

# Well Planning Proposal FOR

**Bill Barrett Corp.  
Epperly 14D-23-692  
Garfield Co., CO**

Well File: Design #1 (12/19/11)

Presented By:

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Pat Rasmussen  
Regional Manager

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Bret Wolford  
Well Planner



**Sharewell**  
Energy Services, LP



Project: Garfield Co., CO (NAD83)  
Site: Sec.23-T6S-R92W  
Well: Epperly 14D-23-692  
Wellbore: Wellbore #1  
Design: Design #1  
Latitude: 39° 30' 42.372 N  
Longitude: 107° 38' 26.293 W  
Ground Level: 5854.00  
WELL @ 5876.00usft



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 Epperly 14D-23-692, True North  
Vertical (TVD) Reference: WELL @ 5876.00usft  
Section (VS) Reference: Slot - (0.00N, 0.00E)  
Measured Depth Reference: WELL @ 5876.00usft  
Calculation Method: Minimum Curvature

WELL DETAILS: Epperly 14D-23-692

+N/-S	+E/-W	Northing	Ground Level:	5854.00	Latitude	Longitude	Slot
0.00	0.00	1618406.134	Easting	2396102.467	39° 30' 42.372 N	107° 38' 26.293 W	

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

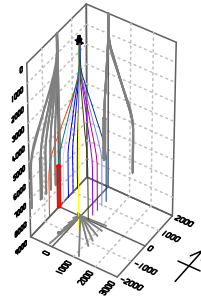
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Epperly 14D-23-692 Tgt	5425.00	-1214.37	-179.17	1617196.326	2395894.739	39° 30' 30.370 N	107° 38' 28.579 W	Circle (Radius: 50.00)

SECTION DETAILS

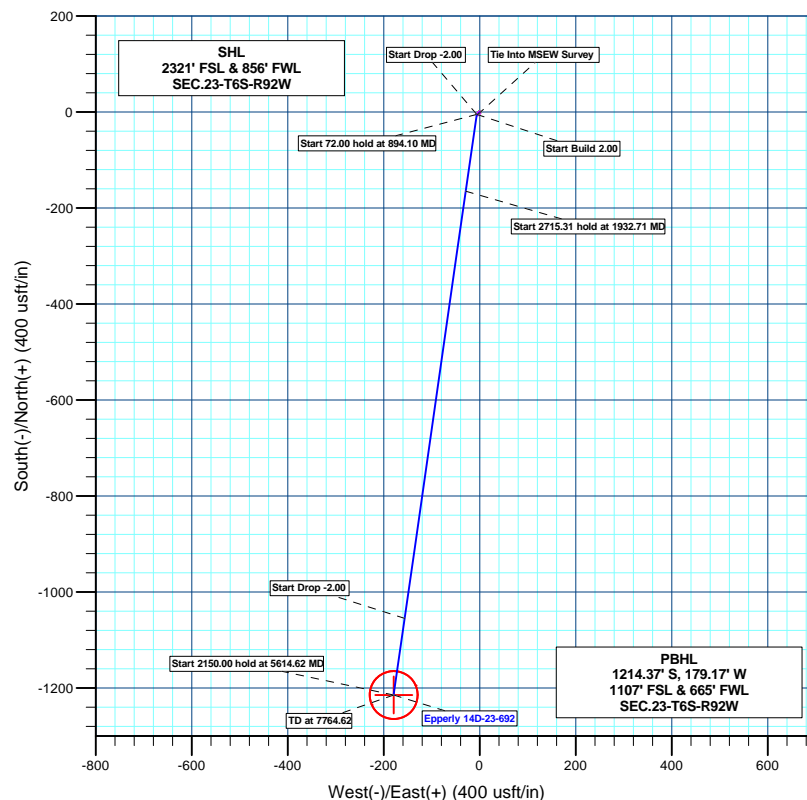
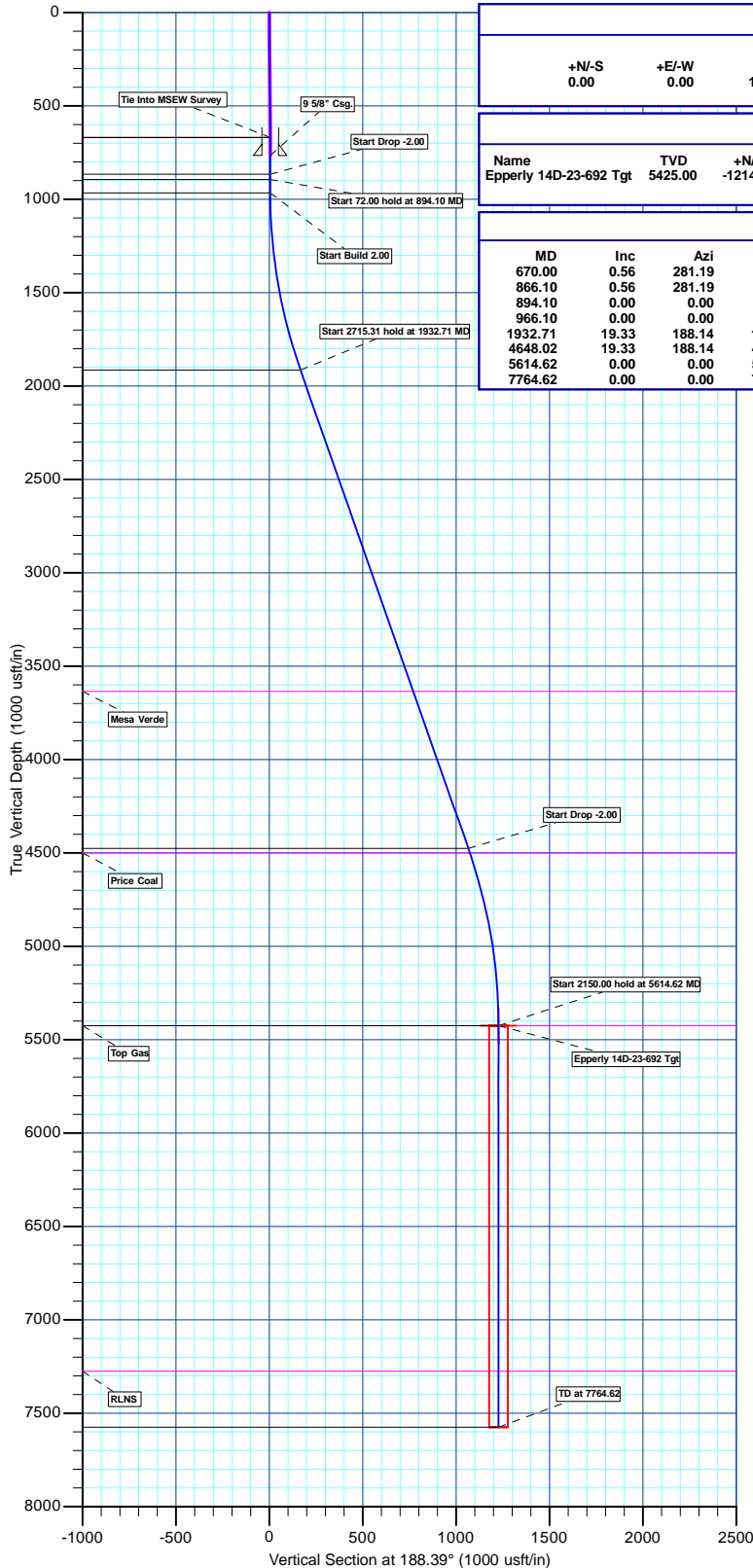
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
670.00	0.56	281.19	669.96	-5.12	-4.21	0.00	0.00	5.68	Tie Into MSEW Survey
866.10	0.56	281.19	866.05	-4.75	-6.09	0.00	0.00	5.59	Start Drop -2.00
894.10	0.00	0.00	894.05	-4.72	-6.23	2.00	180.00	5.58	Start 72.00 hold at 894.10 MD
966.10	0.00	0.00	966.05	-4.72	-6.23	0.00	0.00	5.58	Start Build 2.00
1932.71	19.33	188.14	1914.42	-164.63	-29.09	2.00	188.14	167.11	Start 2715.31 hold at 1932.71 MD
4648.02	19.33	188.14	4476.63	-1054.46	-156.30	0.00	0.00	1065.98	Start Drop -2.00
5614.62	0.00	0.00	5425.00	-1214.37	-179.17	2.00	180.00	1227.51	Start 2150.00 hold at 5614.62 MD
7764.62	0.00	0.00	7575.00	-1214.37	-179.17	0.00	0.00	1227.51	TD at 7764.62

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3635.00	3756.09	Mesa Verde
4500.00	4672.74	Price Coal
5425.00	5614.62	Top Gas
7275.00	7464.62	RLNS



Azimuths to True North  
Magnetic North: 10.13°  
Magnetic Field  
Strength: 52254.6nT  
Dip Angle: 65.80°  
Date: 12/17/2011  
Model: IGRF2010



Plan: Design #1 (Epperly 14D-23-692/Wellbore #1)

Created By: Bret Wolford Date: 20:19, December 19 2011



**Bill Barrett Corporation**

## **Bill Barrett Corp.**

Garfield Co., CO (NAD83)

Sec.23-T6S-R92W

Epperly 14D-23-692

Wellbore #1

Plan: Design #1

## **Standard Planning Report**

19 December, 2011



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site:</b>	Sec.23-T6S-R92W	<b>North Reference:</b>	True
<b>Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	Garfield Co., CO (NAD83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

Site		Sec.23-T6S-R92W			
Site Position:		Northing:	1,618,438.205 usft	Latitude:	39° 30' 42.689 N
From:	Lat/Long	Easting:	2,396,102.658 usft	Longitude:	107° 38' 26.300 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	-1.35 °

Well	Epperly 14D-23-692					
Well Position	+N/-S	-32.07 usft	Northing:	1,618,406.134 usft	Latitude:	39° 30' 42.372 N
	+E/-W	0.56 usft	Easting:	2,396,102.467 usft	Longitude:	107° 38' 26.293 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	5,854.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/17/11	10.13	65.80	52,255

<b>Design</b>	Design #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	670.00	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	188.39	

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
670.00	0.56	281.19	669.96	-5.12	-4.21	0.00	0.00	0.00	0.00	
866.10	0.56	281.19	866.05	-4.75	-6.09	0.00	0.00	0.00	0.00	
894.10	0.00	0.00	894.05	-4.72	-6.23	2.00	-2.00	0.00	180.00	
966.10	0.00	0.00	966.05	-4.72	-6.23	0.00	0.00	0.00	0.00	
1,932.71	19.33	188.14	1,914.42	-164.63	-29.09	2.00	2.00	0.00	188.14	
4,648.02	19.33	188.14	4,476.63	-1,054.46	-156.30	0.00	0.00	0.00	0.00	
5,614.62	0.00	0.00	5,425.00	-1,214.37	-179.17	2.00	-2.00	0.00	180.00	Epperly 14D-23-692 1
7,764.62	0.00	0.00	7,575.00	-1,214.37	-179.17	0.00	0.00	0.00	0.00	

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site:</b>	Sec.23-T6S-R92W	<b>North Reference:</b>	True
<b>Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.56	222.94	100.00	-0.36	-0.33	0.40	0.56	0.56	0.00
200.00	0.65	219.01	199.99	-1.16	-1.02	1.29	0.10	0.09	-3.93
300.00	0.71	208.70	299.99	-2.14	-1.68	2.36	0.14	0.06	-10.31
400.00	0.74	208.50	399.98	-3.25	-2.28	3.55	0.03	0.03	-0.20
500.00	0.71	222.36	499.97	-4.28	-3.01	4.67	0.18	-0.03	13.86
600.00	0.43	224.83	599.96	-5.00	-3.69	5.49	0.28	-0.28	2.47
<b>Tie Into MSEW Survey</b>									
670.00	0.56	281.19	669.96	-5.12	-4.21	5.68	0.69	0.19	80.51
700.00	0.56	281.19	699.96	-5.06	-4.50	5.67	0.00	0.00	0.00
<b>9 5/8" Csg.</b>									
766.10	0.56	281.19	766.06	-4.94	-5.13	5.63	0.00	0.00	0.00
800.00	0.56	281.19	799.96	-4.87	-5.46	5.62	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
866.10	0.56	281.19	866.05	-4.75	-6.09	5.59	0.00	0.00	0.00
<b>Start 72.00 hold at 894.10 MD</b>									
894.10	0.00	0.00	894.05	-4.72	-6.23	5.58	2.00	-2.00	281.46
900.00	0.00	0.00	899.95	-4.72	-6.23	5.58	0.00	0.00	0.00
<b>Start Build 2.00</b>									
966.10	0.00	0.00	966.05	-4.72	-6.23	5.58	0.00	0.00	0.00
1,000.00	0.68	188.14	999.95	-4.92	-6.25	5.78	2.00	2.00	0.00
1,100.00	2.68	188.14	1,099.90	-7.82	-6.67	8.71	2.00	2.00	0.00
1,200.00	4.68	188.14	1,199.69	-14.17	-7.58	15.12	2.00	2.00	0.00
1,300.00	6.68	188.14	1,299.20	-23.96	-8.98	25.02	2.00	2.00	0.00
1,400.00	8.68	188.14	1,398.30	-37.19	-10.87	38.38	2.00	2.00	0.00
1,500.00	10.68	188.14	1,496.87	-53.83	-13.25	55.19	2.00	2.00	0.00
1,600.00	12.68	188.14	1,594.79	-73.87	-16.11	75.43	2.00	2.00	0.00
1,700.00	14.68	188.14	1,691.95	-97.27	-19.46	99.07	2.00	2.00	0.00
1,800.00	16.68	188.14	1,788.23	-124.02	-23.28	126.09	2.00	2.00	0.00
1,900.00	18.68	188.14	1,883.50	-154.08	-27.58	156.46	2.00	2.00	0.00
<b>Start 2715.31 hold at 1932.71 MD</b>									
1,932.71	19.33	188.14	1,914.42	-164.63	-29.09	167.11	2.00	2.00	0.00
2,000.00	19.33	188.14	1,977.92	-186.68	-32.24	189.39	0.00	0.00	0.00
2,100.00	19.33	188.14	2,072.28	-219.45	-36.92	222.49	0.00	0.00	0.00
2,200.00	19.33	188.14	2,166.65	-252.22	-41.61	255.59	0.00	0.00	0.00
2,300.00	19.33	188.14	2,261.01	-284.99	-46.30	288.70	0.00	0.00	0.00
2,400.00	19.33	188.14	2,355.37	-317.76	-50.98	321.80	0.00	0.00	0.00
2,500.00	19.33	188.14	2,449.73	-350.53	-55.67	354.91	0.00	0.00	0.00
2,600.00	19.33	188.14	2,544.09	-383.31	-60.35	388.01	0.00	0.00	0.00
2,700.00	19.33	188.14	2,638.45	-416.08	-65.04	421.11	0.00	0.00	0.00
2,800.00	19.33	188.14	2,732.81	-448.85	-69.72	454.22	0.00	0.00	0.00
2,900.00	19.33	188.14	2,827.18	-481.62	-74.41	487.32	0.00	0.00	0.00
3,000.00	19.33	188.14	2,921.54	-514.39	-79.09	520.43	0.00	0.00	0.00
3,100.00	19.33	188.14	3,015.90	-547.16	-83.78	553.53	0.00	0.00	0.00
3,200.00	19.33	188.14	3,110.26	-579.93	-88.46	586.63	0.00	0.00	0.00
3,300.00	19.33	188.14	3,204.62	-612.70	-93.15	619.74	0.00	0.00	0.00
3,400.00	19.33	188.14	3,298.98	-645.47	-97.83	652.84	0.00	0.00	0.00
3,500.00	19.33	188.14	3,393.35	-678.25	-102.52	685.95	0.00	0.00	0.00
3,600.00	19.33	188.14	3,487.71	-711.02	-107.20	719.05	0.00	0.00	0.00
3,700.00	19.33	188.14	3,582.07	-743.79	-111.89	752.15	0.00	0.00	0.00
<b>Mesa Verde</b>									
3,756.09	19.33	188.14	3,635.00	-762.17	-114.52	770.72	0.00	0.00	0.00
3,800.00	19.33	188.14	3,676.43	-776.56	-116.57	785.26	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site:</b>	Sec.23-T6S-R92W	<b>North Reference:</b>	True
<b>Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,900.00	19.33	188.14	3,770.79	-809.33	-121.26	818.36	0.00	0.00	0.00
4,000.00	19.33	188.14	3,865.15	-842.10	-125.94	851.47	0.00	0.00	0.00
4,100.00	19.33	188.14	3,959.51	-874.87	-130.63	884.57	0.00	0.00	0.00
4,200.00	19.33	188.14	4,053.88	-907.64	-135.31	917.67	0.00	0.00	0.00
4,300.00	19.33	188.14	4,148.24	-940.41	-140.00	950.78	0.00	0.00	0.00
4,400.00	19.33	188.14	4,242.60	-973.19	-144.68	983.88	0.00	0.00	0.00
4,500.00	19.33	188.14	4,336.96	-1,005.96	-149.37	1,016.99	0.00	0.00	0.00
4,600.00	19.33	188.14	4,431.32	-1,038.73	-154.06	1,050.09	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
4,648.02	19.33	188.14	4,476.63	-1,054.46	-156.30	1,065.98	0.00	0.00	0.00
<b>Price Coal</b>									
4,672.74	18.84	188.14	4,500.00	-1,062.47	-157.45	1,074.07	2.00	-2.00	0.00
4,700.00	18.29	188.14	4,525.84	-1,071.06	-158.68	1,082.75	2.00	-2.00	0.00
4,800.00	16.29	188.14	4,621.31	-1,100.48	-162.88	1,112.47	2.00	-2.00	0.00
4,900.00	14.29	188.14	4,717.77	-1,126.59	-166.62	1,138.84	2.00	-2.00	0.00
5,000.00	12.29	188.14	4,815.08	-1,149.35	-169.87	1,161.83	2.00	-2.00	0.00
5,100.00	10.29	188.14	4,913.14	-1,168.73	-172.64	1,181.41	2.00	-2.00	0.00
5,200.00	8.29	188.14	5,011.82	-1,184.72	-174.93	1,197.56	2.00	-2.00	0.00
5,300.00	6.29	188.14	5,111.01	-1,197.28	-176.72	1,210.25	2.00	-2.00	0.00
5,400.00	4.29	188.14	5,210.58	-1,206.41	-178.03	1,219.48	2.00	-2.00	0.00
5,500.00	2.29	188.14	5,310.41	-1,212.10	-178.84	1,225.22	2.00	-2.00	0.00
5,600.00	0.29	188.14	5,410.38	-1,214.33	-179.16	1,227.47	2.00	-2.00	0.00
<b>Start 2150.00 hold at 5614.62 MD - Top Gas - Epperly 14D-23-692 Tgt</b>									
5,614.62	0.00	0.00	5,425.00	-1,214.37	-179.17	1,227.51	2.00	-2.00	0.00
5,700.00	0.00	0.00	5,510.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
5,800.00	0.00	0.00	5,610.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
5,900.00	0.00	0.00	5,710.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,000.00	0.00	0.00	5,810.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,100.00	0.00	0.00	5,910.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,200.00	0.00	0.00	6,010.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,300.00	0.00	0.00	6,110.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,400.00	0.00	0.00	6,210.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,500.00	0.00	0.00	6,310.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,600.00	0.00	0.00	6,410.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,700.00	0.00	0.00	6,510.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,800.00	0.00	0.00	6,610.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
6,900.00	0.00	0.00	6,710.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
7,000.00	0.00	0.00	6,810.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
7,100.00	0.00	0.00	6,910.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
7,200.00	0.00	0.00	7,010.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
7,300.00	0.00	0.00	7,110.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
7,400.00	0.00	0.00	7,210.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
<b>RLNS</b>									
7,464.62	0.00	0.00	7,275.00	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
7,500.00	0.00	0.00	7,310.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
7,600.00	0.00	0.00	7,410.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
7,700.00	0.00	0.00	7,510.38	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00
<b>TD at 7764.62</b>									
7,764.62	0.00	0.00	7,575.00	-1,214.37	-179.17	1,227.51	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site:</b>	Sec.23-T6S-R92W	<b>North Reference:</b>	True
<b>Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Epperly 14D-23-692 Tgt	0.00	0.00	5,425.00	-1,214.37	-179.17	1,617,196.326	2,395,894.739	39° 30' 30.370 N	107° 38' 28.579 W
- plan hits target center									
- Circle (radius 50.00)									

Casing Points				
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(usft)	(usft)		(")	(")
766.10	766.06	9 5/8" Csg.	9-5/8	12-1/4

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
3,756.09	3,635.00	Mesa Verde		0.00	
4,672.74	4,500.00	Price Coal		0.00	
5,614.62	5,425.00	Top Gas		0.00	
7,464.62	7,275.00	RLNS		0.00	

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
670.00	669.96	-5.12	-4.21	Tie Into MSEW Survey
866.10	866.05	-4.75	-6.09	Start Drop -2.00
894.10	894.05	-4.72	-6.23	Start 72.00 hold at 894.10 MD
966.10	966.05	-4.72	-6.23	Start Build 2.00
1,932.71	1,914.42	-164.63	-29.09	Start 2715.31 hold at 1932.71 MD
4,648.02	4,476.63	-1,054.46	-156.30	Start Drop -2.00
5,614.62	5,425.00	-1,214.37	-179.17	Start 2150.00 hold at 5614.62 MD
7,764.62	7,575.00	-1,214.37	-179.17	TD at 7764.62



**Bill Barrett Corporation**

## **Bill Barrett Corp.**

Garfield Co., CO (NAD83)

Sec.23-T6S-R92W

Epperly 14D-23-692

Wellbore #1

Design #1

## **Anticollision Report**

19 December, 2011





<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Reference	Design #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	12/19/11		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	670.00	Survey #1 (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s	
670.00	7,764.62	Design #1 (Wellbore #1)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Sec.23-T6S-R92W						
Epperly 13A-23-692 - Wellbore #1 - Design #1	0.00	0.00	8.01			
Epperly 13A-23-692 - Wellbore #1 - Design #1	1,100.00	1,100.48	12.63	9.22	3.704	SF
Epperly 13B-23-692 - Wellbore #1 - Design #1	0.00	0.00	16.03			
Epperly 13B-23-692 - Wellbore #1 - Design #1	966.10	965.99	22.17	18.61	6.223	SF
Epperly 13C-23-692 - Wellbore #1 - Design #1	917.96	917.95	21.78	18.33	6.312	CC, ES
Epperly 13C-23-692 - Wellbore #1 - Design #1	966.10	965.77	22.14	18.62	6.301	SF
Epperly 13D-23-692 - Wellbore #1 - Design #1	0.00	0.00	32.06			
Epperly 13D-23-692 - Wellbore #1 - Design #1	1,000.00	999.80	40.48	37.29	12.689	SF
Epperly 14B-23-692 - Wellbore #1 - Design #1	675.51	675.49	2.00	-1.12	0.641	Level 1, CC
Epperly 14B-23-692 - Wellbore #1 - Design #1	700.00	699.98	2.01	-1.16	0.635	Level 1, ES, SF
Epperly 23A-23-692 - Wellbore #1 - Design #1	0.00	0.00	12.72			
Epperly 23A-23-692 - Wellbore #1 - Design #1	700.00	700.00	16.97	13.73	5.236	SF
Epperly 23B-23-692 - Wellbore #1 - Design #1	0.00	0.00	18.68			
Epperly 23B-23-692 - Wellbore #1 - Design #1	700.00	699.67	29.85	26.74	9.585	SF
Epperly 23C-23-692 - Wellbore #1 - Design #1	0.00	0.00	25.89			
Epperly 23C-23-692 - Wellbore #1 - Design #1	1,000.00	999.78	35.55	32.33	11.031	SF
Epperly 23D-23-692 - Wellbore #1 - Design #1	0.00	0.00	33.38			
Epperly 23D-23-692 - Wellbore #1 - Design #1	966.10	965.28	46.62	43.17	13.525	SF
Epperly 24B-23-692 - Wellbore #1 - Design #1	462.46	462.49	11.21	9.10	5.318	CC
Epperly 24B-23-692 - Wellbore #1 - Design #1	700.00	700.07	11.44	8.21	3.542	ES
Epperly 24B-23-692 - Wellbore #1 - Design #1	866.10	866.13	11.74	8.42	3.529	SF
Epperly 24D-23-692 - Wellbore #1 - Design #1	0.00	0.00	9.87			
Epperly 24D-23-692 - Wellbore #1 - Design #1	200.00	200.02	10.46	9.72	14.172	ES
Epperly 24D-23-692 - Wellbore #1 - Design #1	966.10	965.92	16.88	13.65	5.222	SF

Offset Design		Sec.23-T6S-R92W - Epperly 13A-23-692 - Wellbore #1 - Design #1										Offset Site Error:		0.00 usft
Survey Program:		100-NS-GYRO-MS, 675-MWD										Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-2.02	8.01	-0.28	8.01					
100.00	100.00	100.02	100.02	0.10	0.10	-0.90	7.90	-0.46	8.26	8.05	0.21	39.843		
200.00	199.99	200.03	200.03	0.37	0.36	2.07	7.60	-0.71	8.77	8.04	0.73	12.069		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 675-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
300.00	299.99	300.01	300.01	0.63	0.60	5.53	7.27	-0.77	9.46	8.22	1.24	7.650		
400.00	399.98	400.01	400.01	0.90	0.84	9.03	6.95	-0.66	10.33	8.60	1.73	5.958		
500.00	499.97	499.98	499.98	1.16	1.03	13.71	6.67	-0.34	11.27	9.07	2.20	5.131		
600.00	599.96	599.92	599.92	1.43	1.19	18.77	6.66	0.27	12.32	9.70	2.62	4.705		
670.00	669.96	669.90	669.90	1.58	1.29	22.48	6.83	0.73	12.93	10.06	2.87	4.506		
700.00	699.96	699.90	699.89	1.61	1.31	24.21	6.93	0.89	13.15	10.23	2.92	4.499		
800.00	799.96	799.89	799.88	1.63	1.33	29.55	7.26	1.42	13.95	10.99	2.97	4.703		
866.10	866.05	865.99	865.98	1.66	1.37	32.73	7.49	1.77	14.55	11.51	3.03	4.796		
894.10	894.05	894.12	894.11	1.68	1.39	33.25	7.50	1.79	14.62	11.55	3.07	4.768		
900.00	899.95	900.04	900.03	1.68	1.39	33.19	7.49	1.76	14.59	11.52	3.07	4.748		
966.10	966.05	966.42	966.40	1.73	1.44	30.89	6.90	0.73	13.55	10.38	3.16	4.281		
1,000.00	999.95	1,000.37	1,000.33	1.75	1.47	28.05	6.33	-0.26	12.75	9.53	3.22	3.962		
1,047.85	1,047.79	1,048.20	1,048.13	1.79	1.52	22.39	5.49	-1.71	12.30	8.99	3.31	3.719		
1,100.00	1,099.90	1,100.48	1,100.38	1.84	1.57	15.46	4.35	-3.30	12.63	9.22	3.41	3.704 SF		
1,200.00	1,199.69	1,200.90	1,200.62	1.96	1.71	4.25	-0.43	-6.56	13.81	10.16	3.65	3.781		
1,300.00	1,299.20	1,301.38	1,300.69	2.11	1.88	-4.05	-8.72	-10.06	15.35	11.42	3.94	3.900		
1,400.00	1,398.30	1,401.91	1,400.45	2.31	2.09	-9.97	-20.52	-13.80	17.07	12.80	4.27	3.997		
1,500.00	1,496.87	1,502.49	1,499.78	2.56	2.36	-14.13	-35.80	-17.78	18.81	14.16	4.66	4.040		
1,600.00	1,594.79	1,603.13	1,598.55	2.88	2.67	-16.99	-54.57	-22.01	20.52	15.42	5.10	4.021		
1,700.00	1,691.95	1,703.73	1,696.57	3.25	3.05	-18.83	-76.76	-26.45	22.15	16.55	5.61	3.950		
1,800.00	1,788.23	1,803.66	1,793.62	3.70	3.47	-17.82	-100.14	-30.96	25.66	19.53	6.12	4.190		
1,900.00	1,883.50	1,903.41	1,890.51	4.21	3.90	-14.43	-123.48	-35.45	32.36	25.77	6.60	4.906		
1,932.71	1,914.42	1,935.98	1,922.13	4.39	4.05	-13.15	-131.10	-36.92	35.28	28.53	6.75	5.229		
2,000.00	1,977.92	2,002.95	1,987.18	4.78	4.35	-10.92	-146.77	-39.94	41.69	34.61	7.07	5.893		
2,100.00	2,072.28	2,102.48	2,083.83	5.38	4.81	-8.63	-170.05	-44.43	51.28	43.70	7.59	6.760		
2,200.00	2,166.65	2,202.00	2,180.49	5.98	5.28	-7.07	-193.33	-48.91	60.93	52.81	8.12	7.505		
2,300.00	2,261.01	2,301.52	2,277.15	6.60	5.75	-5.93	-216.62	-53.40	70.61	61.95	8.66	8.149		
2,400.00	2,355.37	2,401.04	2,373.80	7.23	6.23	-5.07	-239.90	-57.88	80.31	71.09	9.22	8.709		
2,500.00	2,449.73	2,500.56	2,470.46	7.86	6.71	-4.39	-263.18	-62.37	90.03	80.24	9.79	9.198		
2,600.00	2,544.09	2,600.09	2,567.12	8.50	7.20	-3.84	-286.47	-66.86	99.75	89.39	10.36	9.628		
2,700.00	2,638.45	2,699.61	2,663.77	9.14	7.68	-3.39	-309.75	-71.34	109.48	98.54	10.94	10.009		
2,800.00	2,732.81	2,799.13	2,760.43	9.78	8.17	-3.02	-333.03	-75.83	119.22	107.70	11.52	10.348		
2,900.00	2,827.18	2,898.65	2,857.09	10.43	8.66	-2.70	-356.32	-80.31	128.96	116.85	12.11	10.651		
3,000.00	2,921.54	2,998.18	2,953.74	11.08	9.15	-2.43	-379.60	-84.80	138.70	126.00	12.70	10.924		
3,100.00	3,015.90	3,097.70	3,050.40	11.73	9.64	-2.19	-402.88	-89.29	148.45	135.16	13.29	11.170		
3,200.00	3,110.26	3,197.22	3,147.05	12.38	10.13	-1.98	-426.16	-93.77	158.20	144.31	13.89	11.393		
3,300.00	3,204.62	3,296.74	3,243.71	13.03	10.63	-1.79	-449.45	-98.26	167.95	153.46	14.48	11.596		
3,400.00	3,298.98	3,396.26	3,340.37	13.68	11.12	-1.63	-472.73	-102.74	177.70	162.62	15.08	11.782		
3,500.00	3,393.35	3,495.79	3,437.02	14.34	11.62	-1.48	-496.01	-107.23	187.45	171.77	15.68	11.952		
3,600.00	3,487.71	3,595.31	3,533.68	14.99	12.11	-1.35	-519.30	-111.72	197.21	180.92	16.29	12.109		
3,700.00	3,582.07	3,694.83	3,630.34	15.65	12.61	-1.23	-542.58	-116.20	206.96	190.07	16.89	12.254		
3,800.00	3,676.43	3,794.35	3,726.99	16.30	13.10	-1.12	-565.86	-120.69	216.72	199.22	17.49	12.388		
3,900.00	3,770.79	3,893.88	3,823.65	16.96	13.60	-1.02	-589.15	-125.18	226.47	208.37	18.10	12.512		
4,000.00	3,865.15	3,993.40	3,920.31	17.62	14.10	-0.93	-612.43	-129.66	236.23	217.52	18.71	12.628		
4,100.00	3,959.51	4,092.92	4,016.96	18.27	14.59	-0.84	-635.71	-134.15	245.99	226.67	19.31	12.736		
4,200.00	4,053.88	4,192.44	4,113.62	18.93	15.09	-0.76	-658.99	-138.63	255.75	235.82	19.92	12.837		
4,300.00	4,148.24	4,291.96	4,210.27	19.59	15.59	-0.69	-682.28	-143.12	265.50	244.97	20.53	12.931		
4,400.00	4,242.60	4,391.49	4,306.93	20.25	16.09	-0.63	-705.56	-147.61	275.26	254.12	21.14	13.020		
4,500.00	4,336.96	4,491.01	4,403.59	20.91	16.59	-0.56	-728.84	-152.09	285.02	263.27	21.75	13.103		
4,600.00	4,431.32	4,590.53	4,500.24	21.56	17.08	-0.50	-752.13	-156.58	294.78	272.42	22.36	13.182		
4,648.02	4,476.63	4,638.32	4,546.65	21.88	17.32	-0.48	-763.31	-158.73	299.47	276.81	22.66	13.218		
4,700.00	4,525.84	4,690.10	4,596.94	22.17	17.58	-0.46	-775.42	-161.07	304.08	281.09	22.99	13.228		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 675-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,800.00	4,621.31	4,789.89	4,693.87	22.60	18.08	-0.51	-798.77	-165.56	310.33	286.74	23.59	13.157		
4,900.00	4,717.77	4,882.51	4,784.00	22.99	18.48	-0.55	-819.66	-169.59	314.01	289.90	24.12	13.021		
5,000.00	4,815.08	4,972.71	4,872.38	23.35	18.77	-0.57	-837.34	-173.00	317.25	292.68	24.56	12.915		
5,100.00	4,913.14	5,062.83	4,961.21	23.66	19.02	-0.58	-852.26	-175.87	320.11	295.16	24.96	12.827		
5,200.00	5,011.82	5,152.90	5,050.41	23.94	19.24	-0.59	-864.43	-178.22	322.62	297.32	25.29	12.755		
5,300.00	5,111.01	5,242.91	5,139.91	24.17	19.43	-0.59	-873.84	-180.03	324.75	299.17	25.58	12.698		
5,400.00	5,210.58	5,332.87	5,229.61	24.36	19.59	-0.58	-880.48	-181.31	326.51	300.70	25.80	12.654		
5,500.00	5,310.41	5,422.79	5,319.45	24.51	19.72	-0.56	-884.34	-182.05	327.89	301.91	25.98	12.621		
5,600.00	5,410.38	5,513.73	5,410.38	24.61	19.83	-0.54	-885.46	-182.27	328.89	302.77	26.12	12.593		
5,614.62	5,425.00	5,528.36	5,425.00	24.62	19.84	-0.54	-885.46	-182.27	328.92	302.79	26.14	12.585		
5,700.00	5,510.38	5,613.73	5,510.38	24.69	19.93	-0.54	-885.46	-182.27	328.92	302.52	26.40	12.460		
5,800.00	5,610.38	5,713.73	5,610.38	24.77	20.02	-0.54	-885.46	-182.27	328.92	302.24	26.69	12.325		
5,900.00	5,710.38	5,813.73	5,710.38	24.84	20.12	-0.54	-885.46	-182.27	328.92	301.95	26.98	12.192		
6,000.00	5,810.38	5,913.73	5,810.38	24.92	20.21	-0.54	-885.46	-182.27	328.92	301.65	27.27	12.060		
6,100.00	5,910.38	6,013.73	5,910.38	25.00	20.31	-0.54	-885.46	-182.27	328.92	301.35	27.57	11.928		
6,200.00	6,010.38	6,113.73	6,010.38	25.08	20.41	-0.54	-885.46	-182.27	328.92	301.05	27.88	11.798		
6,300.00	6,110.38	6,213.73	6,110.38	25.17	20.51	-0.54	-885.46	-182.27	328.92	300.74	28.19	11.669		
6,400.00	6,210.38	6,313.73	6,210.38	25.25	20.61	-0.54	-885.46	-182.27	328.92	300.43	28.50	11.542		
6,500.00	6,310.38	6,413.73	6,310.38	25.34	20.72	-0.54	-885.46	-182.27	328.92	300.11	28.81	11.415		
6,600.00	6,410.38	6,513.73	6,410.38	25.43	20.83	-0.54	-885.46	-182.27	328.92	299.79	29.13	11.290		
6,700.00	6,510.38	6,613.73	6,510.38	25.52	20.94	-0.54	-885.46	-182.27	328.92	299.47	29.46	11.167		
6,800.00	6,610.38	6,713.73	6,610.38	25.61	21.05	-0.54	-885.46	-182.27	328.92	299.14	29.78	11.044		
6,900.00	6,710.38	6,813.73	6,710.38	25.70	21.16	-0.54	-885.46	-182.27	328.92	298.81	30.11	10.924		
7,000.00	6,810.38	6,913.73	6,810.38	25.80	21.27	-0.54	-885.46	-182.27	328.92	298.48	30.44	10.805		
7,100.00	6,910.38	7,013.73	6,910.38	25.89	21.39	-0.54	-885.46	-182.27	328.92	298.15	30.78	10.687		
7,200.00	7,010.38	7,113.73	7,010.38	25.99	21.51	-0.54	-885.46	-182.27	328.92	297.81	31.12	10.571		
7,300.00	7,110.38	7,213.73	7,110.38	26.09	21.63	-0.54	-885.46	-182.27	328.92	297.47	31.46	10.457		
7,400.00	7,210.38	7,313.73	7,210.38	26.19	21.75	-0.54	-885.46	-182.27	328.92	297.13	31.80	10.344		
7,500.00	7,310.38	7,413.73	7,310.38	26.30	21.87	-0.54	-885.46	-182.27	328.92	296.78	32.15	10.232		
7,600.00	7,410.38	7,513.73	7,410.38	26.40	22.00	-0.54	-885.46	-182.27	328.92	296.43	32.49	10.123		
7,700.00	7,510.38	7,613.73	7,510.38	26.51	22.12	-0.54	-885.46	-182.27	328.92	296.08	32.84	10.015		
7,764.62	7,575.00	7,678.36	7,575.00	26.58	22.21	-0.54	-885.46	-182.27	328.92	295.85	33.07	9.945		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 700-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-1.01	16.03	-0.28	16.03					
100.00	100.00	100.02	100.02	0.10	0.10	-0.76	15.95	-0.55	16.30	16.10	0.21	78.613		
200.00	199.99	200.02	200.02	0.37	0.37	0.03	15.79	-1.01	16.95	16.21	0.74	22.964		
300.00	299.99	300.00	300.00	0.63	0.63	0.86	15.72	-1.41	17.86	16.60	1.26	14.123		
400.00	399.98	399.97	399.97	0.90	0.89	1.14	15.74	-1.91	19.00	17.21	1.79	10.618		
500.00	499.97	499.95	499.95	1.16	1.15	1.60	15.83	-2.45	20.12	17.80	2.31	8.702		
600.00	599.96	599.90	599.89	1.43	1.40	1.88	16.08	-3.00	21.09	18.27	2.83	7.465		
670.00	669.96	669.90	669.89	1.58	1.57	2.16	16.34	-3.40	21.47	18.32	3.15	6.807		
700.00	699.96	699.90	699.89	1.61	1.64	2.50	16.45	-3.56	21.53	18.27	3.26	6.611		
800.00	799.96	799.90	799.88	1.63	1.77	3.65	16.81	-4.07	21.73	18.32	3.40	6.382		
866.10	866.05	866.00	865.98	1.66	1.79	4.40	17.05	-4.41	21.86	18.41	3.45	6.331		
894.10	894.05	894.00	893.98	1.68	1.80	4.36	17.15	-4.56	21.94	18.46	3.48	6.310		
900.00	899.95	899.90	899.88	1.68	1.80	4.28	17.17	-4.59	21.96	18.47	3.48	6.306		
966.10	966.05	965.99	965.98	1.73	1.84	3.36	17.41	-4.93	22.17	18.61	3.56	6.223 SF		
1,000.00	999.95	999.89	999.88	1.75	1.86	2.94	17.54	-5.10	22.49	18.88	3.61	6.232		
1,100.00	1,099.90	1,100.60	1,100.57	1.84	1.93	1.60	16.51	-5.99	24.35	20.58	3.77	6.460		
1,200.00	1,199.69	1,201.44	1,201.29	1.96	2.02	-0.48	12.09	-7.80	26.31	22.34	3.97	6.628		
1,300.00	1,299.20	1,302.33	1,301.83	2.11	2.15	-3.15	4.23	-10.53	28.36	24.15	4.21	6.738		
1,400.00	1,398.30	1,403.27	1,402.07	2.31	2.31	-6.27	-7.04	-14.18	30.56	26.07	4.49	6.803		
1,500.00	1,496.87	1,503.67	1,501.38	2.56	2.52	-9.27	-21.13	-18.58	33.44	28.61	4.82	6.931		
1,600.00	1,594.79	1,603.49	1,600.06	2.88	2.77	-10.25	-35.48	-23.05	39.36	34.17	5.20	7.574		
1,700.00	1,691.95	1,703.06	1,698.49	3.25	3.03	-9.63	-49.79	-27.51	48.60	43.01	5.59	8.687		
1,800.00	1,788.23	1,802.25	1,796.55	3.70	3.32	-8.23	-64.06	-31.95	61.16	55.15	6.01	10.182		
1,900.00	1,883.50	1,900.95	1,894.13	4.21	3.61	-6.62	-78.25	-36.37	77.08	70.65	6.43	11.985		
1,932.71	1,914.42	1,933.10	1,925.92	4.39	3.71	-6.09	-82.87	-37.81	83.02	76.45	6.57	12.628		
2,000.00	1,977.92	1,999.19	1,991.25	4.78	3.92	-5.17	-92.37	-40.77	95.63	88.74	6.89	13.876		
2,100.00	2,072.28	2,097.40	2,088.34	5.38	4.23	-4.18	-106.49	-45.17	114.39	107.01	7.38	15.501		
2,200.00	2,166.65	2,195.61	2,185.42	5.98	4.56	-3.46	-120.61	-49.57	133.18	125.30	7.88	16.896		
2,300.00	2,261.01	2,293.81	2,282.51	6.60	4.88	-2.92	-134.73	-53.97	151.99	143.59	8.40	18.102		
2,400.00	2,355.37	2,392.02	2,379.60	7.23	5.21	-2.50	-148.85	-58.37	170.81	161.89	8.92	19.151		
2,500.00	2,449.73	2,490.23	2,476.69	7.86	5.55	-2.17	-162.96	-62.77	189.63	180.18	9.45	20.069		
2,600.00	2,544.09	2,588.43	2,573.77	8.50	5.88	-1.89	-177.08	-67.16	208.46	198.47	9.99	20.876		
2,700.00	2,638.45	2,686.64	2,670.86	9.14	6.22	-1.66	-191.20	-71.56	227.29	216.76	10.53	21.591		
2,800.00	2,732.81	2,784.85	2,767.95	9.78	6.56	-1.47	-205.32	-75.96	246.13	235.05	11.07	22.227		
2,900.00	2,827.18	2,883.05	2,865.03	10.43	6.91	-1.30	-219.44	-80.36	264.96	253.34	11.62	22.796		
3,000.00	2,921.54	2,981.26	2,962.12	11.08	7.25	-1.16	-233.56	-84.76	283.80	271.63	12.18	23.308		
3,100.00	3,015.90	3,079.47	3,059.21	11.73	7.60	-1.03	-247.68	-89.15	302.64	289.91	12.73	23.770		
3,200.00	3,110.26	3,177.68	3,156.30	12.38	7.94	-0.92	-261.80	-93.55	321.49	308.20	13.29	24.189		
3,300.00	3,204.62	3,275.88	3,253.38	13.03	8.29	-0.82	-275.92	-97.95	340.33	326.48	13.85	24.570		
3,400.00	3,298.98	3,374.09	3,350.47	13.68	8.64	-0.73	-290.04	-102.35	359.18	344.76	14.41	24.918		
3,500.00	3,393.35	3,472.30	3,447.56	14.34	8.99	-0.65	-304.16	-106.75	378.02	363.04	14.98	25.237		
3,600.00	3,487.71	3,570.50	3,544.64	14.99	9.34	-0.58	-318.28	-111.15	396.87	381.32	15.54	25.531		
3,700.00	3,582.07	3,668.71	3,641.73	15.65	9.69	-0.51	-332.39	-115.54	415.71	399.60	16.11	25.801		
3,800.00	3,676.43	3,766.92	3,738.82	16.30	10.04	-0.45	-346.51	-119.94	434.56	417.88	16.68	26.052		
3,900.00	3,770.79	3,865.12	3,835.91	16.96	10.40	-0.39	-360.63	-124.34	453.41	436.16	17.25	26.284		
4,000.00	3,865.15	3,963.33	3,932.99	17.62	10.75	-0.34	-374.75	-128.74	472.26	454.43	17.82	26.500		
4,100.00	3,959.51	4,061.54	4,030.08	18.27	11.10	-0.30	-388.87	-133.14	491.10	472.71	18.39	26.701		
4,200.00	4,053.88	4,159.74	4,127.17	18.93	11.45	-0.25	-402.99	-137.53	509.95	490.99	18.97	26.889		
4,300.00	4,148.24	4,257.95	4,224.25	19.59	11.81	-0.21	-417.11	-141.93	528.80	509.26	19.54	27.064		
4,400.00	4,242.60	4,356.16	4,321.34	20.25	12.16	-0.17	-431.23	-146.33	547.65	527.54	20.11	27.229		
4,500.00	4,336.96	4,454.37	4,418.43	20.91	12.52	-0.14	-445.35	-150.73	566.50	545.81	20.69	27.384		
4,600.00	4,431.32	4,552.57	4,515.51	21.56	12.87	-0.11	-459.47	-155.13	585.35	564.09	21.26	27.530		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

<b>Offset Design</b> Sec.23-T6S-R92W - Epperly 13B-23-692 - Wellbore #1 - Design #1												<b>Offset Site Error:</b>	0.00 usft
Survey Program: 100-NS-GYRO-MS, 700-MWD												<b>Offset Well Error:</b>	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,648.02	4,476.63	4,599.73	4,562.13	21.88	13.04	-0.09	-466.25	-157.24	594.40	572.86	21.54	27.597	
4,700.00	4,525.84	4,650.86	4,612.69	22.17	13.23	-0.08	-473.60	-159.53	603.74	581.88	21.86	27.621	
4,800.00	4,621.31	4,749.67	4,710.36	22.60	13.58	-0.10	-487.80	-163.95	619.12	596.69	22.43	27.601	
4,900.00	4,717.77	4,848.94	4,808.51	22.99	13.94	-0.16	-502.08	-168.40	631.07	608.10	22.98	27.464	
5,000.00	4,815.08	4,948.57	4,907.00	23.35	14.30	-0.27	-516.40	-172.86	639.60	616.10	23.50	27.222	
5,100.00	4,913.14	5,041.79	4,999.18	23.66	14.62	-0.39	-529.64	-176.99	644.87	620.91	23.96	26.920	
5,200.00	5,011.82	5,124.00	5,080.74	23.94	14.84	-0.46	-539.51	-180.06	648.90	624.58	24.32	26.683	
5,300.00	5,111.01	5,200.00	5,156.36	24.17	14.99	-0.49	-546.64	-182.28	652.25	627.64	24.60	26.509	
5,400.00	5,210.58	5,288.29	5,244.43	24.36	15.15	-0.53	-552.51	-184.11	654.80	629.94	24.86	26.337	
5,500.00	5,310.41	5,370.38	5,326.46	24.51	15.27	-0.55	-555.65	-185.09	656.68	631.62	25.06	26.207	
5,600.00	5,410.38	5,454.31	5,410.38	24.61	15.39	-0.54	-556.55	-185.37	657.81	632.59	25.22	26.086	
5,614.62	5,425.00	5,468.93	5,425.00	24.62	15.41	-0.54	-556.55	-185.37	657.85	632.61	25.24	26.060	
5,700.00	5,510.38	5,554.31	5,510.38	24.69	15.51	-0.54	-556.55	-185.37	657.85	632.34	25.51	25.788	
5,800.00	5,610.38	5,654.31	5,610.38	24.77	15.63	-0.54	-556.55	-185.37	657.85	632.04	25.81	25.491	
5,900.00	5,710.38	5,754.31	5,710.38	24.84	15.75	-0.54	-556.55	-185.37	657.85	631.74	26.11	25.197	
6,000.00	5,810.38	5,854.31	5,810.38	24.92	15.87	-0.54	-556.55	-185.37	657.85	631.43	26.41	24.905	
6,100.00	5,910.38	5,954.31	5,910.38	25.00	15.99	-0.54	-556.55	-185.37	657.85	631.12	26.72	24.616	
6,200.00	6,010.38	6,054.31	6,010.38	25.08	16.12	-0.54	-556.55	-185.37	657.85	630.81	27.04	24.330	
6,300.00	6,110.38	6,154.31	6,110.38	25.17	16.25	-0.54	-556.55	-185.37	657.85	630.49	27.36	24.048	
6,400.00	6,210.38	6,254.31	6,210.38	25.25	16.38	-0.54	-556.55	-185.37	657.85	630.17	27.68	23.769	
6,500.00	6,310.38	6,354.31	6,310.38	25.34	16.51	-0.54	-556.55	-185.37	657.85	629.85	28.00	23.493	
6,600.00	6,410.38	6,454.31	6,410.38	25.43	16.65	-0.54	-556.55	-185.37	657.85	629.52	28.33	23.221	
6,700.00	6,510.38	6,554.31	6,510.38	25.52	16.78	-0.54	-556.55	-185.37	657.85	629.19	28.66	22.953	
6,800.00	6,610.38	6,654.31	6,610.38	25.61	16.92	-0.54	-556.55	-185.37	657.85	628.85	29.00	22.688	
6,900.00	6,710.38	6,754.31	6,710.38	25.70	17.06	-0.54	-556.55	-185.37	657.85	628.52	29.33	22.427	
7,000.00	6,810.38	6,854.31	6,810.38	25.80	17.20	-0.54	-556.55	-185.37	657.85	628.18	29.67	22.169	
7,100.00	6,910.38	6,954.31	6,910.38	25.89	17.35	-0.54	-556.55	-185.37	657.85	627.83	30.02	21.916	
7,200.00	7,010.38	7,054.31	7,010.38	25.99	17.49	-0.54	-556.55	-185.37	657.85	627.49	30.36	21.666	
7,300.00	7,110.38	7,154.31	7,110.38	26.09	17.64	-0.54	-556.55	-185.37	657.85	627.14	30.71	21.420	
7,400.00	7,210.38	7,254.31	7,210.38	26.19	17.79	-0.54	-556.55	-185.37	657.85	626.79	31.06	21.178	
7,500.00	7,310.38	7,354.31	7,310.38	26.30	17.94	-0.54	-556.55	-185.37	657.85	626.43	31.42	20.939	
7,600.00	7,410.38	7,454.31	7,410.38	26.40	18.09	-0.54	-556.55	-185.37	657.85	626.08	31.77	20.704	
7,700.00	7,510.38	7,554.31	7,510.38	26.51	18.24	-0.54	-556.55	-185.37	657.85	625.72	32.13	20.473	
7,764.62	7,575.00	7,618.93	7,575.00	26.58	18.34	-0.54	-556.55	-185.37	657.85	625.48	32.36	20.326	

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Sec.23-T6S-R92W - Epperly 13C-23-692 - Wellbore #1 - Design #1		Offset Site Error:		0.00 usft
Survey Program:		100-NS-GYRO-MS, 695-MWD											Offset Well Error:		0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor					
0.00	0.00	0.00	0.00	0.00	0.00	-1.34	24.04	-0.56	24.05	23.99	23.78	0.21	115.542				
100.00	100.00	100.20	100.19	0.10	0.10	-0.90	23.63	-0.71	23.99	23.78	0.21	115.542					
162.78	162.77	162.97	162.97	0.27	0.27	-0.27	23.11	-0.87	23.95	23.41	0.54	44.286					
200.00	199.99	200.19	200.19	0.37	0.37	0.16	22.81	-0.95	23.97	23.23	0.74	32.465					
300.00	299.99	300.21	300.20	0.63	0.63	1.15	21.96	-1.19	24.11	22.84	1.27	19.016					
400.00	399.98	400.27	400.25	0.90	0.90	1.91	20.95	-1.48	24.22	22.42	1.80	13.475					
500.00	499.97	500.29	500.27	1.16	1.17	2.93	19.78	-1.78	24.09	21.76	2.33	10.350					
600.00	599.96	600.28	600.25	1.43	1.43	3.90	18.58	-2.08	23.63	20.78	2.86	8.273					
670.00	669.96	670.15	670.12	1.58	1.62	4.95	17.92	-2.22	23.13	19.93	3.20	7.234					
700.00	699.96	700.11	700.08	1.61	1.69	5.69	17.75	-2.22	22.93	19.63	3.30	6.951					
800.00	799.96	800.10	800.07	1.63	1.70	8.33	17.24	-2.22	22.35	19.02	3.33	6.704					
866.10	866.05	866.20	866.16	1.66	1.73	10.15	16.91	-2.22	22.00	18.61	3.39	6.482					
894.10	894.05	894.20	894.16	1.68	1.74	10.58	16.77	-2.21	21.86	18.44	3.42	6.388					
900.00	899.95	900.10	900.06	1.68	1.75	10.59	16.74	-2.21	21.83	18.40	3.43	6.368					
917.96	917.91	917.95	917.91	1.69	1.76	10.58	16.69	-2.23	21.78	18.33	3.45	6.312 CC, ES					
966.10	966.05	965.77	965.73	1.73	1.79	9.86	17.09	-2.43	22.14	18.62	3.51	6.301 SF					
1,000.00	999.95	999.42	999.37	1.75	1.81	8.81	17.82	-2.73	23.02	19.46	3.56	6.464					
1,100.00	1,099.90	1,098.97	1,098.83	1.84	1.89	4.53	21.80	-4.32	29.73	25.99	3.74	7.952					
1,200.00	1,199.69	1,199.78	1,199.58	1.96	2.00	1.14	23.89	-6.82	38.07	34.11	3.96	9.613					
1,300.00	1,299.20	1,300.85	1,300.58	2.11	2.14	-1.47	22.52	-10.17	46.52	42.31	4.22	11.037					
1,400.00	1,398.30	1,402.09	1,401.61	2.31	2.29	-3.63	17.69	-14.35	55.09	50.58	4.50	12.234					
1,500.00	1,496.87	1,501.52	1,500.75	2.56	2.45	-4.89	11.41	-18.83	65.59	60.76	4.83	13.584					
1,600.00	1,594.79	1,600.55	1,599.47	2.88	2.64	-5.19	5.16	-23.28	79.49	74.30	5.18	15.336					
1,700.00	1,691.95	1,699.04	1,697.67	3.25	2.83	-4.91	-1.06	-27.72	96.73	91.17	5.56	17.398					
1,800.00	1,788.23	1,796.89	1,795.22	3.70	3.04	-4.33	-7.24	-32.12	117.33	111.37	5.96	19.697					
1,900.00	1,883.50	1,893.97	1,892.01	4.21	3.25	-3.63	-13.37	-36.49	141.25	134.88	6.37	22.180					
1,932.71	1,914.42	1,925.53	1,923.48	4.39	3.32	-3.39	-15.36	-37.92	149.80	143.29	6.51	23.024					
2,000.00	1,977.92	1,990.37	1,988.12	4.78	3.47	-2.94	-19.46	-40.83	167.75	160.94	6.82	24.609					
2,100.00	2,072.28	2,086.73	2,084.19	5.38	3.69	-2.44	-25.54	-45.17	194.45	187.16	7.29	26.668					
2,200.00	2,166.65	2,183.09	2,180.26	5.98	3.92	-2.05	-31.63	-49.51	221.16	213.38	7.78	28.439					
2,300.00	2,261.01	2,279.45	2,276.33	6.60	4.15	-1.75	-37.71	-53.85	247.87	239.60	8.27	29.960					
2,400.00	2,355.37	2,375.80	2,372.39	7.23	4.39	-1.51	-43.79	-58.19	274.59	265.82	8.78	31.283					
2,500.00	2,449.73	2,472.16	2,468.46	7.86	4.63	-1.31	-49.88	-62.53	301.32	292.03	9.29	32.439					
2,600.00	2,544.09	2,568.52	2,564.53	8.50	4.87	-1.14	-55.96	-66.86	328.05	318.24	9.81	33.455					
2,700.00	2,638.45	2,664.88	2,660.60	9.14	5.11	-1.00	-62.05	-71.20	354.78	344.45	10.33	34.354					
2,800.00	2,732.81	2,761.23	2,756.66	9.78	5.35	-0.88	-68.13	-75.54	381.51	370.66	10.85	35.153					
2,900.00	2,827.18	2,857.59	2,852.73	10.43	5.60	-0.77	-74.21	-79.88	408.24	396.86	11.38	35.868					
3,000.00	2,921.54	2,953.95	2,948.80	11.08	5.85	-0.68	-80.30	-84.22	434.98	423.06	11.91	36.509					
3,100.00	3,015.90	3,050.31	3,044.87	11.73	6.10	-0.59	-86.38	-88.55	461.71	449.26	12.45	37.088					
3,200.00	3,110.26	3,146.66	3,140.93	12.38	6.34	-0.52	-92.47	-92.89	488.45	475.46	12.99	37.613					
3,300.00	3,204.62	3,243.02	3,237.00	13.03	6.60	-0.45	-98.55	-97.23	515.19	501.66	13.53	38.089					
3,400.00	3,298.98	3,339.38	3,333.07	13.68	6.85	-0.40	-104.63	-101.57	541.93	527.86	14.07	38.525					
3,500.00	3,393.35	3,435.74	3,429.13	14.34	7.10	-0.34	-110.72	-105.91	568.66	554.05	14.61	38.923					
3,600.00	3,487.71	3,532.09	3,525.20	14.99	7.35	-0.29	-116.80	-110.24	595.40	580.25	15.15	39.290					
3,700.00	3,582.07	3,628.45	3,621.27	15.65	7.60	-0.25	-122.89	-114.58	622.14	606.44	15.70	39.627					
3,800.00	3,676.43	3,724.81	3,717.34	16.30	7.86	-0.21	-128.97	-118.92	648.88	632.64	16.25	39.939					
3,900.00	3,770.79	3,821.17	3,813.40	16.96	8.11	-0.17	-135.06	-123.26	675.62	658.83	16.79	40.228					
4,000.00	3,865.15	3,917.52	3,909.47	17.62	8.37	-0.14	-141.14	-127.60	702.36	685.02	17.34	40.497					
4,100.00	3,959.51	4,013.88	4,005.54	18.27	8.62	-0.10	-147.22	-131.93	729.10	711.21	17.89	40.746					
4,200.00	4,053.88	4,110.24	4,101.61	18.93	8.88	-0.07	-153.31	-136.27	755.84	737.40	18.44	40.980					
4,300.00	4,148.24	4,206.60	4,197.67	19.59	9.13	-0.04	-159.39	-140.61	782.59	763.59	19.00	41.197					
4,400.00	4,242.60	4,302.95	4,293.74	20.25	9.39	-0.02	-165.48	-144.95	809.33	789.78	19.55	41.402					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 695-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,500.00	4,336.96	4,399.31	4,389.81	20.91	9.65	0.01	-171.56	-149.29	836.07	815.97	20.10	41.593		
4,600.00	4,431.32	4,495.67	4,485.88	21.56	9.90	0.03	-177.64	-153.63	862.81	842.16	20.65	41.773		
4,648.02	4,476.63	4,541.94	4,532.00	21.88	10.03	0.04	-180.57	-155.71	875.65	854.73	20.92	41.856		
4,700.00	4,525.84	4,592.15	4,582.07	22.17	10.16	0.05	-183.74	-157.97	889.10	867.87	21.24	41.869		
4,800.00	4,621.31	4,689.38	4,679.01	22.60	10.42	0.03	-189.88	-162.35	912.43	890.63	21.80	41.857		
4,900.00	4,717.77	4,787.36	4,776.69	22.99	10.68	-0.01	-196.06	-166.76	932.39	910.06	22.34	41.744		
5,000.00	4,815.08	4,885.97	4,875.00	23.35	10.95	-0.08	-202.29	-171.20	948.95	926.11	22.84	41.542		
5,100.00	4,913.14	4,985.08	4,973.82	23.66	11.21	-0.18	-208.55	-175.66	962.11	938.79	23.32	41.257		
5,200.00	5,011.82	5,084.58	5,073.01	23.94	11.48	-0.31	-214.83	-180.14	971.83	948.07	23.76	40.894		
5,300.00	5,111.01	5,180.08	5,168.22	24.17	11.73	-0.45	-220.82	-184.41	978.16	954.00	24.16	40.487		
5,400.00	5,210.58	5,258.28	5,246.30	24.36	11.87	-0.53	-224.55	-187.07	982.55	958.12	24.43	40.221		
5,500.00	5,310.41	5,336.50	5,324.47	24.51	12.01	-0.56	-226.55	-188.49	985.70	961.05	24.65	39.987		
5,600.00	5,410.38	5,422.41	5,410.38	24.61	12.15	-0.56	-226.91	-188.75	987.47	962.62	24.84	39.749		
5,614.62	5,425.00	5,437.03	5,425.00	24.62	12.17	-0.56	-226.91	-188.75	987.50	962.63	24.87	39.705		
5,700.00	5,510.38	5,522.41	5,510.38	24.69	12.30	-0.56	-226.91	-188.75	987.50	962.37	25.14	39.283		
5,800.00	5,610.38	5,622.41	5,610.38	24.77	12.46	-0.56	-226.91	-188.75	987.50	962.06	25.44	38.811		
5,900.00	5,710.38	5,722.41	5,710.38	24.84	12.61	-0.56	-226.91	-188.75	987.50	961.75	25.75	38.344		
6,000.00	5,810.38	5,822.41	5,810.38	24.92	12.77	-0.56	-226.91	-188.75	987.50	961.44	26.07	37.882		
6,100.00	5,910.38	5,922.41	5,910.38	25.00	12.93	-0.56	-226.91	-188.75	987.50	961.12	26.39	37.426		
6,200.00	6,010.38	6,022.41	6,010.38	25.08	13.09	-0.56	-226.91	-188.75	987.50	960.80	26.71	36.975		
6,300.00	6,110.38	6,122.41	6,110.38	25.17	13.25	-0.56	-226.91	-188.75	987.50	960.47	27.03	36.531		
6,400.00	6,210.38	6,222.41	6,210.38	25.25	13.42	-0.56	-226.91	-188.75	987.50	960.14	27.36	36.092		
6,500.00	6,310.38	6,322.41	6,310.38	25.34	13.58	-0.56	-226.91	-188.75	987.50	959.81	27.69	35.660		
6,600.00	6,410.38	6,422.41	6,410.38	25.43	13.75	-0.56	-226.91	-188.75	987.50	959.48	28.03	35.233		
6,700.00	6,510.38	6,522.41	6,510.38	25.52	13.92	-0.56	-226.91	-188.75	987.50	959.14	28.37	34.813		
6,800.00	6,610.38	6,622.41	6,610.38	25.61	14.09	-0.56	-226.91	-188.75	987.50	958.80	28.71	34.399		
6,900.00	6,710.38	6,722.41	6,710.38	25.70	14.27	-0.56	-226.91	-188.75	987.50	958.45	29.05	33.992		
7,000.00	6,810.38	6,822.41	6,810.38	25.80	14.44	-0.56	-226.91	-188.75	987.50	958.11	29.40	33.591		
7,100.00	6,910.38	6,922.41	6,910.38	25.89	14.62	-0.56	-226.91	-188.75	987.50	957.76	29.75	33.196		
7,200.00	7,010.38	7,022.41	7,010.38	25.99	14.79	-0.56	-226.91	-188.75	987.50	957.40	30.10	32.807		
7,300.00	7,110.38	7,122.41	7,110.38	26.09	14.97	-0.56	-226.91	-188.75	987.50	957.05	30.46	32.425		
7,400.00	7,210.38	7,222.41	7,210.38	26.19	15.15	-0.56	-226.91	-188.75	987.50	956.69	30.81	32.049		
7,500.00	7,310.38	7,322.41	7,310.38	26.30	15.33	-0.56	-226.91	-188.75	987.50	956.33	31.17	31.679		
7,600.00	7,410.38	7,422.41	7,410.38	26.40	15.51	-0.56	-226.91	-188.75	987.50	955.97	31.53	31.316		
7,700.00	7,510.38	7,522.41	7,510.38	26.51	15.70	-0.56	-226.91	-188.75	987.50	955.61	31.90	30.959		
7,764.62	7,575.00	7,587.03	7,575.00	26.58	15.81	-0.56	-226.91	-188.75	987.50	955.37	32.13	30.731		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 700-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-1.01	32.05	-0.56	32.06					
100.00	100.00	99.99	99.99	0.10	0.10	-0.73	32.06	-0.75	32.42	32.22	0.21	156.244		
200.00	199.99	200.03	200.03	0.37	0.35	0.05	32.01	-0.99	33.17	32.45	0.72	45.842		
300.00	299.99	300.08	300.08	0.63	0.58	1.02	31.81	-1.07	33.96	32.75	1.21	27.974		
400.00	399.98	400.07	400.07	0.90	0.75	2.35	31.53	-0.85	34.82	33.17	1.65	21.160		
500.00	499.97	500.00	500.00	1.16	0.89	4.71	31.35	-0.08	35.75	33.70	2.05	17.465		
600.00	599.96	599.89	599.88	1.43	1.05	7.76	31.32	1.26	36.65	34.18	2.47	14.819		
670.00	669.96	669.74	669.72	1.58	1.18	10.27	31.45	2.42	37.17	34.41	2.76	13.463		
700.00	699.96	699.67	699.64	1.61	1.23	11.50	31.58	2.95	37.39	34.55	2.85	13.142		
800.00	799.96	799.63	799.58	1.63	1.34	15.50	32.08	4.79	38.35	35.38	2.97	12.914		
866.10	866.05	865.70	865.65	1.66	1.36	18.03	32.41	6.00	39.07	36.05	3.03	12.914		
894.10	894.05	893.70	893.63	1.68	1.37	18.88	32.55	6.52	39.39	36.34	3.05	12.906		
900.00	899.95	899.60	899.53	1.68	1.38	19.01	32.57	6.62	39.45	36.39	3.06	12.903		
966.10	966.05	965.83	965.76	1.73	1.42	19.65	33.01	7.25	40.06	36.92	3.14	12.751		
1,000.00	999.95	999.80	999.73	1.75	1.44	19.09	33.33	6.99	40.48	37.29	3.19	12.689 SF		
1,100.00	1,099.90	1,099.85	1,099.71	1.84	1.53	13.98	34.67	3.91	43.79	40.42	3.37	13.009		
1,200.00	1,199.69	1,199.45	1,199.19	1.96	1.64	7.65	36.29	-0.80	50.92	47.32	3.60	14.153		
1,300.00	1,299.20	1,298.74	1,298.35	2.11	1.78	3.22	37.91	-5.50	61.98	58.10	3.87	16.003		
1,400.00	1,398.30	1,397.59	1,397.08	2.31	1.94	0.51	39.52	-10.18	76.72	72.54	4.18	18.343		
1,500.00	1,496.87	1,495.88	1,495.25	2.56	2.12	-0.96	41.12	-14.83	94.97	90.45	4.52	21.008		
1,600.00	1,594.79	1,593.49	1,592.73	2.88	2.30	-1.64	42.71	-19.45	116.64	111.76	4.88	23.887		
1,700.00	1,691.95	1,690.30	1,689.43	3.25	2.49	-1.85	44.28	-24.03	141.65	136.39	5.26	26.906		
1,800.00	1,788.23	1,786.20	1,785.21	3.70	2.69	-1.78	45.84	-28.57	169.98	164.31	5.66	30.014		
1,900.00	1,883.50	1,881.07	1,879.96	4.21	2.89	-1.56	47.39	-33.06	201.58	195.50	6.08	33.175		
1,932.71	1,914.42	1,911.85	1,910.70	4.39	2.96	-1.46	47.89	-34.51	212.62	206.40	6.21	34.218		
2,000.00	1,977.92	1,975.06	1,973.83	4.78	3.09	-1.28	48.92	-37.50	235.69	229.17	6.52	36.140		
2,100.00	2,072.28	2,069.00	2,067.65	5.38	3.30	-1.07	50.45	-41.95	269.98	262.99	6.99	38.625		
2,200.00	2,166.65	2,162.93	2,161.46	5.98	3.51	-0.90	51.97	-46.39	304.28	296.81	7.47	40.733		
2,300.00	2,261.01	2,256.86	2,255.28	6.60	3.72	-0.77	53.50	-50.84	338.57	330.61	7.96	42.536		
2,400.00	2,355.37	2,350.79	2,349.09	7.23	3.93	-0.66	55.03	-55.28	372.87	364.42	8.46	44.090		
2,500.00	2,449.73	2,444.72	2,442.90	7.86	4.15	-0.57	56.56	-59.73	407.17	398.21	8.96	45.439		
2,600.00	2,544.09	2,538.66	2,536.72	8.50	4.36	-0.50	58.09	-64.17	441.47	432.00	9.47	46.617		
2,700.00	2,638.45	2,632.59	2,630.53	9.14	4.58	-0.43	59.62	-68.62	475.77	465.79	9.98	47.654		
2,800.00	2,732.81	2,726.52	2,724.35	9.78	4.80	-0.38	61.15	-73.06	510.08	499.57	10.50	48.571		
2,900.00	2,827.18	2,820.45	2,818.16	10.43	5.02	-0.33	62.68	-77.51	544.38	533.35	11.02	49.386		
3,000.00	2,921.54	2,914.38	2,911.97	11.08	5.23	-0.28	64.20	-81.95	578.68	567.13	11.55	50.116		
3,100.00	3,015.90	3,008.31	3,005.79	11.73	5.46	-0.24	65.73	-86.40	612.98	600.91	12.07	50.771		
3,200.00	3,110.26	3,102.25	3,099.60	12.38	5.68	-0.21	67.26	-90.84	647.29	634.68	12.60	51.363		
3,300.00	3,204.62	3,196.18	3,193.42	13.03	5.90	-0.18	68.79	-95.29	681.59	668.46	13.13	51.899		
3,400.00	3,298.98	3,290.11	3,287.23	13.68	6.12	-0.15	70.32	-99.73	715.89	702.23	13.67	52.387		
3,500.00	3,393.35	3,384.04	3,381.04	14.34	6.34	-0.13	71.85	-104.18	750.20	736.00	14.20	52.832		
3,600.00	3,487.71	3,477.97	3,474.86	14.99	6.57	-0.10	73.38	-108.62	784.50	769.76	14.74	53.240		
3,700.00	3,582.07	3,571.90	3,568.67	15.65	6.79	-0.08	74.90	-113.07	818.80	803.53	15.27	53.616		
3,800.00	3,676.43	3,665.84	3,662.49	16.30	7.01	-0.06	76.43	-117.51	853.11	837.30	15.81	53.961		
3,900.00	3,770.79	3,759.77	3,756.30	16.96	7.24	-0.05	77.96	-121.96	887.41	871.06	16.35	54.281		
4,000.00	3,865.15	3,853.70	3,850.11	17.62	7.46	-0.03	79.49	-126.40	921.71	904.83	16.89	54.577		
4,100.00	3,959.51	3,947.63	3,943.93	18.27	7.69	-0.01	81.02	-130.85	956.02	938.59	17.43	54.852		
4,200.00	4,053.88	4,041.56	4,037.74	18.93	7.91	0.00	82.55	-135.29	990.32	972.35	17.97	55.107		
4,300.00	4,148.24	4,135.49	4,131.56	19.59	8.13	0.01	84.08	-139.74	1,024.63	1,006.11	18.51	55.346		
4,400.00	4,242.60	4,229.43	4,225.37	20.25	8.36	0.03	85.61	-144.18	1,058.93	1,039.88	19.06	55.569		
4,500.00	4,336.96	4,323.36	4,319.18	20.91	8.59	0.04	87.13	-148.63	1,093.24	1,073.64	19.60	55.778		
4,600.00	4,431.32	4,417.29	4,413.00	21.56	8.81	0.05	88.66	-153.07	1,127.54	1,107.40	20.14	55.974		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 700-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,648.02	4,476.63	4,462.39	4,458.04	21.88	8.92	0.06	89.40	-155.20	1,144.01	1,123.61	20.41	56.064		
4,700.00	4,525.84	4,511.38	4,506.97	22.17	9.04	0.06	90.19	-157.52	1,161.41	1,140.68	20.72	56.051		
4,800.00	4,621.31	4,606.45	4,601.93	22.60	9.26	0.04	91.74	-162.02	1,192.38	1,171.09	21.29	56.017		
4,900.00	4,717.77	4,702.54	4,697.89	22.99	9.50	0.00	93.31	-166.57	1,220.06	1,198.23	21.83	55.901		
5,000.00	4,815.08	4,799.52	4,794.75	23.35	9.73	-0.06	94.88	-171.16	1,244.40	1,222.06	22.34	55.714		
5,100.00	4,913.14	4,897.27	4,892.38	23.66	9.96	-0.14	96.47	-175.78	1,265.38	1,242.57	22.82	55.461		
5,200.00	5,011.82	4,995.68	4,990.66	23.94	10.20	-0.25	98.08	-180.44	1,282.98	1,259.71	23.26	55.149		
5,300.00	5,111.01	5,094.72	5,089.58	24.17	10.44	-0.37	99.69	-185.13	1,297.17	1,273.49	23.68	54.782		
5,400.00	5,210.58	5,202.26	5,197.04	24.36	10.63	-0.49	101.10	-189.24	1,307.63	1,283.62	24.01	54.461		
5,500.00	5,310.41	5,310.30	5,305.05	24.51	10.82	-0.55	101.86	-191.45	1,314.03	1,289.74	24.29	54.090		
5,600.00	5,410.38	5,415.64	5,410.38	24.61	11.01	-0.55	102.00	-191.85	1,316.39	1,291.85	24.54	53.647		
5,614.62	5,425.00	5,430.26	5,425.00	24.62	11.03	-0.55	102.00	-191.85	1,316.43	1,291.86	24.57	53.571		
5,700.00	5,510.38	5,515.64	5,510.38	24.69	11.20	-0.55	102.00	-191.85	1,316.43	1,291.56	24.87	52.936		
5,800.00	5,610.38	5,615.64	5,610.38	24.77	11.40	-0.55	102.00	-191.85	1,316.43	1,291.22	25.21	52.228		
5,900.00	5,710.38	5,715.64	5,710.38	24.84	11.60	-0.55	102.00	-191.85	1,316.43	1,290.88	25.55	51.533		
6,000.00	5,810.38	5,815.64	5,810.38	24.92	11.80	-0.55	102.00	-191.85	1,316.43	1,290.54	25.89	50.850		
6,100.00	5,910.38	5,915.64	5,910.38	25.00	12.00	-0.55	102.00	-191.85	1,316.43	1,290.19	26.23	50.180		
6,200.00	6,010.38	6,015.64	6,010.38	25.08	12.20	-0.55	102.00	-191.85	1,316.43	1,289.85	26.58	49.521		
6,300.00	6,110.38	6,115.64	6,110.38	25.17	12.40	-0.55	102.00	-191.85	1,316.43	1,289.49	26.94	48.874		
6,400.00	6,210.38	6,215.64	6,210.38	25.25	12.60	-0.55	102.00	-191.85	1,316.43	1,289.14	27.29	48.240		
6,500.00	6,310.38	6,315.64	6,310.38	25.34	12.81	-0.55	102.00	-191.85	1,316.43	1,288.78	27.65	47.617		
6,600.00	6,410.38	6,415.64	6,410.38	25.43	13.01	-0.55	102.00	-191.85	1,316.43	1,288.42	28.01	47.005		
6,700.00	6,510.38	6,515.64	6,510.38	25.52	13.22	-0.55	102.00	-191.85	1,316.43	1,288.06	28.37	46.406		
6,800.00	6,610.38	6,615.64	6,610.38	25.61	13.42	-0.55	102.00	-191.85	1,316.43	1,287.70	28.73	45.818		
6,900.00	6,710.38	6,715.64	6,710.38	25.70	13.63	-0.55	102.00	-191.85	1,316.43	1,287.33	29.10	45.241		
7,000.00	6,810.38	6,815.64	6,810.38	25.80	13.83	-0.55	102.00	-191.85	1,316.43	1,286.96	29.47	44.675		
7,100.00	6,910.38	6,915.64	6,910.38	25.89	14.04	-0.55	102.00	-191.85	1,316.43	1,286.59	29.84	44.120		
7,200.00	7,010.38	7,015.64	7,010.38	25.99	14.25	-0.55	102.00	-191.85	1,316.43	1,286.22	30.21	43.575		
7,300.00	7,110.38	7,115.64	7,110.38	26.09	14.46	-0.55	102.00	-191.85	1,316.43	1,285.84	30.58	43.042		
7,400.00	7,210.38	7,215.64	7,210.38	26.19	14.67	-0.55	102.00	-191.85	1,316.43	1,285.47	30.96	42.518		
7,500.00	7,310.38	7,315.64	7,310.38	26.30	14.88	-0.55	102.00	-191.85	1,316.43	1,285.09	31.34	42.005		
7,600.00	7,410.38	7,415.64	7,410.38	26.40	15.09	-0.55	102.00	-191.85	1,316.43	1,284.71	31.72	41.502		
7,700.00	7,510.38	7,515.64	7,510.38	26.51	15.30	-0.55	102.00	-191.85	1,316.43	1,284.33	32.10	41.008		
7,764.62	7,575.00	7,580.26	7,575.00	26.58	15.43	-0.55	102.00	-191.85	1,316.43	1,284.08	32.35	40.694		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 680-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	180.00	-8.01	0.00	8.01					
100.00	100.00	99.97	99.97	0.10	0.10	-179.26	-8.22	-0.43	7.86	7.65	0.21	37.946		
200.00	199.99	200.00	199.99	0.37	0.36	-177.43	-8.39	-1.35	7.24	6.51	0.73	9.893		
300.00	299.99	300.01	300.00	0.63	0.62	-174.98	-8.22	-2.21	6.10	4.85	1.25	4.877		
400.00	399.98	400.00	399.99	0.90	0.87	-171.31	-7.94	-3.00	4.74	2.97	1.77	2.674		
500.00	499.97	499.99	499.98	1.16	1.13	-168.77	-7.62	-3.67	3.40	1.11	2.29	1.486	Level 3	
600.00	599.96	599.99	599.97	1.43	1.37	-171.09	-7.30	-4.05	2.33	-0.47	2.80	0.832	Level 1	
670.00	669.96	669.99	669.97	1.58	1.52	178.04	-7.12	-4.14	2.00	-1.10	3.10	0.645	Level 1	
675.51	675.47	675.49	675.48	1.59	1.53	176.58	-7.11	-4.14	2.00	-1.12	3.12	0.641	Level 1, CC	
700.00	699.96	699.98	699.97	1.61	1.56	169.99	-7.05	-4.15	2.01	-1.16	3.17	0.635	Level 1, ES, SF	
800.00	799.96	799.98	799.96	1.63	1.58	146.16	-6.80	-4.16	2.32	-0.89	3.21	0.723	Level 1	
866.10	866.05	866.08	866.06	1.66	1.61	134.64	-6.64	-4.17	2.70	-0.58	3.27	0.824	Level 1	
894.10	894.05	894.06	894.04	1.68	1.62	134.02	-6.69	-4.19	2.83	-0.47	3.30	0.858	Level 1	
900.00	899.95	899.96	899.94	1.68	1.63	134.74	-6.74	-4.19	2.86	-0.45	3.31	0.865	Level 1	
966.10	966.05	965.99	965.95	1.73	1.67	150.51	-8.06	-4.34	3.84	0.44	3.40	1.130	Level 2	
1,000.00	999.95	999.83	999.77	1.75	1.69	157.89	-9.33	-4.46	4.76	1.32	3.44	1.383	Level 3	
1,100.00	1,099.90	1,099.57	1,099.33	1.84	1.79	167.85	-15.37	-5.04	7.75	4.13	3.62	2.139		
1,200.00	1,199.69	1,199.21	1,198.50	1.96	1.92	171.23	-24.86	-5.93	10.88	7.03	3.85	2.827		
1,300.00	1,299.20	1,298.74	1,297.18	2.11	2.11	172.33	-37.75	-7.12	14.06	9.95	4.12	3.416		
1,400.00	1,398.30	1,398.16	1,395.24	2.31	2.35	172.39	-54.04	-8.62	17.27	12.85	4.42	3.904		
1,500.00	1,496.87	1,497.46	1,492.56	2.56	2.65	171.87	-73.67	-10.41	20.50	15.73	4.77	4.296		
1,600.00	1,594.79	1,596.67	1,589.04	2.88	3.02	171.00	-96.63	-12.50	23.76	18.59	5.17	4.597		
1,700.00	1,691.95	1,695.76	1,684.56	3.25	3.46	169.88	-122.87	-14.89	27.03	21.42	5.61	4.817		
1,800.00	1,788.23	1,794.75	1,779.02	3.70	3.97	168.60	-152.36	-17.57	30.34	24.22	6.11	4.962		
1,900.00	1,883.50	1,893.63	1,872.29	4.21	4.55	167.17	-185.04	-20.53	33.67	26.99	6.68	5.041		
1,932.71	1,914.42	1,925.95	1,902.52	4.39	4.75	166.68	-196.41	-21.56	34.76	27.88	6.88	5.049		
2,000.00	1,977.92	1,992.37	1,964.25	4.78	5.18	166.08	-220.85	-23.77	37.77	30.44	7.32	5.157		
2,100.00	2,072.28	2,090.76	2,054.59	5.38	5.88	166.51	-259.65	-27.28	44.97	37.01	7.96	5.650		
2,200.00	2,166.65	2,188.56	2,143.01	5.98	6.64	167.84	-301.26	-31.04	55.45	46.88	8.58	6.464		
2,300.00	2,261.01	2,285.55	2,229.24	6.60	7.45	169.46	-345.47	-35.04	69.24	60.05	9.19	7.538		
2,400.00	2,355.37	2,381.53	2,313.04	7.23	8.31	171.02	-392.06	-39.24	86.31	76.51	9.79	8.812		
2,500.00	2,449.73	2,476.29	2,394.20	7.86	9.21	172.41	-440.77	-43.64	106.63	96.22	10.41	10.239		
2,600.00	2,544.09	2,571.64	2,474.39	8.50	10.16	173.67	-482.14	-48.27	129.81	118.75	11.05	11.743		
2,700.00	2,638.45	2,668.78	2,555.85	9.14	11.14	174.67	-544.84	-53.02	153.45	141.74	11.72	13.098		
2,800.00	2,732.81	2,765.92	2,637.32	9.78	12.13	175.41	-597.54	-57.78	177.12	164.73	12.39	14.290		
2,900.00	2,827.18	2,863.06	2,718.78	10.43	13.12	175.97	-650.24	-62.53	200.81	187.72	13.09	15.345		
3,000.00	2,921.54	2,960.20	2,800.25	11.08	14.12	176.42	-702.94	-67.28	224.51	210.72	13.79	16.285		
3,100.00	3,015.90	3,057.35	2,881.72	11.73	15.12	176.78	-755.64	-72.03	248.21	233.72	14.49	17.125		
3,200.00	3,110.26	3,154.49	2,963.18	12.38	16.12	177.07	-808.34	-76.79	271.92	256.71	15.21	17.881		
3,300.00	3,204.62	3,251.63	3,044.65	13.03	17.12	177.32	-861.04	-81.54	295.64	279.71	15.93	18.563		
3,400.00	3,298.98	3,348.77	3,126.11	13.68	18.12	177.54	-913.74	-86.29	319.35	302.70	16.65	19.182		
3,500.00	3,393.35	3,445.91	3,207.58	14.34	19.13	177.72	-966.45	-91.04	343.07	325.70	17.38	19.745		
3,600.00	3,487.71	3,543.06	3,289.04	14.99	20.14	177.88	-1,019.15	-95.80	366.80	348.69	18.10	20.260		
3,700.00	3,582.07	3,640.20	3,370.51	15.65	21.14	178.02	-1,071.85	-100.55	390.52	371.69	18.84	20.732		
3,800.00	3,676.43	3,737.34	3,451.97	16.30	22.15	178.14	-1,124.55	-105.30	414.25	394.68	19.57	21.167		
3,900.00	3,770.79	3,834.48	3,533.44	16.96	23.16	178.26	-1,177.25	-110.06	437.98	417.67	20.31	21.568		
4,000.00	3,865.15	3,931.62	3,614.91	17.62	24.17	178.36	-1,229.95	-114.81	461.70	440.66	21.05	21.939		
4,100.00	3,959.51	4,028.76	3,696.37	18.27	25.18	178.45	-1,282.65	-119.56	485.43	463.65	21.78	22.283		
4,200.00	4,053.88	4,125.91	3,777.84	18.93	26.19	178.53	-1,335.35	-124.31	509.16	486.64	22.53	22.603		
4,300.00	4,148.24	4,223.05	3,859.30	19.59	27.20	178.60	-1,388.05	-129.07	532.90	509.63	23.27	22.902		
4,400.00	4,242.60	4,327.69	3,947.20	20.25	28.19	178.72	-1,444.60	-134.16	556.42	532.38	24.03	23.153		
4,500.00	4,336.96	4,449.61	4,051.69	20.91	29.07	178.91	-1,507.15	-139.81	576.77	551.94	24.84	23.223		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 680-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,600.00	4,431.32	4,573.48	4,160.48	21.56	29.92	179.03	-1,566.11	-145.12	592.93	567.29	25.64	23.128		
4,648.02	4,476.63	4,633.52	4,214.12	21.88	30.32	179.07	-1,592.99	-147.55	599.17	573.15	26.02	23.029		
4,700.00	4,525.84	4,698.81	4,273.07	22.17	30.74	179.10	-1,620.94	-150.07	605.26	578.87	26.39	22.937		
4,800.00	4,621.31	4,824.98	4,388.72	22.60	31.51	179.17	-1,671.13	-154.59	616.29	589.27	27.02	22.808		
4,900.00	4,717.77	4,951.86	4,507.15	22.99	32.21	179.23	-1,716.44	-158.68	626.38	598.80	27.58	22.708		
5,000.00	4,815.08	5,079.40	4,628.11	23.35	32.86	179.29	-1,756.68	-162.31	635.51	607.44	28.07	22.638		
5,100.00	4,913.14	5,207.54	4,751.33	23.66	33.43	179.34	-1,791.67	-165.46	643.65	615.17	28.49	22.595		
5,200.00	5,011.82	5,336.22	4,876.53	23.94	33.93	179.39	-1,821.25	-168.13	650.79	621.97	28.82	22.582		
5,300.00	5,111.01	5,465.37	5,003.39	24.17	34.35	179.43	-1,845.28	-170.30	656.90	627.83	29.08	22.593		
5,400.00	5,210.58	5,594.92	5,131.62	24.36	34.69	179.47	-1,863.64	-171.95	661.98	632.72	29.25	22.628		
5,500.00	5,310.41	5,724.80	5,260.87	24.51	34.94	179.50	-1,876.22	-173.09	666.00	636.65	29.35	22.691		
5,600.00	5,410.38	5,854.94	5,390.82	24.61	35.11	179.53	-1,882.97	-173.70	668.95	639.58	29.37	22.777		
5,614.62	5,425.00	5,873.98	5,409.85	24.62	35.13	179.54	-1,883.47	-173.74	669.29	639.93	29.37	22.789		
5,700.00	5,510.38	5,974.51	5,510.38	24.69	35.20	179.54	-1,884.21	-173.81	669.86	640.24	29.62	22.614		
5,800.00	5,610.38	6,074.51	5,610.38	24.77	35.26	179.54	-1,884.21	-173.81	669.86	639.98	29.88	22.419		
5,900.00	5,710.38	6,174.51	5,710.38	24.84	35.31	179.54	-1,884.21	-173.81	669.86	639.72	30.14	22.224		
6,000.00	5,810.38	6,274.51	5,810.38	24.92	35.37	179.54	-1,884.21	-173.81	669.86	639.45	30.41	22.030		
6,100.00	5,910.38	6,374.51	5,910.38	25.00	35.43	179.54	-1,884.21	-173.81	669.86	639.18	30.68	21.836		
6,200.00	6,010.38	6,474.51	6,010.38	25.08	35.49	179.54	-1,884.21	-173.81	669.86	638.91	30.95	21.643		
6,300.00	6,110.38	6,574.51	6,110.38	25.17	35.55	179.54	-1,884.21	-173.81	669.86	638.63	31.23	21.450		
6,400.00	6,210.38	6,674.51	6,210.38	25.25	35.61	179.54	-1,884.21	-173.81	669.86	638.35	31.51	21.258		
6,500.00	6,310.38	6,774.51	6,310.38	25.34	35.67	179.54	-1,884.21	-173.81	669.86	638.06	31.80	21.066		
6,600.00	6,410.38	6,874.51	6,410.38	25.43	35.74	179.54	-1,884.21	-173.81	669.86	637.77	32.09	20.876		
6,700.00	6,510.38	6,974.51	6,510.38	25.52	35.80	179.54	-1,884.21	-173.81	669.86	637.48	32.38	20.687		
6,800.00	6,610.38	7,074.51	6,610.38	25.61	35.87	179.54	-1,884.21	-173.81	669.86	637.18	32.68	20.499		
6,900.00	6,710.38	7,174.51	6,710.38	25.70	35.94	179.54	-1,884.21	-173.81	669.86	636.88	32.98	20.312		
7,000.00	6,810.38	7,274.51	6,810.38	25.80	36.01	179.54	-1,884.21	-173.81	669.86	636.58	33.28	20.127		
7,100.00	6,910.38	7,374.51	6,910.38	25.89	36.08	179.54	-1,884.21	-173.81	669.86	636.27	33.59	19.943		
7,200.00	7,010.38	7,474.51	7,010.38	25.99	36.15	179.54	-1,884.21	-173.81	669.86	635.96	33.90	19.761		
7,300.00	7,110.38	7,574.51	7,110.38	26.09	36.23	179.54	-1,884.21	-173.81	669.86	635.65	34.21	19.580		
7,400.00	7,210.38	7,674.51	7,210.38	26.19	36.30	179.54	-1,884.21	-173.81	669.86	635.33	34.53	19.400		
7,500.00	7,310.38	7,774.51	7,310.38	26.30	36.38	179.54	-1,884.21	-173.81	669.86	635.01	34.85	19.223		
7,600.00	7,410.38	7,874.51	7,410.38	26.40	36.45	179.54	-1,884.21	-173.81	669.86	634.69	35.17	19.047		
7,700.00	7,510.38	7,974.51	7,510.38	26.51	36.53	179.54	-1,884.21	-173.81	669.86	634.37	35.49	18.872		
7,729.49	7,539.87	8,004.00	7,539.87	26.54	36.56	179.54	-1,884.21	-173.81	669.86	634.27	35.59	18.821		
7,764.62	7,575.00	8,014.13	7,550.00	26.58	36.56	179.54	-1,884.21	-173.81	670.33	634.66	35.67	18.794		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 677-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	50.93	8.02	9.87	12.72					
100.00	100.00	100.05	100.05	0.10	0.10	50.63	7.90	9.73	13.02	12.81	0.21	62.756		
200.00	199.99	200.05	200.05	0.37	0.37	49.90	7.65	9.44	13.68	12.94	0.74	18.531		
300.00	299.99	300.04	300.04	0.63	0.63	48.38	7.44	9.10	14.42	13.16	1.27	11.393		
400.00	399.98	400.05	400.04	0.90	0.90	46.26	7.26	8.70	15.21	13.42	1.79	8.486		
500.00	499.97	500.04	500.04	1.16	1.15	44.42	7.16	8.20	16.01	13.70	2.31	6.922		
600.00	599.96	600.03	600.03	1.43	1.41	43.19	7.11	7.68	16.61	13.78	2.83	5.863		
670.00	669.96	670.00	669.99	1.58	1.58	43.54	7.10	7.41	16.86	13.70	3.17	5.326		
700.00	699.96	700.00	699.99	1.61	1.63	44.13	7.12	7.32	16.97	13.73	3.24	5.236 SF		
800.00	799.96	799.99	799.99	1.63	1.65	46.03	7.17	7.03	17.35	14.06	3.28	5.287		
866.10	866.05	866.08	866.08	1.66	1.68	47.24	7.20	6.83	17.60	14.26	3.34	5.271		
894.10	894.05	893.96	893.95	1.68	1.69	47.72	7.22	6.90	17.75	14.38	3.37	5.268		
900.00	899.95	899.83	899.82	1.68	1.69	47.82	7.22	6.95	17.78	14.41	3.38	5.269		
966.10	966.05	965.60	965.58	1.73	1.74	50.58	7.24	8.33	18.85	15.39	3.46	5.448		
1,000.00	999.95	999.29	999.25	1.75	1.76	52.52	7.25	9.62	20.02	16.51	3.51	5.707		
1,100.00	1,099.90	1,098.38	1,098.14	1.84	1.85	56.02	7.27	15.71	27.05	23.35	3.69	7.322		
1,200.00	1,199.69	1,197.35	1,196.68	1.96	1.98	57.45	6.55	24.89	38.63	34.70	3.93	9.818		
1,300.00	1,299.20	1,295.99	1,294.59	2.11	2.14	58.88	3.40	36.35	53.14	48.92	4.23	12.569		
1,400.00	1,398.30	1,394.01	1,391.49	2.31	2.36	60.10	-2.21	49.97	70.51	65.92	4.59	15.353		
1,500.00	1,496.87	1,491.31	1,487.17	2.56	2.63	61.07	-10.21	65.69	90.71	85.67	5.04	17.998		
1,600.00	1,594.79	1,587.76	1,581.42	2.88	2.95	61.81	-20.52	83.42	113.71	108.13	5.58	20.375		
1,700.00	1,691.95	1,683.29	1,674.06	3.25	3.34	62.34	-33.07	103.05	139.46	133.24	6.22	22.412		
1,800.00	1,788.23	1,777.79	1,764.91	3.70	3.79	62.70	-47.76	124.48	167.91	160.94	6.97	24.092		
1,900.00	1,883.50	1,871.18	1,853.83	4.21	4.30	62.91	-64.47	147.61	199.00	191.18	7.82	25.439		
1,932.71	1,914.42	1,901.47	1,882.47	4.39	4.47	62.95	-70.35	155.52	209.73	201.61	8.12	25.833		
2,000.00	1,977.92	1,963.51	1,940.80	4.78	4.87	63.15	-83.12	172.35	232.29	223.50	8.79	26.441		
2,100.00	2,072.28	2,055.04	2,026.01	5.38	5.49	63.83	-103.68	198.69	266.57	256.73	9.83	27.107		
2,200.00	2,166.65	2,146.20	2,109.81	5.98	6.17	64.83	-126.16	226.67	301.82	290.88	10.94	27.591		
2,300.00	2,261.01	2,239.41	2,195.11	6.60	6.91	65.90	-149.81	255.85	337.50	325.40	12.10	27.893		
2,400.00	2,355.37	2,332.62	2,280.42	7.23	7.65	66.76	-173.46	285.04	373.29	360.01	13.28	28.113		
2,500.00	2,449.73	2,425.83	2,365.72	7.86	8.41	67.47	-197.11	314.22	409.16	394.69	14.47	28.273		
2,600.00	2,544.09	2,519.03	2,451.02	8.50	9.17	68.07	-220.76	343.40	445.08	429.41	15.68	28.393		
2,700.00	2,638.45	2,612.24	2,536.32	9.14	9.94	68.58	-244.41	372.59	481.05	464.17	16.89	28.484		
2,800.00	2,732.81	2,705.45	2,621.63	9.78	10.72	69.02	-268.06	401.77	517.06	498.95	18.11	28.554		
2,900.00	2,827.18	2,798.66	2,706.93	10.43	11.50	69.40	-291.71	430.96	553.10	533.76	19.33	28.608		
3,000.00	2,921.54	2,891.86	2,792.23	11.08	12.28	69.74	-315.36	460.14	589.16	568.59	20.56	28.650		
3,100.00	3,015.90	2,985.07	2,877.53	11.73	13.06	70.04	-339.01	489.33	625.23	603.44	21.80	28.683		
3,200.00	3,110.26	3,078.28	2,962.84	12.38	13.85	70.30	-362.66	518.51	661.33	638.29	23.03	28.710		
3,300.00	3,204.62	3,171.48	3,048.14	13.03	14.63	70.54	-386.31	547.69	697.44	673.16	24.27	28.732		
3,400.00	3,298.98	3,264.69	3,133.44	13.68	15.42	70.76	-409.96	576.88	733.56	708.04	25.52	28.749		
3,500.00	3,393.35	3,357.90	3,218.75	14.34	16.21	70.95	-433.61	606.06	769.69	742.93	26.76	28.763		
3,600.00	3,487.71	3,451.11	3,304.05	14.99	17.00	71.13	-457.26	635.25	805.82	777.82	28.00	28.775		
3,700.00	3,582.07	3,544.31	3,389.35	15.65	17.79	71.29	-480.91	664.43	841.97	812.72	29.25	28.784		
3,800.00	3,676.43	3,637.52	3,474.65	16.30	18.59	71.44	-504.56	693.62	878.12	847.62	30.50	28.791		
3,900.00	3,770.79	3,730.73	3,559.96	16.96	19.38	71.58	-528.21	722.80	914.28	882.53	31.75	28.797		
4,000.00	3,865.15	3,823.94	3,645.26	17.62	20.17	71.71	-551.86	751.98	950.45	917.45	33.00	28.802		
4,100.00	3,959.51	3,917.14	3,730.56	18.27	20.97	71.82	-575.51	781.17	986.62	952.37	34.25	28.806		
4,200.00	4,053.88	4,010.35	3,815.86	18.93	21.76	71.93	-599.16	810.35	1,022.79	987.29	35.50	28.809		
4,300.00	4,148.24	4,103.56	3,901.17	19.59	22.55	72.04	-622.81	839.54	1,058.96	1,022.21	36.76	28.811		
4,400.00	4,242.60	4,196.76	3,986.47	20.25	23.35	72.13	-646.46	868.72	1,095.14	1,057.14	38.01	28.813		
4,500.00	4,336.96	4,289.97	4,071.77	20.91	24.15	72.22	-670.11	897.91	1,131.33	1,092.06	39.26	28.814		
4,600.00	4,431.32	4,383.18	4,157.08	21.56	24.94	72.30	-693.76	927.09	1,167.51	1,127.00	40.52	28.815		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Sec.23-T6S-R92W - Epperly 23A-23-692 - Wellbore #1 - Design #1		Offset Site Error: 0.00 usft	
Survey Program: 100-NS-GYRO-MS, 677-MWD													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
4,648.02	4,476.63	4,427.93	4,198.03	21.88	25.32	72.34	-705.12	941.10	1,184.89	1,143.77	41.12	28.816				
4,700.00	4,525.84	4,476.43	4,242.42	22.17	25.74	72.40	-717.43	956.29	1,203.55	1,161.75	41.80	28.792				
4,800.00	4,621.31	4,600.61	4,357.06	22.60	26.56	73.02	-747.46	993.35	1,237.47	1,194.46	43.01	28.771				
4,900.00	4,717.77	4,728.80	4,477.46	22.99	27.30	73.60	-775.15	1,027.52	1,267.76	1,223.64	44.12	28.736				
5,000.00	4,815.08	4,859.68	4,602.28	23.35	27.97	74.11	-799.89	1,058.05	1,294.29	1,249.16	45.13	28.680				
5,100.00	4,913.14	4,992.96	4,731.12	23.66	28.56	74.55	-821.37	1,084.56	1,316.95	1,270.91	46.03	28.608				
5,200.00	5,011.82	5,128.33	4,863.43	23.94	29.06	74.92	-839.31	1,106.69	1,335.62	1,288.80	46.81	28.530				
5,300.00	5,111.01	5,265.39	4,998.64	24.17	29.46	75.19	-853.44	1,124.13	1,350.21	1,302.74	47.47	28.444				
5,400.00	5,210.58	5,403.75	5,136.04	24.36	29.78	75.38	-863.55	1,136.61	1,360.66	1,312.66	48.00	28.349				
5,500.00	5,310.41	5,542.96	5,274.92	24.51	29.99	75.48	-869.51	1,143.96	1,366.90	1,318.52	48.38	28.252				
5,600.00	5,410.38	5,678.46	5,410.38	24.61	30.11	75.48	-871.23	1,146.08	1,368.93	1,320.29	48.65	28.139				
5,614.62	5,425.00	5,693.08	5,425.00	24.62	30.12	75.48	-871.23	1,146.08	1,368.95	1,320.27	48.68	28.124				
5,700.00	5,510.38	5,778.46	5,510.38	24.69	30.18	75.48	-871.23	1,146.08	1,368.95	1,320.13	48.82	28.042				
5,800.00	5,610.38	5,878.46	5,610.38	24.77	30.25	75.48	-871.23	1,146.08	1,368.95	1,319.97	48.97	27.952				
5,900.00	5,710.38	5,978.46	5,710.38	24.84	30.32	75.48	-871.23	1,146.08	1,368.95	1,319.81	49.13	27.861				
6,000.00	5,810.38	6,078.46	5,810.38	24.92	30.40	75.48	-871.23	1,146.08	1,368.95	1,319.65	49.30	27.769				
6,100.00	5,910.38	6,178.46	5,910.38	25.00	30.47	75.48	-871.23	1,146.08	1,368.95	1,319.48	49.47	27.675				
6,200.00	6,010.38	6,278.46	6,010.38	25.08	30.55	75.48	-871.23	1,146.08	1,368.95	1,319.31	49.64	27.579				
6,300.00	6,110.38	6,378.46	6,110.38	25.17	30.62	75.48	-871.23	1,146.08	1,368.95	1,319.14	49.81	27.483				
6,400.00	6,210.38	6,478.46	6,210.38	25.25	30.70	75.48	-871.23	1,146.08	1,368.95	1,318.96	49.99	27.385				
6,500.00	6,310.38	6,578.46	6,310.38	25.34	30.78	75.48	-871.23	1,146.08	1,368.95	1,318.78	50.17	27.286				
6,600.00	6,410.38	6,678.46	6,410.38	25.43	30.86	75.48	-871.23	1,146.08	1,368.95	1,318.59	50.35	27.186				
6,700.00	6,510.38	6,778.46	6,510.38	25.52	30.94	75.48	-871.23	1,146.08	1,368.95	1,318.41	50.54	27.085				
6,800.00	6,610.38	6,878.46	6,610.38	25.61	31.03	75.48	-871.23	1,146.08	1,368.95	1,318.22	50.73	26.983				
6,900.00	6,710.38	6,978.46	6,710.38	25.70	31.11	75.48	-871.23	1,146.08	1,368.95	1,318.02	50.93	26.880				
7,000.00	6,810.38	7,078.46	6,810.38	25.80	31.20	75.48	-871.23	1,146.08	1,368.95	1,317.82	51.13	26.776				
7,100.00	6,910.38	7,178.46	6,910.38	25.89	31.29	75.48	-871.23	1,146.08	1,368.95	1,317.62	51.33	26.671				
7,200.00	7,010.38	7,278.46	7,010.38	25.99	31.38	75.48	-871.23	1,146.08	1,368.95	1,317.42	51.53	26.566				
7,300.00	7,110.38	7,378.46	7,110.38	26.09	31.47	75.48	-871.23	1,146.08	1,368.95	1,317.21	51.74	26.460				
7,400.00	7,210.38	7,478.46	7,210.38	26.19	31.56	75.48	-871.23	1,146.08	1,368.95	1,317.00	51.95	26.353				
7,500.00	7,310.38	7,578.46	7,310.38	26.30	31.65	75.48	-871.23	1,146.08	1,368.95	1,316.79	52.16	26.245				
7,600.00	7,410.38	7,678.46	7,410.38	26.40	31.75	75.48	-871.23	1,146.08	1,368.95	1,316.57	52.38	26.136				
7,700.00	7,510.38	7,778.46	7,510.38	26.51	31.85	75.48	-871.23	1,146.08	1,368.95	1,316.35	52.60	26.028				
7,764.62	7,575.00	7,843.08	7,575.00	26.58	31.91	75.48	-871.23	1,146.08	1,368.95	1,316.21	52.74	25.957				

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 675-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	30.90	16.03	9.59	18.68					
100.00	100.00	100.00	100.00	0.10	0.10	30.05	16.20	9.25	19.13	18.93	0.21	92.093		
200.00	199.99	199.92	199.91	0.37	0.36	28.33	16.75	8.63	20.34	19.61	0.73	27.744		
300.00	299.99	299.86	299.85	0.63	0.62	26.61	17.54	8.18	22.01	20.75	1.25	17.554		
400.00	399.98	399.76	399.74	0.90	0.87	25.38	18.49	8.03	24.06	22.30	1.76	13.652		
500.00	499.97	499.72	499.70	1.16	1.10	25.10	19.54	8.15	26.30	24.04	2.26	11.615		
600.00	599.96	599.67	599.64	1.43	1.33	25.53	20.56	8.52	28.33	25.57	2.76	10.267		
670.00	669.96	669.67	669.64	1.58	1.47	26.90	21.14	9.11	29.44	26.39	3.05	9.642		
700.00	699.96	699.67	699.63	1.61	1.50	27.90	21.32	9.47	29.85	26.74	3.11	9.585 SF		
800.00	799.96	799.64	799.60	1.63	1.52	31.03	21.93	10.67	31.28	28.12	3.16	9.911		
866.10	866.05	865.72	865.68	1.66	1.56	32.94	22.33	11.46	32.27	29.05	3.22	10.028		
894.10	894.05	893.69	893.64	1.68	1.57	33.75	22.43	11.92	32.66	29.41	3.25	10.048		
900.00	899.95	899.59	899.53	1.68	1.58	33.93	22.44	12.04	32.74	29.48	3.26	10.050		
966.10	966.05	965.56	965.47	1.73	1.63	37.29	22.10	14.20	33.71	30.36	3.36	10.048		
1,000.00	999.95	999.35	999.21	1.75	1.66	39.73	21.64	15.82	34.54	31.13	3.41	10.132		
1,100.00	1,099.90	1,098.75	1,098.35	1.84	1.78	47.30	19.18	22.60	39.85	36.24	3.62	11.019		
1,200.00	1,199.69	1,197.56	1,196.59	1.96	1.94	53.73	15.11	32.33	49.59	45.70	3.89	12.759		
1,300.00	1,299.20	1,295.56	1,293.61	2.11	2.14	58.19	9.46	44.91	63.65	59.43	4.22	15.072		
1,400.00	1,398.30	1,392.54	1,389.10	2.31	2.41	60.94	2.30	60.21	81.83	77.19	4.63	17.658		
1,500.00	1,496.87	1,488.31	1,482.79	2.56	2.73	62.50	-6.29	78.09	103.93	98.80	5.13	20.272		
1,600.00	1,594.79	1,582.67	1,574.40	2.88	3.12	63.28	-16.23	98.39	129.80	124.09	5.71	22.744		
1,700.00	1,691.95	1,675.47	1,663.72	3.25	3.56	63.54	-27.41	120.92	159.32	152.94	6.38	24.980		
1,800.00	1,788.23	1,766.56	1,750.56	3.70	4.06	63.46	-39.75	145.48	192.36	185.22	7.14	26.944		
1,900.00	1,883.50	1,857.52	1,836.45	4.21	4.61	63.22	-53.27	172.20	228.67	220.68	7.99	28.617		
1,932.71	1,914.42	1,887.80	1,864.99	4.39	4.81	63.08	-57.84	181.24	241.00	232.71	8.29	29.080		
2,000.00	1,977.92	1,950.04	1,923.65	4.78	5.21	62.77	-67.25	199.80	266.55	257.62	8.93	29.841		
2,100.00	2,072.28	2,042.53	2,010.81	5.38	5.82	62.39	-81.23	227.38	304.53	294.62	9.91	30.731		
2,200.00	2,166.65	2,135.02	2,097.98	5.98	6.43	62.10	-95.20	254.96	342.53	331.61	10.91	31.382		
2,300.00	2,261.01	2,227.50	2,185.14	6.60	7.06	61.87	-109.18	282.54	380.53	368.59	11.94	31.874		
2,400.00	2,355.37	2,319.99	2,272.31	7.23	7.69	61.68	-123.15	310.12	418.53	405.55	12.98	32.252		
2,500.00	2,449.73	2,412.48	2,359.47	7.86	8.32	61.52	-137.13	337.71	456.54	442.51	14.03	32.549		
2,600.00	2,544.09	2,504.96	2,446.64	8.50	8.96	61.39	-151.11	365.29	494.55	479.47	15.08	32.785		
2,700.00	2,638.45	2,597.45	2,533.80	9.14	9.60	61.27	-165.08	392.87	532.57	516.42	16.15	32.976		
2,800.00	2,732.81	2,689.94	2,620.97	9.78	10.25	61.17	-179.06	420.45	570.58	553.36	17.22	33.132		
2,900.00	2,827.18	2,782.42	2,708.13	10.43	10.89	61.08	-193.04	448.03	608.60	590.30	18.30	33.261		
3,000.00	2,921.54	2,874.91	2,795.29	11.08	11.54	61.01	-207.01	475.62	646.62	627.24	19.38	33.369		
3,100.00	3,015.90	2,967.40	2,882.46	11.73	12.19	60.94	-220.99	503.20	684.64	664.18	20.46	33.460		
3,200.00	3,110.26	3,059.88	2,969.62	12.38	12.84	60.88	-234.96	530.78	722.66	701.12	21.55	33.538		
3,300.00	3,204.62	3,152.37	3,056.79	13.03	13.48	60.82	-248.94	558.36	760.69	738.05	22.64	33.604		
3,400.00	3,298.98	3,244.86	3,143.95	13.68	14.14	60.77	-262.92	585.94	798.71	774.98	23.73	33.662		
3,500.00	3,393.35	3,337.34	3,231.12	14.34	14.79	60.73	-276.89	613.53	836.73	811.91	24.82	33.712		
3,600.00	3,487.71	3,429.83	3,318.28	14.99	15.44	60.69	-290.87	641.11	874.76	848.84	25.91	33.756		
3,700.00	3,582.07	3,522.32	3,405.45	15.65	16.09	60.65	-304.84	668.69	912.78	885.77	27.01	33.794		
3,800.00	3,676.43	3,614.80	3,492.61	16.30	16.74	60.61	-318.82	696.27	950.80	922.70	28.11	33.828		
3,900.00	3,770.79	3,707.29	3,579.78	16.96	17.40	60.58	-332.80	723.85	988.83	959.62	29.21	33.858		
4,000.00	3,865.15	3,799.78	3,666.94	17.62	18.05	60.55	-346.77	751.44	1,026.85	996.55	30.30	33.885		
4,100.00	3,959.51	3,892.26	3,754.11	18.27	18.70	60.53	-360.75	779.02	1,064.88	1,033.48	31.40	33.908		
4,200.00	4,053.88	3,984.75	3,841.27	18.93	19.36	60.50	-374.73	806.60	1,102.91	1,070.40	32.51	33.930		
4,300.00	4,148.24	4,077.24	3,928.44	19.59	20.01	60.48	-388.70	834.18	1,140.93	1,107.33	33.61	33.949		
4,400.00	4,242.60	4,169.72	4,015.60	20.25	20.67	60.45	-402.68	861.76	1,178.96	1,144.25	34.71	33.967		
4,500.00	4,336.96	4,262.21	4,102.77	20.91	21.32	60.43	-416.65	889.34	1,216.99	1,181.17	35.81	33.982		
4,600.00	4,431.32	4,354.70	4,189.93	21.56	21.98	60.41	-430.63	916.93	1,255.01	1,218.10	36.92	33.997		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 675-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,648.02	4,476.63	4,399.10	4,231.78	21.88	22.29	60.40	-437.34	930.17	1,273.27	1,235.82	37.45	34.003		
4,700.00	4,525.84	4,447.28	4,277.19	22.17	22.63	60.41	-444.62	944.54	1,292.80	1,254.75	38.05	33.978		
4,800.00	4,621.31	4,540.45	4,365.00	22.60	23.29	60.52	-458.70	972.32	1,329.01	1,289.91	39.11	33.986		
4,900.00	4,717.77	4,638.69	4,457.60	22.99	23.97	60.79	-473.53	1,001.58	1,363.40	1,323.26	40.14	33.964		
5,000.00	4,815.08	4,770.49	4,583.01	23.35	24.69	61.43	-491.82	1,037.69	1,394.42	1,353.25	41.17	33.873		
5,100.00	4,913.14	4,905.62	4,713.39	23.66	25.29	61.98	-507.85	1,069.33	1,420.97	1,378.91	42.06	33.788		
5,200.00	5,011.82	5,043.64	4,848.14	23.94	25.79	62.44	-521.34	1,095.95	1,442.91	1,400.08	42.83	33.693		
5,300.00	5,111.01	5,184.07	4,986.54	24.17	26.22	62.79	-532.04	1,117.05	1,460.10	1,416.62	43.48	33.581		
5,400.00	5,210.58	5,326.34	5,127.78	24.36	26.54	63.03	-539.74	1,132.25	1,472.46	1,428.45	44.00	33.462		
5,500.00	5,310.41	5,469.84	5,270.91	24.51	26.77	63.17	-544.28	1,141.21	1,479.89	1,435.50	44.40	33.333		
5,600.00	5,410.38	5,609.35	5,410.38	24.61	26.91	63.18	-545.59	1,143.81	1,482.38	1,437.71	44.67	33.186		
5,614.62	5,425.00	5,623.97	5,425.00	24.62	26.92	63.18	-545.59	1,143.81	1,482.40	1,437.71	44.70	33.166		
5,700.00	5,510.38	5,709.35	5,510.38	24.69	26.99	63.18	-545.59	1,143.81	1,482.40	1,437.55	44.85	33.051		
5,800.00	5,610.38	5,809.35	5,610.38	24.77	27.07	63.18	-545.59	1,143.81	1,482.40	1,437.38	45.03	32.923		
5,900.00	5,710.38	5,909.35	5,710.38	24.84	27.15	63.18	-545.59	1,143.81	1,482.40	1,437.20	45.20	32.794		
6,000.00	5,810.38	6,009.35	5,810.38	24.92	27.24	63.18	-545.59	1,143.81	1,482.40	1,437.02	45.39	32.663		
6,100.00	5,910.38	6,109.35	5,910.38	25.00	27.32	63.18	-545.59	1,143.81	1,482.40	1,436.83	45.57	32.530		
6,200.00	6,010.38	6,209.35	6,010.38	25.08	27.41	63.18	-545.59	1,143.81	1,482.40	1,436.64	45.76	32.396		
6,300.00	6,110.38	6,309.35	6,110.38	25.17	27.50	63.18	-545.59	1,143.81	1,482.40	1,436.45	45.95	32.260		
6,400.00	6,210.38	6,409.35	6,210.38	25.25	27.58	63.18	-545.59	1,143.81	1,482.40	1,436.25	46.15	32.123		
6,500.00	6,310.38	6,509.35	6,310.38	25.34	27.68	63.18	-545.59	1,143.81	1,482.40	1,436.06	46.35	31.985		
6,600.00	6,410.38	6,609.35	6,410.38	25.43	27.77	63.18	-545.59	1,143.81	1,482.40	1,435.85	46.55	31.845		
6,700.00	6,510.38	6,709.35	6,510.38	25.52	27.86	63.18	-545.59	1,143.81	1,482.40	1,435.65	46.76	31.705		
6,800.00	6,610.38	6,809.35	6,610.38	25.61	27.96	63.18	-545.59	1,143.81	1,482.40	1,435.44	46.97	31.563		
6,900.00	6,710.38	6,909.35	6,710.38	25.70	28.06	63.18	-545.59	1,143.81	1,482.40	1,435.22	47.18	31.420		
7,000.00	6,810.38	7,009.35	6,810.38	25.80	28.15	63.18	-545.59	1,143.81	1,482.40	1,435.01	47.40	31.277		
7,100.00	6,910.38	7,109.35	6,910.38	25.89	28.25	63.18	-545.59	1,143.81	1,482.40	1,434.79	47.62	31.132		
7,200.00	7,010.38	7,209.35	7,010.38	25.99	28.36	63.18	-545.59	1,143.81	1,482.40	1,434.56	47.84	30.987		
7,300.00	7,110.38	7,309.35	7,110.38	26.09	28.46	63.18	-545.59	1,143.81	1,482.40	1,434.34	48.07	30.842		
7,400.00	7,210.38	7,409.35	7,210.38	26.19	28.56	63.18	-545.59	1,143.81	1,482.40	1,434.11	48.29	30.695		
7,500.00	7,310.38	7,509.35	7,310.38	26.30	28.67	63.18	-545.59	1,143.81	1,482.40	1,433.88	48.53	30.548		
7,600.00	7,410.38	7,609.35	7,410.38	26.40	28.77	63.18	-545.59	1,143.81	1,482.40	1,433.64	48.76	30.401		
7,700.00	7,510.38	7,709.35	7,510.38	26.51	28.88	63.18	-545.59	1,143.81	1,482.40	1,433.40	49.00	30.253		
7,764.62	7,575.00	7,773.97	7,575.00	26.58	28.95	63.18	-545.59	1,143.81	1,482.40	1,433.25	49.16	30.157		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 678-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	21.75	24.04	9.59	25.89					
100.00	100.00	100.02	100.02	0.10	0.10	21.93	24.04	9.49	26.30	26.09	0.21	126.624		
200.00	199.99	200.00	200.00	0.37	0.36	22.21	24.08	9.28	27.26	26.53	0.73	37.257		
300.00	299.99	299.88	299.88	0.63	0.58	22.28	24.34	9.17	28.61	27.40	1.21	23.613		
400.00	399.98	399.86	399.86	0.90	0.77	22.40	24.72	9.25	30.25	28.59	1.66	18.200		
500.00	499.97	499.84	499.84	1.16	0.95	23.10	25.04	9.50	31.88	29.77	2.11	15.109		
600.00	599.96	599.84	599.83	1.43	1.14	24.11	25.32	9.88	33.22	30.65	2.56	12.961		
670.00	669.96	669.87	669.87	1.58	1.26	25.30	25.42	10.22	33.78	30.93	2.85	11.871		
700.00	699.96	699.87	699.87	1.61	1.30	26.05	25.42	10.40	33.93	31.03	2.91	11.671		
800.00	799.96	799.86	799.86	1.63	1.32	28.50	25.43	11.00	34.49	31.53	2.95	11.684		
866.10	866.05	865.95	865.95	1.66	1.36	30.07	25.44	11.39	34.89	31.86	3.02	11.545		
894.10	894.05	893.95	893.94	1.68	1.38	30.51	25.44	11.55	35.02	31.96	3.05	11.467		
900.00	899.95	899.85	899.84	1.68	1.38	30.56	25.45	11.59	35.03	31.97	3.06	11.447		
966.10	966.05	965.95	965.94	1.73	1.44	31.10	25.45	11.98	35.24	32.08	3.16	11.139		
1,000.00	999.95	999.78	999.76	1.75	1.47	31.34	25.44	12.24	35.55	32.33	3.22	11.031 SF		
1,100.00	1,099.90	1,099.25	1,099.19	1.84	1.59	33.65	24.94	15.14	39.36	35.93	3.43	11.460		
1,200.00	1,199.69	1,198.26	1,197.99	1.96	1.74	37.40	23.70	21.37	47.70	44.00	3.70	12.888		
1,300.00	1,299.20	1,296.50	1,295.75	2.11	1.92	41.07	21.74	30.85	60.71	56.69	4.02	15.097		
1,400.00	1,398.30	1,393.66	1,392.05	2.31	2.14	43.98	19.08	43.43	78.44	74.04	4.40	17.824		
1,500.00	1,496.87	1,489.43	1,486.49	2.56	2.41	46.05	15.77	58.95	100.81	95.97	4.84	20.812		
1,600.00	1,594.79	1,583.55	1,578.74	2.88	2.72	47.43	11.85	77.19	127.71	122.35	5.35	23.850		
1,700.00	1,691.95	1,675.77	1,668.49	3.25	3.08	48.28	7.37	97.92	158.99	153.06	5.94	26.786		
1,800.00	1,788.23	1,765.88	1,755.47	3.70	3.50	48.75	2.39	120.89	194.53	187.94	6.59	29.527		
1,900.00	1,883.50	1,853.67	1,839.46	4.21	3.95	48.94	-3.03	145.83	234.15	226.85	7.31	32.036		
1,932.71	1,914.42	1,881.88	1,866.28	4.39	4.10	48.95	-4.88	154.38	247.98	240.42	7.56	32.812		
2,000.00	1,977.92	1,942.66	1,923.98	4.78	4.46	49.12	-8.95	173.06	276.84	268.73	8.11	34.124		
2,100.00	2,072.28	2,032.99	2,009.72	5.38	5.00	49.30	-14.99	200.82	319.74	310.78	8.96	35.674		
2,200.00	2,166.65	2,123.31	2,095.46	5.98	5.55	49.45	-21.04	228.57	362.65	352.81	9.84	36.872		
2,300.00	2,261.01	2,213.64	2,181.21	6.60	6.12	49.56	-27.08	256.33	405.55	394.82	10.73	37.804		
2,400.00	2,355.37	2,303.96	2,266.95	7.23	6.69	49.65	-33.12	284.09	448.46	436.82	11.64	38.540		
2,500.00	2,449.73	2,394.29	2,352.69	7.86	7.26	49.73	-39.17	311.85	491.36	478.81	12.56	39.130		
2,600.00	2,544.09	2,484.61	2,438.43	8.50	7.84	49.79	-45.21	339.61	534.27	520.78	13.49	39.612		
2,700.00	2,638.45	2,574.94	2,524.17	9.14	8.43	49.85	-51.25	367.37	577.18	562.75	14.43	40.010		
2,800.00	2,732.81	2,665.26	2,609.91	9.78	9.01	49.89	-57.30	395.13	620.09	604.71	15.37	40.343		
2,900.00	2,827.18	2,755.59	2,695.65	10.43	9.60	49.93	-63.34	422.89	662.99	646.67	16.32	40.624		
3,000.00	2,921.54	2,845.91	2,781.39	11.08	10.19	49.97	-69.38	450.65	705.90	688.63	17.27	40.865		
3,100.00	3,015.90	2,936.24	2,867.14	11.73	10.78	50.00	-75.42	478.41	748.81	730.58	18.23	41.071		
3,200.00	3,110.26	3,026.56	2,952.88	12.38	11.37	50.03	-81.47	506.17	791.72	772.53	19.19	41.250		
3,300.00	3,204.62	3,116.89	3,038.62	13.03	11.97	50.05	-87.51	533.93	834.63	814.47	20.16	41.407		
3,400.00	3,298.98	3,207.22	3,124.36	13.68	12.56	50.08	-93.55	561.69	877.54	856.42	21.12	41.545		
3,500.00	3,393.35	3,297.54	3,210.10	14.34	13.16	50.10	-99.60	589.45	920.45	898.36	22.09	41.666		
3,600.00	3,487.71	3,387.87	3,295.84	14.99	13.75	50.12	-105.64	617.21	963.36	940.30	23.06	41.774		
3,700.00	3,582.07	3,478.19	3,381.58	15.65	14.35	50.13	-111.68	644.96	1,006.27	982.24	24.03	41.871		
3,800.00	3,676.43	3,568.52	3,467.32	16.30	14.95	50.15	-117.73	672.72	1,049.18	1,024.17	25.01	41.957		
3,900.00	3,770.79	3,658.84	3,553.06	16.96	15.54	50.16	-123.77	700.48	1,092.09	1,066.11	25.98	42.036		
4,000.00	3,865.15	3,749.17	3,638.81	17.62	16.14	50.18	-129.81	728.24	1,135.00	1,108.04	26.96	42.106		
4,100.00	3,959.51	3,839.49	3,724.55	18.27	16.74	50.19	-135.85	756.00	1,177.91	1,149.98	27.93	42.171		
4,200.00	4,053.88	3,929.82	3,810.29	18.93	17.34	50.20	-141.90	783.76	1,220.82	1,191.91	28.91	42.229		
4,300.00	4,148.24	4,020.14	3,896.03	19.59	17.94	50.21	-147.94	811.52	1,263.73	1,233.84	29.89	42.283		
4,400.00	4,242.60	4,110.47	3,981.77	20.25	18.54	50.22	-153.98	839.28	1,306.64	1,275.77	30.87	42.332		
4,500.00	4,336.96	4,200.79	4,067.51	20.91	19.14	50.23	-160.03	867.04	1,349.55	1,317.70	31.85	42.377		
4,600.00	4,431.32	4,291.12	4,153.25	21.56	19.74	50.24	-166.07	894.80	1,392.46	1,359.63	32.83	42.418		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 678-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,648.02	4,476.63	4,334.49	4,194.42	21.88	20.02	50.24	-168.97	908.13	1,413.06	1,379.77	33.30	42.437		
4,700.00	4,525.84	4,381.58	4,239.12	22.17	20.34	50.26	-172.12	922.60	1,435.08	1,401.23	33.84	42.402		
4,800.00	4,621.31	4,472.88	4,325.79	22.60	20.94	50.37	-178.23	950.66	1,475.76	1,440.94	34.81	42.391		
4,900.00	4,717.77	4,565.04	4,413.28	22.99	21.56	50.56	-184.40	978.98	1,514.21	1,478.46	35.76	42.347		
5,000.00	4,815.08	4,673.41	4,516.25	23.35	22.24	50.98	-191.58	1,011.97	1,550.28	1,513.56	36.72	42.220		
5,100.00	4,913.14	4,819.61	4,656.78	23.66	22.93	51.64	-200.14	1,051.29	1,581.74	1,544.09	37.65	42.011		
5,200.00	5,011.82	4,970.42	4,803.70	23.94	23.51	52.19	-207.36	1,084.47	1,607.67	1,569.21	38.46	41.804		
5,300.00	5,111.01	5,125.05	4,955.99	24.17	23.99	52.60	-213.05	1,110.59	1,627.86	1,588.72	39.14	41.589		
5,400.00	5,210.58	5,282.60	5,112.40	24.36	24.35	52.87	-217.03	1,128.91	1,642.13	1,602.44	39.69	41.371		
5,500.00	5,310.41	5,442.04	5,271.50	24.51	24.60	53.00	-219.20	1,138.86	1,650.36	1,610.26	40.10	41.154		
5,600.00	5,410.38	5,580.95	5,410.38	24.61	24.74	53.00	-219.60	1,140.69	1,652.72	1,612.35	40.37	40.938		
5,614.62	5,425.00	5,595.57	5,425.00	24.62	24.75	52.99	-219.60	1,140.69	1,652.75	1,612.35	40.40	40.909		
5,700.00	5,510.38	5,680.95	5,510.38	24.69	24.82	52.99	-219.60	1,140.69	1,652.75	1,612.18	40.58	40.733		
5,800.00	5,610.38	5,780.95	5,610.38	24.77	24.91	52.99	-219.60	1,140.69	1,652.75	1,611.98	40.77	40.537		
5,900.00	5,710.38	5,880.95	5,710.38	24.84	25.01	52.99	-219.60	1,140.69	1,652.75	1,611.78	40.97	40.339		
6,000.00	5,810.38	5,980.95	5,810.38	24.92	25.10	52.99	-219.60	1,140.69	1,652.75	1,611.57	41.18	40.139		
6,100.00	5,910.38	6,080.95	5,910.38	25.00	25.19	52.99	-219.60	1,140.69	1,652.75	1,611.37	41.38	39.937		
6,200.00	6,010.38	6,180.95	6,010.38	25.08	25.29	52.99	-219.60	1,140.69	1,652.75	1,611.15	41.60	39.734		
6,300.00	6,110.38	6,280.95	6,110.38	25.17	25.39	52.99	-219.60	1,140.69	1,652.75	1,610.94	41.81	39.529		
6,400.00	6,210.38	6,380.95	6,210.38	25.25	25.49	52.99	-219.60	1,140.69	1,652.75	1,610.72	42.03	39.323		
6,500.00	6,310.38	6,480.95	6,310.38	25.34	25.59	52.99	-219.60	1,140.69	1,652.75	1,610.50	42.25	39.116		
6,600.00	6,410.38	6,580.95	6,410.38	25.43	25.69	52.99	-219.60	1,140.69	1,652.75	1,610.27	42.48	38.907		
6,700.00	6,510.38	6,680.95	6,510.38	25.52	25.79	52.99	-219.60	1,140.69	1,652.75	1,610.04	42.71	38.697		
6,800.00	6,610.38	6,780.95	6,610.38	25.61	25.90	52.99	-219.60	1,140.69	1,652.75	1,609.81	42.94	38.487		
6,900.00	6,710.38	6,880.95	6,710.38	25.70	26.01	52.99	-219.60	1,140.69	1,652.75	1,609.57	43.18	38.276		
7,000.00	6,810.38	6,980.95	6,810.38	25.80	26.12	52.99	-219.60	1,140.69	1,652.75	1,609.33	43.42	38.064		
7,100.00	6,910.38	7,080.95	6,910.38	25.89	26.23	52.99	-219.60	1,140.69	1,652.75	1,609.09	43.66	37.852		
7,200.00	7,010.38	7,180.95	7,010.38	25.99	26.34	52.99	-219.60	1,140.69	1,652.75	1,608.84	43.91	37.639		
7,300.00	7,110.38	7,280.95	7,110.38	26.09	26.45	52.99	-219.60	1,140.69	1,652.75	1,608.59	44.16	37.426		
7,400.00	7,210.38	7,380.95	7,210.38	26.19	26.56	52.99	-219.60	1,140.69	1,652.75	1,608.34	44.41	37.212		
7,500.00	7,310.38	7,480.95	7,310.38	26.30	26.68	52.99	-219.60	1,140.69	1,652.75	1,608.08	44.67	36.999		
7,600.00	7,410.38	7,580.95	7,410.38	26.40	26.80	52.99	-219.60	1,140.69	1,652.75	1,607.82	44.93	36.785		
7,700.00	7,510.38	7,680.95	7,510.38	26.51	26.92	52.99	-219.60	1,140.69	1,652.75	1,607.56	45.19	36.572		
7,764.62	7,575.00	7,745.57	7,575.00	26.58	26.99	52.99	-219.60	1,140.69	1,652.75	1,607.39	45.36	36.434		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Sec.23-T6S-R92W - Epperly 23D-23-692 - Wellbore #1 - Design #1		Offset Site Error:		0.00 usft
Survey Program:		100-NS-GYRO-MS, 700-MWD											Offset Well Error:		0.00 usft		
Reference		Offset		Semi Major Axis		Distance								Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor					
							+N/-S (usft)	+E/-W (usft)									
0.00	0.00	0.00	0.00	0.00	0.00	16.19	32.06	9.31	33.38								
100.00	100.00	99.84	99.84	0.10	0.10	15.79	32.41	8.93	34.05	33.84	0.21	163.376					
200.00	199.99	199.67	199.67	0.37	0.35	15.60	33.22	8.58	35.70	34.98	0.72	49.562					
300.00	299.99	299.72	299.71	0.63	0.58	16.21	34.01	8.83	37.65	36.43	1.21	30.999					
400.00	399.98	399.66	399.65	0.90	0.81	17.14	34.65	9.40	39.67	37.96	1.71	23.229					
500.00	499.97	499.60	499.58	1.16	1.05	18.31	35.35	10.10	41.74	39.53	2.21	18.850					
600.00	599.96	599.65	599.63	1.43	1.30	19.44	36.01	10.79	43.49	40.76	2.73	15.938					
670.00	669.96	669.74	669.71	1.58	1.47	20.52	36.32	11.30	44.25	41.20	3.05	14.508					
700.00	699.96	699.77	699.75	1.61	1.54	21.16	36.39	11.55	44.45	41.30	3.15	14.117					
800.00	799.96	799.76	799.73	1.63	1.65	23.33	36.57	12.42	45.14	41.85	3.28	13.744					
866.10	866.05	865.84	865.81	1.66	1.67	24.73	36.69	13.00	45.63	42.29	3.33	13.684					
894.10	894.05	893.84	893.81	1.68	1.68	25.15	36.74	13.24	45.81	42.45	3.36	13.641					
900.00	899.95	899.71	899.67	1.68	1.68	25.20	36.75	13.29	45.84	42.48	3.36	13.628					
966.10	966.05	965.28	965.22	1.73	1.72	26.70	36.92	14.72	46.62	43.17	3.45	13.525 SF					
1,000.00	999.95	998.87	998.79	1.75	1.74	27.97	37.04	16.03	47.53	44.03	3.49	13.603					
1,100.00	1,099.90	1,097.62	1,097.35	1.84	1.83	32.44	37.53	22.15	53.79	50.11	3.68	14.623					
1,200.00	1,199.69	1,195.56	1,194.82	1.96	1.96	36.78	38.20	31.57	65.56	61.64	3.92	16.718					
1,300.00	1,299.20	1,292.27	1,290.71	2.11	2.14	40.12	39.05	44.13	82.84	78.62	4.22	19.622					
1,400.00	1,398.30	1,387.38	1,384.54	2.31	2.36	42.38	40.07	59.62	105.49	100.91	4.58	23.038					
1,500.00	1,496.87	1,480.54	1,475.89	2.56	2.64	43.76	41.24	77.81	133.30	128.31	4.99	26.692					
1,600.00	1,594.79	1,571.43	1,564.40	2.88	2.97	44.53	42.55	98.39	166.10	160.63	5.47	30.386					
1,700.00	1,691.95	1,659.78	1,649.78	3.25	3.35	44.86	43.98	121.09	203.67	197.68	6.00	33.968					
1,800.00	1,788.23	1,746.35	1,732.73	3.70	3.77	44.93	45.52	145.82	245.80	239.22	6.58	37.328					
1,900.00	1,883.50	1,835.54	1,817.93	4.21	4.25	44.78	47.15	172.14	291.00	283.78	7.22	40.285					
1,932.71	1,914.42	1,864.45	1,845.54	4.39	4.40	44.65	47.68	180.67	306.30	298.86	7.44	41.162					
2,000.00	1,977.92	1,923.77	1,902.21	4.78	4.73	44.38	48.77	198.18	338.03	330.11	7.92	42.701					
2,100.00	2,072.28	2,011.93	1,986.42	5.38	5.23	44.06	50.39	224.20	385.19	376.54	8.65	44.520					
2,200.00	2,166.65	2,100.09	2,070.64	5.98	5.74	43.81	52.01	250.22	432.36	422.95	9.41	45.967					
2,300.00	2,261.01	2,188.24	2,154.85	6.60	6.26	43.61	53.62	276.24	479.54	469.36	10.18	47.114					
2,400.00	2,355.37	2,276.40	2,239.07	7.23	6.78	43.44	55.24	302.26	526.72	515.76	10.96	48.043					
2,500.00	2,449.73	2,364.56	2,323.28	7.86	7.31	43.30	56.86	328.28	573.91	562.15	11.76	48.804					
2,600.00	2,544.09	2,452.71	2,407.50	8.50	7.83	43.19	58.47	354.30	621.09	608.53	12.56	49.434					
2,700.00	2,638.45	2,540.87	2,491.71	9.14	8.37	43.08	60.09	380.32	668.29	654.91	13.38	49.963					
2,800.00	2,732.81	2,629.03	2,575.93	9.78	8.90	43.00	61.71	406.34	715.48	701.29	14.19	50.410					
2,900.00	2,827.18	2,717.19	2,660.14	10.43	9.44	42.92	63.32	432.36	762.67	747.66	15.02	50.792					
3,000.00	2,921.54	2,805.34	2,744.36	11.08	9.97	42.85	64.94	458.38	809.87	794.03	15.84	51.120					
3,100.00	3,015.90	2,893.50	2,828.57	11.73	10.51	42.79	66.56	484.40	857.06	840.39	16.67	51.405					
3,200.00	3,110.26	2,981.66	2,912.79	12.38	11.05	42.74	68.17	510.41	904.26	886.76	17.51	51.653					
3,300.00	3,204.62	3,069.82	2,997.00	13.03	11.59	42.69	69.79	536.43	951.46	933.12	18.34	51.871					
3,400.00	3,298.98	3,157.97	3,081.21	13.68	12.13	42.65	71.41	562.45	998.66	979.48	19.18	52.064					
3,500.00	3,393.35	3,246.13	3,165.43	14.34	12.68	42.61	73.02	588.47	1,045.86	1,025.84	20.02	52.235					
3,600.00	3,487.71	3,334.29	3,249.64	14.99	13.22	42.57	74.64	614.49	1,093.06	1,072.19	20.86	52.388					
3,700.00	3,582.07	3,422.45	3,333.86	15.65	13.76	42.54	76.26	640.51	1,140.26	1,118.55	21.71	52.525					
3,800.00	3,676.43	3,510.60	3,418.07	16.30	14.31	42.51	77.87	666.53	1,187.46	1,164.90	22.55	52.649					
3,900.00	3,770.79	3,598.76	3,502.29	16.96	14.85	42.48	79.49	692.55	1,234.66	1,211.26	23.40	52.761					
4,000.00	3,865.15	3,686.92	3,586.50	17.62	15.39	42.45	81.11	718.57	1,281.86	1,257.61	24.25	52.862					
4,100.00	3,959.51	3,775.08	3,670.72	18.27	15.94	42.43	82.72	744.59	1,329.06	1,303.96	25.10	52.954					
4,200.00	4,053.88	3,863.23	3,754.93	18.93	16.48	42.40	84.34	770.61	1,376.26	1,350.31	25.95	53.038					
4,300.00	4,148.24	3,951.39	3,839.15	19.59	17.03	42.38	85.96	796.63	1,423.46	1,396.66	26.80	53.115					
4,400.00	4,242.60	4,039.55	3,923.36	20.25	17.58	42.36	87.57	822.65	1,470.67	1,443.01	27.65	53.186					
4,500.00	4,336.96	4,127.71	4,007.58	20.91	18.12	42.34	89.19	848.67	1,517.87	1,489.36	28.50	53.251					
4,600.00	4,431.32	4,215.86	4,091.79	21.56	18.67	42.33	90.81	874.69	1,565.07	1,535.71	29.36	53.311					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 700-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,648.02	4,476.63	4,258.19	4,132.23	21.88	18.93	42.32	91.58	887.18	1,587.73	1,557.97	29.77	53.339		
4,700.00	4,525.84	4,304.19	4,176.17	22.17	19.22	42.32	92.43	900.76	1,611.95	1,581.68	30.26	53.268		
4,800.00	4,621.31	4,393.62	4,261.59	22.60	19.77	42.38	94.07	927.15	1,656.66	1,625.52	31.14	53.202		
4,900.00	4,717.77	4,484.18	4,348.10	22.99	20.33	42.51	95.73	953.88	1,698.89	1,666.89	32.00	53.098		
5,000.00	4,815.08	4,575.76	4,435.59	23.35	20.90	42.71	97.41	980.91	1,738.60	1,705.77	32.82	52.968		
5,100.00	4,913.14	4,668.26	4,523.96	23.66	21.47	42.97	99.10	1,008.21	1,775.75	1,742.13	33.62	52.819		
5,200.00	5,011.82	4,840.73	4,690.08	23.94	22.26	43.69	101.97	1,054.37	1,808.39	1,773.85	34.54	52.362		
5,300.00	5,111.01	5,024.12	4,869.43	24.17	22.93	44.28	104.34	1,092.41	1,833.92	1,798.60	35.33	51.911		
5,400.00	5,210.58	5,213.36	5,056.67	24.36	23.44	44.67	106.03	1,119.58	1,852.02	1,816.04	35.98	51.479		
5,500.00	5,310.41	5,406.50	5,249.19	24.51	23.78	44.88	106.95	1,134.53	1,862.42	1,825.95	36.47	51.073		
5,600.00	5,410.38	5,567.73	5,410.38	24.61	23.95	44.89	107.13	1,137.29	1,865.28	1,828.51	36.77	50.726		
5,614.62	5,425.00	5,582.35	5,425.00	24.62	23.96	44.89	107.13	1,137.29	1,865.31	1,828.51	36.80	50.684		
5,700.00	5,510.38	5,667.73	5,510.38	24.69	24.04	44.89	107.13	1,137.29	1,865.31	1,828.32	36.99	50.421		
5,800.00	5,610.38	5,767.73	5,610.38	24.77	24.13	44.89	107.13	1,137.29	1,865.31	1,828.10	37.21	50.126		
5,900.00	5,710.38	5,867.73	5,710.38	24.84	24.22	44.89	107.13	1,137.29	1,865.31	1,827.88	37.43	49.830		
6,000.00	5,810.38	5,967.73	5,810.38	24.92	24.32	44.89	107.13	1,137.29	1,865.31	1,827.65	37.66	49.531		
6,100.00	5,910.38	6,067.73	5,910.38	25.00	24.42	44.89	107.13	1,137.29	1,865.31	1,827.43	37.89	49.231		
6,200.00	6,010.38	6,167.73	6,010.38	25.08	24.52	44.89	107.13	1,137.29	1,865.31	1,827.19	38.12	48.929		
6,300.00	6,110.38	6,267.73	6,110.38	25.17	24.62	44.89	107.13	1,137.29	1,865.31	1,826.95	38.36	48.627		
6,400.00	6,210.38	6,367.73	6,210.38	25.25	24.73	44.89	107.13	1,137.29	1,865.31	1,826.71	38.60	48.323		
6,500.00	6,310.38	6,467.73	6,310.38	25.34	24.83	44.89	107.13	1,137.29	1,865.31	1,826.47	38.85	48.018		
6,600.00	6,410.38	6,567.73	6,410.38	25.43	24.94	44.89	107.13	1,137.29	1,865.31	1,826.22	39.09	47.713		
6,700.00	6,510.38	6,667.73	6,510.38	25.52	25.05	44.89	107.13	1,137.29	1,865.31	1,825.97	39.35	47.408		
6,800.00	6,610.38	6,767.73	6,610.38	25.61	25.16	44.89	107.13	1,137.29	1,865.31	1,825.71	39.60	47.102		
6,900.00	6,710.38	6,867.73	6,710.38	25.70	25.27	44.89	107.13	1,137.29	1,865.31	1,825.45	39.86	46.796		
7,000.00	6,810.38	6,967.73	6,810.38	25.80	25.38	44.89	107.13	1,137.29	1,865.31	1,825.19	40.12	46.490		
7,100.00	6,910.38	7,067.73	6,910.38	25.89	25.49	44.89	107.13	1,137.29	1,865.31	1,824.93	40.39	46.184		
7,200.00	7,010.38	7,167.73	7,010.38	25.99	25.61	44.89	107.13	1,137.29	1,865.31	1,824.66	40.66	45.879		
7,300.00	7,110.38	7,267.73	7,110.38	26.09	25.73	44.89	107.13	1,137.29	1,865.31	1,824.38	40.93	45.574		
7,400.00	7,210.38	7,367.73	7,210.38	26.19	25.84	44.89	107.13	1,137.29	1,865.31	1,824.11	41.20	45.269		
7,500.00	7,310.38	7,467.73	7,310.38	26.30	25.96	44.89	107.13	1,137.29	1,865.31	1,823.83	41.48	44.966		
7,600.00	7,410.38	7,567.73	7,410.38	26.40	26.09	44.89	107.13	1,137.29	1,865.31	1,823.55	41.76	44.663		
7,700.00	7,510.38	7,667.73	7,510.38	26.51	26.21	44.89	107.13	1,137.29	1,865.31	1,823.27	42.05	44.361		
7,764.62	7,575.00	7,732.35	7,575.00	26.58	26.29	44.89	107.13	1,137.29	1,865.31	1,823.08	42.23	44.167		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 679-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	128.26	-8.01	10.16	12.93					
100.00	100.00	100.07	100.07	0.10	0.10	127.14	-8.02	9.79	12.70	12.49	0.21	61.204		
200.00	199.99	200.06	200.05	0.37	0.37	123.78	-7.97	9.17	12.26	11.53	0.74	16.657		
300.00	299.99	300.07	300.06	0.63	0.63	118.76	-7.79	8.62	11.74	10.48	1.26	9.298		
400.00	399.98	400.03	400.02	0.90	0.89	112.29	-7.53	8.16	11.29	9.50	1.78	6.332		
462.46	462.44	462.49	462.48	1.06	1.04	107.88	-7.36	7.96	11.21	9.10	2.11	5.318 CC		
500.00	499.97	500.02	500.02	1.16	1.14	105.37	-7.25	7.82	11.23	8.93	2.30	4.879		
600.00	599.96	600.02	600.01	1.43	1.40	100.05	-6.98	7.45	11.32	8.49	2.83	4.003		
670.00	669.96	670.06	670.05	1.58	1.57	99.39	-6.98	7.03	11.39	8.24	3.16	3.611		
700.00	699.96	700.07	700.05	1.61	1.62	100.15	-7.08	6.76	11.44	8.21	3.23	3.542 ES		
800.00	799.96	800.06	800.05	1.63	1.64	102.72	-7.43	5.87	11.61	8.34	3.27	3.552		
866.10	866.05	866.13	866.12	1.66	1.67	104.41	-7.67	5.28	11.74	8.42	3.33	3.529 SF		
894.10	894.05	894.00	893.98	1.68	1.68	106.10	-8.02	5.20	11.89	8.53	3.36	3.540		
900.00	899.95	899.87	899.85	1.68	1.68	106.63	-8.14	5.21	11.93	8.57	3.36	3.546		
966.10	966.05	965.58	965.51	1.73	1.73	115.25	-10.48	5.98	13.51	10.05	3.46	3.909		
1,000.00	999.95	999.20	999.06	1.75	1.76	119.76	-12.41	6.85	15.12	11.62	3.51	4.313		
1,100.00	1,099.90	1,098.03	1,097.41	1.84	1.87	126.25	-20.97	11.26	22.37	18.67	3.70	6.042		
1,200.00	1,199.69	1,196.15	1,194.44	1.96	2.03	126.93	-33.67	18.37	32.88	28.92	3.96	8.306		
1,300.00	1,299.20	1,293.34	1,289.67	2.11	2.28	125.48	-50.36	28.06	46.47	42.19	4.28	10.851		
1,400.00	1,398.30	1,389.38	1,382.71	2.31	2.62	123.37	-70.84	40.21	63.12	58.43	4.69	13.457		
1,500.00	1,496.87	1,484.10	1,473.17	2.56	3.06	121.13	-94.84	54.68	82.81	77.61	5.20	15.937		
1,600.00	1,594.79	1,577.32	1,560.75	2.88	3.60	118.91	-122.12	71.28	105.47	99.66	5.81	18.157		
1,700.00	1,691.95	1,668.91	1,645.17	3.25	4.23	116.76	-152.37	89.83	131.03	124.49	6.53	20.051		
1,800.00	1,788.23	1,758.76	1,726.24	3.70	4.94	114.67	-185.32	110.16	159.39	152.02	7.37	21.613		
1,900.00	1,883.50	1,846.77	1,803.81	4.21	5.73	112.64	-220.65	132.06	190.44	182.12	8.32	22.878		
1,932.71	1,914.42	1,875.14	1,828.40	4.39	5.99	111.98	-232.68	139.54	201.16	192.51	8.65	23.246		
2,000.00	1,977.92	1,933.90	1,878.65	4.78	6.58	110.93	-258.52	155.63	224.30	214.92	9.39	23.893		
2,100.00	2,072.28	2,027.46	1,958.20	5.38	7.55	110.30	-300.32	181.68	259.51	248.97	10.54	24.632		
2,200.00	2,166.65	2,121.03	2,037.75	5.98	8.53	109.83	-342.12	207.74	294.73	283.02	11.71	25.163		
2,300.00	2,261.01	2,214.59	2,117.30	6.60	9.53	109.45	-383.92	233.79	329.98	317.06	12.92	25.549		
2,400.00	2,355.37	2,308.16	2,196.85	7.23	10.53	109.15	-425.72	259.84	365.23	351.09	14.14	25.837		
2,500.00	2,449.73	2,401.72	2,276.41	7.86	11.54	108.91	-467.52	285.89	400.48	385.12	15.37	26.056		
2,600.00	2,544.09	2,495.29	2,355.96	8.50	12.55	108.70	-509.32	311.94	435.75	419.13	16.62	26.226		
2,700.00	2,638.45	2,588.85	2,435.51	9.14	13.57	108.52	-551.12	338.00	471.02	453.15	17.87	26.359		
2,800.00	2,732.81	2,682.42	2,515.06	9.78	14.59	108.37	-592.92	364.05	506.29	487.16	19.13	26.465		
2,900.00	2,827.18	2,775.98	2,594.61	10.43	15.61	108.24	-634.72	390.10	541.56	521.17	20.40	26.552		
3,000.00	2,921.54	2,869.55	2,674.16	11.08	16.63	108.13	-676.52	416.15	576.84	555.17	21.67	26.622		
3,100.00	3,015.90	2,963.11	2,753.71	11.73	17.65	108.03	-718.32	442.20	612.12	589.18	22.94	26.680		
3,200.00	3,110.26	3,056.68	2,833.27	12.38	18.67	107.93	-760.12	468.26	647.40	623.18	24.22	26.729		
3,300.00	3,204.62	3,150.24	2,912.82	13.03	19.70	107.85	-801.92	494.31	682.68	657.18	25.50	26.770		
3,400.00	3,298.98	3,243.81	2,992.37	13.68	20.72	107.78	-843.72	520.36	717.97	691.18	26.79	26.805		
3,500.00	3,393.35	3,337.37	3,071.92	14.34	21.75	107.71	-885.52	546.41	753.25	725.18	28.07	26.834		
3,600.00	3,487.71	3,430.94	3,151.47	14.99	22.77	107.65	-927.32	572.46	788.53	759.18	29.36	26.860		
3,700.00	3,582.07	3,524.50	3,231.02	15.65	23.80	107.60	-969.12	598.52	823.82	793.17	30.65	26.881		
3,800.00	3,676.43	3,618.06	3,310.57	16.30	24.83	107.55	-1,010.92	624.57	859.11	827.17	31.94	26.900		
3,900.00	3,770.79	3,711.63	3,390.13	16.96	25.86	107.50	-1,052.72	650.62	894.39	861.17	33.23	26.917		
4,000.00	3,865.15	3,805.19	3,469.68	17.62	26.88	107.46	-1,094.52	676.67	929.68	895.16	34.52	26.931		
4,100.00	3,959.51	3,898.76	3,549.23	18.27	27.91	107.42	-1,136.32	702.72	964.97	929.15	35.81	26.944		
4,200.00	4,053.88	3,992.32	3,628.78	18.93	28.94	107.38	-1,178.12	728.78	1,000.26	963.15	37.11	26.955		
4,300.00	4,148.24	4,085.89	3,708.33	19.59	29.97	107.35	-1,219.92	754.83	1,035.55	997.14	38.40	26.965		
4,400.00	4,242.60	4,179.45	3,787.88	20.25	31.00	107.31	-1,261.72	780.88	1,070.83	1,031.13	39.70	26.974		
4,500.00	4,336.96	4,273.02	3,867.43	20.91	32.03	107.28	-1,303.52	806.93	1,106.12	1,065.13	41.00	26.981		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 679-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,600.00	4,431.32	4,366.58	3,946.99	21.56	33.06	107.26	-1,345.32	832.98	1,141.41	1,099.12	42.29	26.988		
4,648.02	4,476.63	4,411.51	3,985.18	21.88	33.55	107.24	-1,365.39	845.49	1,158.36	1,115.44	42.92	26.991		
4,700.00	4,525.84	4,460.10	4,026.50	22.17	34.09	107.25	-1,387.10	859.02	1,176.83	1,133.19	43.65	26.963		
4,800.00	4,621.31	4,553.25	4,105.69	22.60	35.11	107.39	-1,428.71	884.96	1,213.08	1,168.18	44.90	27.018		
4,900.00	4,717.77	4,645.88	4,184.45	22.99	36.13	107.68	-1,470.09	910.75	1,250.25	1,204.18	46.07	27.136		
5,000.00	4,815.08	4,737.88	4,262.68	23.35	37.15	108.11	-1,511.20	936.37	1,288.35	1,241.18	47.17	27.314		
5,100.00	4,913.14	4,829.14	4,340.27	23.66	38.15	108.67	-1,551.97	961.78	1,327.39	1,279.21	48.18	27.550		
5,200.00	5,011.82	4,919.55	4,417.13	23.94	39.15	109.33	-1,592.36	986.95	1,367.40	1,318.29	49.11	27.842		
5,300.00	5,111.01	5,053.14	4,531.41	24.17	40.44	110.71	-1,651.05	1,023.53	1,408.00	1,358.01	49.99	28.168		
5,400.00	5,210.58	5,299.70	4,753.04	24.36	42.23	113.07	-1,742.42	1,080.48	1,442.39	1,391.63	50.76	28.414		
5,500.00	5,310.41	5,567.80	5,007.53	24.51	43.59	114.76	-1,813.39	1,124.71	1,467.15	1,415.80	51.35	28.572		
5,600.00	5,410.38	5,851.88	5,287.12	24.61	44.41	115.72	-1,854.83	1,150.54	1,481.06	1,429.34	51.71	28.640		
5,614.62	5,425.00	5,894.28	5,329.35	24.62	44.48	115.79	-1,857.97	1,152.49	1,482.12	1,430.37	51.75	28.640		
5,700.00	5,510.38	6,075.45	5,510.38	24.69	44.64	115.91	-1,862.69	1,155.44	1,483.74	1,431.81	51.93	28.574		
5,800.00	5,610.38	6,175.45	5,610.38	24.77	44.68	115.91	-1,862.69	1,155.44	1,483.74	1,431.67	52.07	28.497		
5,900.00	5,710.38	6,275.45	5,710.38	24.84	44.73	115.91	-1,862.69	1,155.44	1,483.74	1,431.53	52.21	28.419		
6,000.00	5,810.38	6,375.45	5,810.38	24.92	44.77	115.91	-1,862.69	1,155.44	1,483.74	1,431.38	52.36	28.340		
6,100.00	5,910.38	6,475.45	5,910.38	25.00	44.82	115.91	-1,862.69	1,155.44	1,483.74	1,431.24	52.50	28.259		
6,200.00	6,010.38	6,575.45	6,010.38	25.08	44.86	115.91	-1,862.69	1,155.44	1,483.74	1,431.08	52.66	28.177		
6,300.00	6,110.38	6,675.45	6,110.38	25.17	44.91	115.91	-1,862.69	1,155.44	1,483.74	1,430.93	52.81	28.094		
6,400.00	6,210.38	6,775.45	6,210.38	25.25	44.96	115.91	-1,862.69	1,155.44	1,483.74	1,430.77	52.97	28.009		
6,500.00	6,310.38	6,875.45	6,310.38	25.34	45.01	115.91	-1,862.69	1,155.44	1,483.74	1,430.60	53.14	27.924		
6,600.00	6,410.38	6,975.45	6,410.38	25.43	45.06	115.91	-1,862.69	1,155.44	1,483.74	1,430.44	53.30	27.837		
6,700.00	6,510.38	7,075.45	6,510.38	25.52	45.12	115.91	-1,862.69	1,155.44	1,483.74	1,430.27	53.47	27.748		
6,800.00	6,610.38	7,175.45	6,610.38	25.61	45.17	115.91	-1,862.69	1,155.44	1,483.74	1,430.10	53.64	27.659		
6,900.00	6,710.38	7,275.45	6,710.38	25.70	45.22	115.91	-1,862.69	1,155.44	1,483.74	1,429.92	53.82	27.569		
7,000.00	6,810.38	7,375.45	6,810.38	25.80	45.28	115.91	-1,862.69	1,155.44	1,483.74	1,429.74	54.00	27.477		
7,100.00	6,910.38	7,475.45	6,910.38	25.89	45.34	115.91	-1,862.69	1,155.44	1,483.74	1,429.56	54.18	27.385		
7,200.00	7,010.38	7,575.45	7,010.38	25.99	45.39	115.91	-1,862.69	1,155.44	1,483.74	1,429.37	54.37	27.292		
7,300.00	7,110.38	7,675.45	7,110.38	26.09	45.45	115.91	-1,862.69	1,155.44	1,483.74	1,429.19	54.55	27.197		
7,400.00	7,210.38	7,775.45	7,210.38	26.19	45.51	115.91	-1,862.69	1,155.44	1,483.74	1,428.99	54.75	27.102		
7,500.00	7,310.38	7,875.45	7,310.38	26.30	45.57	115.91	-1,862.69	1,155.44	1,483.74	1,428.80	54.94	27.007		
7,600.00	7,410.38	7,975.45	7,410.38	26.40	45.63	115.91	-1,862.69	1,155.44	1,483.74	1,428.60	55.14	26.910		
7,700.00	7,510.38	8,075.45	7,510.38	26.51	45.70	115.91	-1,862.69	1,155.44	1,483.74	1,428.40	55.34	26.812		
7,729.49	7,539.87	8,104.94	7,539.87	26.54	45.72	115.91	-1,862.69	1,155.44	1,483.74	1,428.34	55.40	26.784		
7,764.62	7,575.00	8,115.07	7,550.00	26.58	45.72	115.91	-1,862.69	1,155.44	1,483.95	1,428.51	55.45	26.764		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 400-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	89.97	0.00	9.87	9.87					
100.00	100.00	100.04	100.04	0.10	0.10	87.33	0.11	9.68	10.03	9.82	0.21	48.381		
200.00	199.99	200.02	200.02	0.37	0.37	81.89	0.32	9.33	10.46	9.72	0.74	14.172 ES		
300.00	299.99	300.01	300.00	0.63	0.63	75.06	0.71	9.00	11.05	9.80	1.26	8.775		
400.00	399.98	399.98	399.98	0.90	0.88	67.37	1.33	8.70	11.90	10.12	1.78	6.692		
500.00	499.97	499.97	499.96	1.16	1.01	61.28	1.98	8.42	13.03	10.85	2.18	5.985		
600.00	599.96	599.96	599.95	1.43	1.06	57.13	2.64	8.13	14.08	11.59	2.49	5.656		
670.00	669.96	669.95	669.94	1.58	1.13	55.91	3.10	7.94	14.67	11.96	2.71	5.412		
700.00	699.96	699.95	699.94	1.61	1.15	55.90	3.30	7.85	14.92	12.15	2.77	5.391		
800.00	799.96	799.95	799.93	1.63	1.28	55.87	3.96	7.57	15.74	12.83	2.91	5.406		
866.10	866.05	866.04	866.03	1.66	1.37	55.88	4.39	7.39	16.29	13.25	3.04	5.362		
894.10	894.05	894.02	894.00	1.68	1.41	56.22	4.43	7.45	16.45	13.36	3.09	5.324		
900.00	899.95	899.91	899.89	1.68	1.42	56.34	4.41	7.48	16.47	13.37	3.10	5.311		
966.10	966.05	965.92	965.89	1.73	1.51	60.41	3.61	8.45	16.88	13.65	3.23	5.222 SF		
1,000.00	999.95	999.75	999.70	1.75	1.55	63.75	2.78	9.35	17.40	14.10	3.30	5.269		
1,100.00	1,099.90	1,099.38	1,099.15	1.84	1.71	72.36	-1.38	13.59	21.27	17.72	3.55	5.993		
1,200.00	1,199.69	1,198.69	1,198.01	1.96	1.89	77.51	-8.02	20.17	28.47	24.62	3.85	7.394		
1,300.00	1,299.20	1,297.53	1,296.02	2.11	2.12	79.79	-17.12	29.04	38.76	34.54	4.21	9.197		
1,400.00	1,398.30	1,395.78	1,392.96	2.31	2.39	80.43	-28.59	40.15	52.01	47.35	4.65	11.174		
1,500.00	1,496.87	1,493.32	1,488.61	2.56	2.71	80.25	-42.38	53.42	68.14	62.96	5.18	13.146		
1,600.00	1,594.79	1,590.04	1,582.75	2.88	3.09	79.66	-58.38	68.77	87.12	81.31	5.81	14.988		
1,700.00	1,691.95	1,685.84	1,675.19	3.25	3.52	78.87	-76.50	86.11	108.89	102.34	6.55	16.632		
1,800.00	1,788.23	1,780.61	1,765.78	3.70	4.02	77.98	-96.64	105.33	133.40	126.01	7.39	18.051		
1,900.00	1,883.50	1,874.27	1,854.35	4.21	4.58	77.05	-118.68	126.34	160.60	152.26	8.34	19.254		
1,932.71	1,914.42	1,904.64	1,882.85	4.39	4.77	76.74	-126.28	133.57	170.07	161.40	8.67	19.613		
2,000.00	1,977.92	1,966.81	1,940.83	4.78	5.20	76.31	-142.52	149.02	190.21	180.82	9.40	20.238		
2,100.00	2,072.28	2,058.36	2,025.30	5.38	5.87	76.28	-168.10	173.33	221.48	210.96	10.52	21.057		
2,200.00	2,166.65	2,148.76	2,107.56	5.98	6.59	76.69	-195.27	199.14	254.35	242.67	11.69	21.766		
2,300.00	2,261.01	2,237.86	2,187.45	6.60	7.37	77.37	-223.90	226.30	288.88	275.99	12.89	22.416		
2,400.00	2,355.37	2,328.53	2,267.65	7.23	8.20	78.35	-254.60	255.41	324.90	310.77	14.13	22.989		
2,500.00	2,449.73	2,421.50	2,349.73	7.86	9.08	79.33	-286.27	285.44	361.23	345.82	15.41	23.448		
2,600.00	2,544.09	2,514.47	2,431.82	8.50	9.97	80.13	-317.94	315.47	397.65	380.96	16.69	23.832		
2,700.00	2,638.45	2,607.44	2,513.90	9.14	10.87	80.80	-349.61	345.50	434.14	416.16	17.97	24.156		
2,800.00	2,732.81	2,700.40	2,595.99	9.78	11.77	81.37	-381.28	375.53	470.68	451.42	19.26	24.433		
2,900.00	2,827.18	2,793.37	2,678.08	10.43	12.68	81.86	-412.95	405.57	507.27	486.71	20.56	24.673		
3,000.00	2,921.54	2,886.34	2,760.16	11.08	13.59	82.28	-444.63	435.60	543.89	522.03	21.86	24.881		
3,100.00	3,015.90	2,979.31	2,842.25	11.73	14.50	82.65	-476.30	465.63	580.53	557.37	23.16	25.064		
3,200.00	3,110.26	3,072.27	2,924.33	12.38	15.42	82.98	-507.97	495.66	617.21	592.74	24.47	25.227		
3,300.00	3,204.62	3,165.24	3,006.42	13.03	16.34	83.27	-539.64	525.69	653.90	628.12	25.77	25.371		
3,400.00	3,298.98	3,258.21	3,088.50	13.68	17.25	83.53	-571.31	555.72	690.60	663.52	27.08	25.501		
3,500.00	3,393.35	3,351.17	3,170.59	14.34	18.17	83.76	-602.98	585.75	727.32	698.93	28.39	25.618		
3,600.00	3,487.71	3,444.14	3,252.67	14.99	19.09	83.97	-634.65	615.78	764.05	734.35	29.70	25.723		
3,700.00	3,582.07	3,537.11	3,334.76	15.65	20.01	84.16	-666.32	645.81	800.79	769.78	31.02	25.819		
3,800.00	3,676.43	3,630.08	3,416.84	16.30	20.94	84.34	-698.00	675.84	837.54	805.21	32.33	25.907		
3,900.00	3,770.79	3,723.04	3,498.93	16.96	21.86	84.50	-729.67	705.87	874.30	840.65	33.64	25.987		
4,000.00	3,865.15	3,816.01	3,581.02	17.62	22.78	84.65	-761.34	735.90	911.06	876.10	34.96	26.061		
4,100.00	3,959.51	3,908.98	3,663.10	18.27	23.71	84.78	-793.01	765.93	947.83	911.55	36.27	26.129		
4,200.00	4,053.88	4,001.95	3,745.19	18.93	24.63	84.91	-824.68	795.96	984.60	947.01	37.59	26.192		
4,300.00	4,148.24	4,094.91	3,827.27	19.59	25.56	85.03	-856.35	825.99	1,021.38	982.47	38.91	26.251		
4,400.00	4,242.60	4,187.88	3,909.36	20.25	26.48	85.14	-888.02	856.02	1,058.17	1,017.94	40.23	26.305		
4,500.00	4,336.96	4,280.85	3,991.44	20.91	27.41	85.24	-919.69	886.05	1,094.95	1,053.41	41.54	26.356		
4,600.00	4,431.32	4,373.82	4,073.53	21.56	28.34	85.33	-951.37	916.08	1,131.74	1,088.88	42.86	26.403		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



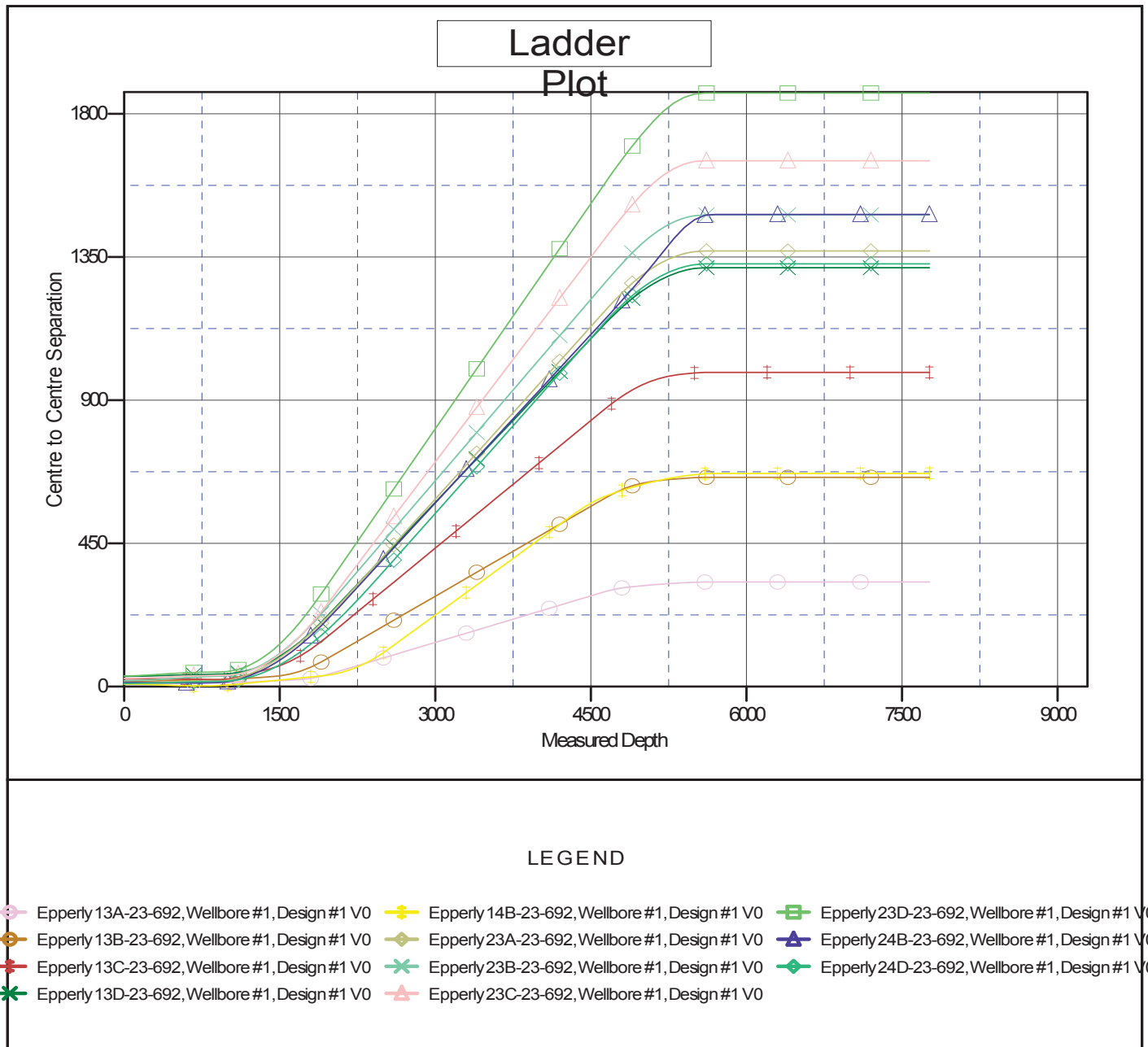
<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 400-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,648.02	4,476.63	4,432.25	4,125.33	21.88	28.82	85.62	-970.98	934.68	1,149.18	1,105.65	43.53	26.400		
4,700.00	4,525.84	4,499.22	4,185.36	22.17	29.33	85.97	-992.52	955.10	1,167.30	1,123.01	44.29	26.356		
4,800.00	4,621.31	4,630.36	4,304.85	22.60	30.25	86.59	-1,031.72	992.27	1,199.69	1,154.11	45.58	26.320		
4,900.00	4,717.77	4,764.40	4,429.40	22.99	31.10	87.17	-1,067.64	1,026.33	1,228.72	1,181.94	46.78	26.266		
5,000.00	4,815.08	4,901.11	4,558.67	23.35	31.87	87.69	-1,099.89	1,056.91	1,254.26	1,206.39	47.87	26.199		
5,100.00	4,913.14	5,040.23	4,692.25	23.66	32.53	88.15	-1,128.07	1,083.63	1,276.19	1,227.35	48.84	26.130		
5,200.00	5,011.82	5,181.46	4,829.61	23.94	33.11	88.53	-1,151.83	1,106.16	1,294.40	1,244.71	49.68	26.052		
5,300.00	5,111.01	5,324.43	4,970.15	24.17	33.58	88.84	-1,170.85	1,124.20	1,308.79	1,258.40	50.39	25.974		
5,400.00	5,210.58	5,468.78	5,113.18	24.36	33.94	89.06	-1,184.87	1,137.49	1,319.29	1,268.34	50.95	25.892		
5,500.00	5,310.41	5,614.07	5,257.95	24.51	34.19	89.20	-1,193.68	1,145.84	1,325.85	1,274.48	51.38	25.807		
5,600.00	5,410.38	5,759.88	5,403.67	24.61	34.35	89.26	-1,197.16	1,149.14	1,328.43	1,276.78	51.66	25.717		
5,614.62	5,425.00	5,781.22	5,425.00	24.62	34.36	89.26	-1,197.22	1,149.20	1,328.47	1,276.78	51.69	25.701		
5,700.00	5,510.38	5,866.60	5,510.38	24.69	34.42	89.26	-1,197.22	1,149.20	1,328.47	1,276.65	51.83	25.633		
5,800.00	5,610.38	5,966.60	5,610.38	24.77	34.48	89.26	-1,197.22	1,149.20	1,328.47	1,276.50	51.98	25.559		
5,900.00	5,710.38	6,066.60	5,710.38	24.84	34.55	89.26	-1,197.22	1,149.20	1,328.47	1,276.34	52.13	25.483		
6,000.00	5,810.38	6,166.60	5,810.38	24.92	34.61	89.26	-1,197.22	1,149.20	1,328.47	1,276.19	52.29	25.407		
6,100.00	5,910.38	6,266.60	5,910.38	25.00	34.68	89.26	-1,197.22	1,149.20	1,328.47	1,276.03	52.45	25.329		
6,200.00	6,010.38	6,366.60	6,010.38	25.08	34.75	89.26	-1,197.22	1,149.20	1,328.47	1,275.86	52.61	25.251		
6,300.00	6,110.38	6,466.60	6,110.38	25.17	34.82	89.26	-1,197.22	1,149.20	1,328.47	1,275.70	52.78	25.171		
6,400.00	6,210.38	6,566.60	6,210.38	25.25	34.89	89.26	-1,197.22	1,149.20	1,328.47	1,275.53	52.95	25.090		
6,500.00	6,310.38	6,666.60	6,310.38	25.34	34.96	89.26	-1,197.22	1,149.20	1,328.47	1,275.35	53.12	25.008		
6,600.00	6,410.38	6,766.60	6,410.38	25.43	35.04	89.26	-1,197.22	1,149.20	1,328.47	1,275.18	53.30	24.925		
6,700.00	6,510.38	6,866.60	6,510.38	25.52	35.11	89.26	-1,197.22	1,149.20	1,328.47	1,275.00	53.48	24.841		
6,800.00	6,610.38	6,966.60	6,610.38	25.61	35.19	89.26	-1,197.22	1,149.20	1,328.47	1,274.81	53.66	24.756		
6,900.00	6,710.38	7,066.60	6,710.38	25.70	35.27	89.26	-1,197.22	1,149.20	1,328.47	1,274.63	53.85	24.670		
7,000.00	6,810.38	7,166.60	6,810.38	25.80	35.35	89.26	-1,197.22	1,149.20	1,328.47	1,274.44	54.04	24.584		
7,100.00	6,910.38	7,266.60	6,910.38	25.89	35.43	89.26	-1,197.22	1,149.20	1,328.47	1,274.24	54.23	24.497		
7,200.00	7,010.38	7,366.60	7,010.38	25.99	35.51	89.26	-1,197.22	1,149.20	1,328.47	1,274.05	54.43	24.409		
7,300.00	7,110.38	7,466.60	7,110.38	26.09	35.59	89.26	-1,197.22	1,149.20	1,328.47	1,273.85	54.62	24.320		
7,400.00	7,210.38	7,566.60	7,210.38	26.19	35.67	89.26	-1,197.22	1,149.20	1,328.47	1,273.65	54.83	24.231		
7,500.00	7,310.38	7,666.60	7,310.38	26.30	35.76	89.26	-1,197.22	1,149.20	1,328.47	1,273.44	55.03	24.141		
7,600.00	7,410.38	7,766.60	7,410.38	26.40	35.85	89.26	-1,197.22	1,149.20	1,328.47	1,273.24	55.24	24.050		
7,700.00	7,510.38	7,866.60	7,510.38	26.51	35.93	89.26	-1,197.22	1,149.20	1,328.47	1,273.03	55.45	23.959		
7,764.62	7,575.00	7,931.22	7,575.00	26.58	35.99	89.26	-1,197.22	1,149.20	1,328.47	1,272.89	55.59	23.900		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Reference Depths are relative to WELL @ 5876.00usft  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Epperly 14D-23-692  
Coordinate System is US State Plane 1983, Colorado Central Zone  
Grid Convergence at Surface is: -1.35°





<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Epperly 14D-23-692
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>TVD Reference:</b>	WELL @ 5876.00usft
<b>Reference Site:</b>	Sec.23-T6S-R92W	<b>MD Reference:</b>	WELL @ 5876.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Epperly 14D-23-692	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Reference Datum

Reference Depths are relative to WELL @ 5876.00usft  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Epperly 14D-23-692  
Coordinate System is US State Plane 1983, Colorado Central Zone  
Grid Convergence at Surface is: -1.35°

