	230.30	1,713.55	-85.58	-110.64	139.78	3.47	3.47	-0.21
1,826.00	23.500	229.00	1,802.46	-109.03	-138.21	175.97	2.86	2.81	-1.35
1,921.00	25.600	232.40	1,888.87	-133.98	-168.77	215.42	2.66	2.21	3.58
2,016.00	28.700	232.50	1,973.39	-160.40	-203.13	258.73	3.26	3.26	0.11
2,111.00	30.800	230.50	2,055.87	-189.76	-240.00	305.85	2.44	2.21	-2.11
2,206.00	33.100	229.10	2,136.48	-222.22	-278.38	356.11	2.54	2.42	-1.47
2,301.00	32.100	229.00	2,216.51	-255.76	-317.04	407.29	1.05	-1.05	-0.11
2,396.00	32.000	229.00	2,297.03	-288.83	-355.09	457.69	0.11	-0.11	0.00
2,491.00	32.200	227.10	2,377.51	-322.58	-392.63	508.13	1.08	0.21	-2.00
2,586.00	32.300	228.60	2,457.85	-356.60	-430.21	558.78	0.85	0.11	1.58
2,681.00	32.400	230.20	2,538.11	-389.67	-468.80	609.61	0.91	0.11	1.68
2,777.00	32.000	231.10	2,619.34	-422.11	-508.36	660.76	0.65	-0.42	0.94
2,872.00	33.900	231.50	2,699.06	-454.41	-548.69	712.42	2.01	2.00	0.42
2,967.00	33.500	231.10	2,778.09	-487.37	-589.82	765.12	0.48	-0.42	-0.42
3,062.00	33.400	229.10	2,857.36	-520.95	-629.99	817.48	1.17	-0.11	-2.11
3,157.00	32.300	230.10	2,937.17	-554.35	-669.23	869.00	1.29	-1.16	1.05
3,252.00	31.300	227.60	3,017.91	-587.28	-706.93	919.04	1.74	-1.05	-2.63
3,347.00	30.400	228.30	3,099.47	-619.91	-743.10	967.72	1.02	-0.95	0.74
3,442.00	28.500	233.00	3,182.20	-649.54	-779.15	1,014.39	3.15	-2.00	4.95
3,537.00	26.200	229.30	3,266.58	-676.87	-813.16	1,058.01	3.01	-2.42	-3.89
3,632.00	25.500	231.30	3,352.08	-703.33	-845.02	1,099.42	1.18	-0.74	2.11
3,728.00	24.900	232.60	3,438.94	-728.52	-877.20	1,140.27	0.85	-0.63	1.35
3,823.00	25.400	235.20	3,524.94	-752.30	-909.82	1,180.55	1.28	0.53	2.74
3,918.00	25.000	235.10	3,610.90	-775.41	-943.02	1,220.85	0.42	-0.42	-0.11
4,013.00	22.100	236.50	3,697.98	-796.77	-974.39	1,258.61	3.11	-3.05	1.47
4,108.00	20.200	234.20	3,786.57	-816.23	-1,002.60	1,292.74	2.18	-2.00	-2.42
4,203.00	17.500	233.20	3,876.47	-834.38	-1,027.34	1,323.37	2.86	-2.84	-1.05
4,298.00	15.900	231.60	3,967.46	-851.02	-1,048.98	1,350.64	1.75	-1.68	-1.68
4,393.00	14.100	229.90	4,059.22	-866.56	-1,068.03	1,375.23	1.95	-1.89	-1.79
4,488.00	11.400	228.80	4,151.87	-880.20	-1,083.95	1,396.19	2.85	-2.84	-1.16
4,583.00	9.900	223.70	4,245.23	-892.29	-1,096.66	1,413.69	1.86	-1.58	-5.37
4,679.00	6.800	209.40	4,340.21	-903.21	-1,105.15	1,427.21	3.86	-3.23	-14.90
4,774.00	4.700	205.30	4,434.73	-911.63	-1,109.58	1,436.00	2.25	-2.21	-4.32
4,869.00	3.800	196.70	4,529.47	-918.16	-1,112.14	1,442.16	1.16	-0.95	-9.05
4,964.00	1.100	183.10	4,624.38	-922.09	-1,113.10	1,445.41	2.89	-2.84	-14.32

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42C-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 42C-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	1.200	61.70	4,719.37	-922.53	-1,112.27	1,445.06	2.11	0.11	-127.79	
5,154.00	2.000	45.70	4,814.33	-920.90	-1,110.21	1,442.43	0.96	0.84	-16.84	
5,249.00	2.000	37.80	4,909.27	-918.43	-1,108.01	1,439.16	0.29	0.00	-8.32	
5,344.00	1.100	65.40	5,004.24	-916.74	-1,106.16	1,436.66	1.21	-0.95	29.05	
5,439.00	1.900	15.30	5,099.21	-914.84	-1,104.92	1,434.49	1.54	0.84	-52.74	
5,534.00	1.600	5.00	5,194.16	-912.00	-1,104.39	1,432.26	0.46	-0.32	-10.84	
5,630.00	1.100	0.80	5,290.14	-909.75	-1,104.26	1,430.71	0.53	-0.52	-4.38	
5,725.00	1.100	24.00	5,385.12	-908.00	-1,103.87	1,429.30	0.47	0.00	24.42	
5,820.00	3.200	43.20	5,480.05	-905.24	-1,101.69	1,425.85	2.31	2.21	20.21	
5,915.00	2.000	49.00	5,574.95	-902.22	-1,098.62	1,421.56	1.29	-1.26	6.11	
6,010.00	1.100	64.60	5,669.91	-900.74	-1,096.54	1,419.02	1.04	-0.95	16.42	
6,105.00	0.700	126.10	5,764.90	-900.69	-1,095.25	1,417.99	1.03	-0.42	64.74	
6,200.00	1.400	40.10	5,859.89	-900.14	-1,094.04	1,416.71	1.60	0.74	-90.53	
6,295.00	1.200	76.00	5,954.87	-899.01	-1,092.32	1,414.67	0.87	-0.21	37.79	
6,390.00	1.000	125.30	6,049.85	-899.25	-1,090.68	1,413.57	0.98	-0.21	51.89	
6,485.00	2.100	139.90	6,144.82	-901.06	-1,088.88	1,413.35	1.22	1.16	15.37	
6,581.00	1.400	106.50	6,240.77	-902.74	-1,086.63	1,412.69	1.26	-0.73	-34.79	
6,676.00	1.300	129.00	6,335.75	-903.75	-1,084.68	1,411.84	0.56	-0.11	23.68	
6,771.00	1.800	146.80	6,430.71	-905.68	-1,083.02	1,411.80	0.72	0.53	18.74	
6,866.00	1.200	321.20	6,525.70	-906.15	-1,082.83	1,411.96	3.15	-0.63	183.58	
6,961.00	1.000	348.80	6,620.68	-904.56	-1,083.61	1,411.54	0.59	-0.21	29.05	
7,056.00	1.000	292.90	6,715.67	-903.42	-1,084.54	1,411.52	0.99	0.00	-58.84	
7,151.00	1.700	299.60	6,810.64	-902.41	-1,086.53	1,412.40	0.75	0.74	7.05	
7,246.00	2.600	285.50	6,905.58	-901.13	-1,089.83	1,414.12	1.09	0.95	-14.84	
7,341.00	3.700	285.40	7,000.43	-899.74	-1,094.86	1,417.09	1.16	1.16	-0.11	
7,436.00	3.200	277.90	7,095.26	-898.57	-1,100.44	1,420.62	0.71	-0.53	-7.89	
7,532.00	2.200	257.00	7,191.15	-898.61	-1,104.89	1,424.06	1.45	-1.04	-21.77	
7,601.00	2.200	239.80	7,260.10	-899.58	-1,107.33	1,426.55	0.95	0.00	-24.93	
7,651.00	2.200	239.80	7,310.07	-900.54	-1,108.98	1,428.44	0.00	0.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)	
812.00	811.99	9 5/8" Csg.	0.80	1.02	

Sharewell
Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42C-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 42C-25-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
812.00	811.99	-0.03	0.58	End of Gyro Surveys
4,679.00	4,340.21	-903.21	-1,105.15	As of Feb 26
6,295.00	5,954.87	-899.01	-1,092.32	As of Feb 27
7,651.00	7,310.07	-900.54	-1,108.98	Projected TD

Checked By: _____	Approved By: _____	Date: _____
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