



**Bill Barrett Corporation**

## **Bill Barrett Corp.**

Weld Co., CO

Sec.32-T5N-R63W

Siebring 5-63-32-48H

Wellbore #1

Design #1

## **Anticollision Report**

01 February, 2012



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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	2012/02/01		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	10,806.11	Design #1 (Wellbore #1)	MWD	MWD - Standard	

<b>Summary</b>						
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.32-T5N-R63W						
Centennial Rein 13-32 (Existing) - Wellbore #1 - Wellbore	10,806.11	6,373.47	193.83	53.88	1.385	Level 3, CC, ES, SF
Centennial Rein 23-32 (Existing) - Wellbore #1 - Wellbore	9,596.60	6,539.08	328.14	216.13	2.930	CC
Centennial Rein 23-32 (Existing) - Wellbore #1 - Wellbore	9,600.00	6,539.01	328.16	216.06	2.927	ES, SF
Hergenreder 32-9 (Existing) - Wellbore #1 - Wellbore #1	6,823.69	6,348.00	720.96	692.10	24.981	CC, ES
Hergenreder 32-9 (Existing) - Wellbore #1 - Wellbore #1	7,300.00	6,348.00	864.09	824.26	21.693	SF
Hergenreder BB 32-10DI (Existing) - Wellbore #1 - Wellb	7,950.99	6,347.00	427.84	371.13	7.544	CC, ES
Hergenreder BB 32-10DI (Existing) - Wellbore #1 - Wellb	8,000.00	6,347.00	430.63	372.62	7.423	SF
Rein 11-32 P&A (Existing) - Wellbore #1 - Wellbore #1	9,506.56	6,351.00	464.89	365.94	4.698	CC, ES
Rein 11-32 P&A (Existing) - Wellbore #1 - Wellbore #1	9,600.00	6,351.00	474.19	372.67	4.671	SF
Siebring 42-32 (Existing) - Wellbore #1 - Wellbore #1	227.66	210.66	454.94	454.19	600.554	CC
Siebring 42-32 (Existing) - Wellbore #1 - Wellbore #1	500.00	481.57	455.43	453.59	247.335	ES
Siebring 42-32 (Existing) - Wellbore #1 - Wellbore #1	7,000.00	6,352.30	756.19	719.43	20.569	SF
Siebring 5-63-32-16H - Wellbore #1 - Design #1	500.00	500.00	69.22	67.23	34.915	CC, ES
Siebring 5-63-32-16H - Wellbore #1 - Design #1	10,806.11	10,922.97	2,121.90	1,870.55	8.442	SF
Siebring 5-63-32-17H - Wellbore #1 - Design #1	500.00	500.00	43.72	41.73	22.051	CC, ES
Siebring 5-63-32-17H - Wellbore #1 - Design #1	10,806.11	10,777.90	1,469.40	1,217.48	5.833	SF
Siebring 5-63-32-32H - Wellbore #1 - Design #1	500.00	499.00	21.86	19.88	11.038	CC
Siebring 5-63-32-32H - Wellbore #1 - Design #1	600.00	599.66	22.08	19.70	9.272	ES
Siebring 5-63-32-32H - Wellbore #1 - Design #1	10,806.11	10,754.09	769.55	517.08	3.048	SF

<b>Offset Design</b>												
Sec.32-T5N-R63W - Centennial Rein 13-32 (Existing) - Wellbore #1 - Wellbore #1												
Survey Program: 100-NS-GYRO-MS												
Reference Offset Semi Major Axis												
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)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor
0.00	0.00	0.00	10.00	0.00	0.00	-100.94	-862.97	-4,464.68	4,547.32			
100.00	100.00	108.31	118.31	0.09	0.15	-100.94	-862.79	-4,464.46	4,547.10	4,546.85	0.25	N/A
200.00	200.00	200.00	210.00	0.32	0.38	-100.93	-862.42	-4,464.30	4,546.85	4,546.15	0.70	6,530.544
300.00	300.00	292.48	302.47	0.54	0.61	-100.93	-861.96	-4,464.32	4,546.77	4,545.62	1.15	3,953.041
400.00	400.00	406.61	416.61	0.77	0.90	-100.92	-861.42	-4,464.18	4,546.56	4,544.89	1.67	2,726.462
500.00	500.00	500.00	509.99	0.99	1.15	-100.92	-860.97	-4,463.94	4,546.22	4,544.08	2.14	2,126.732
561.15	561.15	553.64	563.63	1.11	1.21	-100.91	-860.82	-4,463.87	4,546.13	4,543.80	2.33	1,954.352
600.00	599.98	585.44	595.44	1.19	1.25	-100.89	-860.85	-4,463.87	4,546.17	4,543.72	2.44	1,860.870
700.00	699.84	725.91	735.90	1.38	1.45	-100.83	-860.77	-4,463.34	4,545.91	4,543.08	2.83	1,608.203

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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													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		
800.00	799.45	826.64	836.63	1.59	1.66	-100.72	-860.81	-4,462.61	4,545.46	4,542.21	3.25	1,399.223		
900.00	898.70	947.18	957.16	1.84	1.93	-100.56	-860.33	-4,461.23	4,544.61	4,540.84	3.77	1,205.112		
930.67	929.05	974.71	984.68	1.93	2.00	-100.51	-860.23	-4,460.90	4,544.37	4,540.45	3.92	1,158.190		
1,000.00	997.60	1,036.47	1,046.45	2.13	2.14	-100.38	-860.15	-4,460.19	4,543.94	4,539.67	4.27	1,063.506		
1,100.00	1,096.47	1,127.67	1,137.64	2.44	2.35	-100.19	-860.28	-4,459.27	4,543.53	4,538.74	4.79	948.570		
1,200.00	1,195.34	1,224.52	1,234.49	2.77	2.57	-100.01	-860.51	-4,458.35	4,543.26	4,537.92	5.33	851.985		
1,300.00	1,294.21	1,318.58	1,328.54	3.10	2.79	-99.82	-860.64	-4,457.55	4,543.10	4,537.21	5.89	771.715		
1,331.81	1,325.66	1,347.34	1,357.30	3.21	2.85	-99.76	-860.68	-4,457.33	4,543.09	4,537.02	6.06	749.392		
1,400.00	1,393.09	1,410.96	1,420.92	3.44	3.00	-99.64	-860.83	-4,456.89	4,543.14	4,536.69	6.44	705.059		
1,500.00	1,491.96	1,515.02	1,524.97	3.79	3.25	-99.45	-860.59	-4,456.17	4,543.17	4,536.13	7.04	645.700		
1,600.00	1,590.83	1,600.00	1,609.95	4.14	3.44	-99.26	-860.53	-4,455.75	4,543.46	4,535.89	7.58	599.735		
1,700.00	1,689.70	1,723.59	1,733.54	4.49	3.71	-99.08	-861.04	-4,454.92	4,543.73	4,535.54	8.20	554.389		
1,800.00	1,788.57	1,848.92	1,858.85	4.85	4.01	-98.90	-861.59	-4,453.12	4,543.27	4,534.42	8.85	513.196		
1,900.00	1,887.45	1,938.53	1,948.45	5.20	4.22	-98.72	-862.20	-4,451.64	4,542.70	4,533.28	9.42	482.120		
1,965.54	1,952.24	1,988.22	1,998.13	5.44	4.34	-98.61	-862.69	-4,450.98	4,542.58	4,532.81	9.77	464.973		
2,000.00	1,986.32	2,016.44	2,026.35	5.56	4.39	-98.55	-863.03	-4,450.66	4,542.61	4,532.65	9.95	456.464		
2,100.00	2,085.19	2,103.75	2,113.64	5.92	4.57	-98.38	-864.57	-4,449.77	4,542.89	4,532.41	10.48	433.456		
2,200.00	2,184.06	2,200.00	2,209.84	6.28	4.74	-98.23	-867.61	-4,448.75	4,543.38	4,532.37	11.01	412.642		
2,300.00	2,282.94	2,256.96	2,266.71	6.64	4.83	-98.08	-870.56	-4,448.27	4,544.39	4,532.93	11.46	396.431		
2,400.00	2,381.81	2,300.00	2,309.65	7.01	4.90	-97.93	-873.60	-4,448.15	4,546.38	4,534.49	11.89	382.231		
2,500.00	2,480.68	2,353.95	2,363.40	7.37	4.97	-97.80	-878.29	-4,448.48	4,549.48	4,537.14	12.33	368.866		
2,600.00	2,579.55	2,400.00	2,409.20	7.73	5.04	-97.67	-882.96	-4,449.34	4,553.85	4,541.09	12.76	356.823		
2,700.00	2,678.42	2,519.67	2,527.90	8.09	5.22	-97.66	-897.94	-4,451.65	4,558.67	4,545.36	13.31	342.595		
2,800.00	2,777.30	2,628.05	2,635.14	8.46	5.41	-97.67	-913.56	-4,452.83	4,562.89	4,549.04	13.86	329.329		
2,900.00	2,876.17	2,700.00	2,706.31	8.82	5.53	-97.61	-924.03	-4,453.94	4,567.57	4,553.22	14.35	318.363		
3,000.00	2,975.04	2,854.11	2,858.76	9.19	5.83	-97.70	-946.61	-4,455.51	4,571.69	4,556.68	15.01	304.613		
3,100.00	3,073.91	2,958.56	2,962.05	9.55	6.04	-97.70	-962.07	-4,456.02	4,575.38	4,559.80	15.59	293.529		
3,200.00	3,172.78	3,084.48	3,086.77	9.92	6.31	-97.73	-979.35	-4,456.49	4,578.84	4,562.62	16.22	282.295		
3,300.00	3,271.66	3,178.24	3,179.88	10.28	6.52	-97.68	-990.41	-4,456.76	4,581.92	4,565.14	16.79	272.923		
3,400.00	3,370.53	3,258.54	3,259.65	10.65	6.69	-97.61	-999.60	-4,457.29	4,585.33	4,568.00	17.33	264.618		
3,500.00	3,469.40	3,337.90	3,338.50	11.01	6.87	-97.53	-1,008.47	-4,458.21	4,589.21	4,571.34	17.87	256.874		
3,600.00	3,568.27	3,419.58	3,419.69	11.38	7.04	-97.45	-1,017.33	-4,459.55	4,593.50	4,575.09	18.41	249.535		
3,700.00	3,667.15	3,500.00	3,499.55	11.74	7.22	-97.38	-1,026.73	-4,461.06	4,598.17	4,579.22	18.95	242.645		
3,800.00	3,766.02	3,574.92	3,573.87	12.11	7.39	-97.30	-1,036.03	-4,462.77	4,603.33	4,583.85	19.48	236.281		
3,900.00	3,864.89	3,663.68	3,661.90	12.48	7.59	-97.25	-1,047.13	-4,465.22	4,608.97	4,588.92	20.05	229.914		
4,000.00	3,963.76	3,774.32	3,771.66	12.84	7.84	-97.23	-1,060.67	-4,468.30	4,614.60	4,593.94	20.66	223.340		
4,108.41	4,070.95	3,886.69	3,883.33	13.24	8.09	-97.17	-1,072.90	-4,471.35	4,620.44	4,599.13	21.31	216.802		
4,200.00	4,161.71	4,080.03	4,075.61	13.51	8.55	-97.26	-1,092.69	-4,474.92	4,624.57	4,602.54	22.04	209.852		
4,300.00	4,261.20	4,176.36	4,171.48	13.72	8.79	-97.25	-1,102.06	-4,475.42	4,627.22	4,604.73	22.49	205.785		
4,400.00	4,360.97	4,276.49	4,271.16	13.91	9.03	-97.28	-1,111.51	-4,476.22	4,629.80	4,606.89	22.91	202.058		
4,500.00	4,460.92	4,410.99	4,405.04	14.06	9.37	-97.40	-1,124.40	-4,476.69	4,631.65	4,608.25	23.40	197.939		
4,539.08	4,500.00	4,445.54	4,439.44	14.11	9.46	-97.44	-1,127.64	-4,476.70	4,632.17	4,612.52	19.65	235.766		
4,600.00	4,560.92	4,500.00	4,493.67	14.20	9.60	-97.50	-1,132.60	-4,476.81	4,633.01	4,613.12	19.89	232.924		
4,700.00	4,660.92	4,628.27	4,621.43	14.32	9.92	-97.64	-1,143.99	-4,476.66	4,634.04	4,613.67	20.37	227.470		
4,800.00	4,760.92	4,718.80	4,711.69	14.45	10.15	-97.73	-1,150.97	-4,476.60	4,635.01	4,614.24	20.77	223.208		
4,900.00	4,860.92	4,820.89	4,813.52	14.57	10.41	-97.82	-1,158.39	-4,476.72	4,636.11	4,614.92	21.19	218.798		
5,000.00	4,960.92	4,956.21	4,948.58	14.70	10.75	-97.92	-1,166.51	-4,476.44	4,636.72	4,615.02	21.70	213.672		
5,100.00	5,060.92	5,122.29	5,114.52	14.84	11.18	-98.00	-1,173.36	-4,474.80	4,636.34	4,614.04	22.30	207.920		
5,200.00	5,160.92	5,230.53	5,222.69	14.97	11.46	-98.04	-1,176.32	-4,472.91	4,634.99	4,612.23	22.75	203.695		
5,300.00	5,260.92	5,331.54	5,323.67	15.11	11.71	-98.07	-1,178.31	-4,471.44	4,633.82	4,610.63	23.19	199.839		
5,400.00	5,360.92	5,462.80	5,454.91	15.25	12.00	-98.09	-1,179.48	-4,468.75	4,631.85	4,608.18	23.67	195.706		
5,500.00	5,460.92	5,557.29	5,549.38	15.39	12.19	-98.10	-1,179.80	-4,466.83	4,629.89	4,605.84	24.05	192.506		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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													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		
5,600.00	5,560.92	5,639.97	5,632.04	15.53	12.37	-98.10	-1,180.09	-4,465.29	4,628.10	4,603.69	24.42	189.557		
5,700.00	5,660.92	5,712.87	5,704.93	15.68	12.54	-98.11	-1,180.51	-4,464.32	4,626.86	4,602.09	24.77	186.796		
5,800.00	5,760.92	5,800.00	5,792.06	15.82	12.75	-98.12	-1,181.06	-4,463.68	4,626.20	4,601.03	25.17	183.764		
5,900.00	5,860.92	5,870.59	5,862.65	15.97	12.93	-98.12	-1,181.54	-4,463.48	4,625.97	4,600.43	25.54	181.115		
5,907.45	5,868.37	5,876.87	5,868.92	15.98	12.94	-98.12	-1,181.59	-4,463.47	4,625.97	4,600.40	25.57	180.903		
5,927.62	5,888.54	5,900.00	5,892.05	16.01	13.00	-98.13	-1,181.77	-4,463.46	4,625.98	4,600.31	25.67	180.223		
5,950.00	5,910.91	5,913.70	5,905.75	16.05	13.03	-98.13	-1,181.89	-4,463.45	4,625.47	4,596.45	29.02	159.370		
5,975.00	5,935.84	5,936.36	5,928.41	16.09	13.08	-98.13	-1,182.09	-4,463.46	4,623.68	4,594.67	29.01	159.400		
6,000.00	5,960.64	5,958.90	5,950.95	16.12	13.14	-98.13	-1,182.29	-4,463.47	4,620.60	4,591.68	28.92	159.788		
6,025.00	5,985.25	5,981.28	5,973.32	16.16	13.19	-98.14	-1,182.51	-4,463.49	4,616.24	4,587.49	28.75	160.538		
6,050.00	6,009.58	6,005.90	5,997.95	16.20	13.25	-98.15	-1,182.75	-4,463.52	4,610.61	4,582.09	28.52	161.657		
6,075.00	6,033.59	6,043.62	6,035.67	16.23	13.30	-98.15	-1,182.97	-4,463.53	4,603.68	4,575.46	28.22	163.139		
6,100.00	6,057.20	6,080.66	6,072.71	16.26	13.36	-98.16	-1,182.93	-4,463.47	4,595.42	4,567.58	27.85	165.023		
6,125.00	6,080.35	6,112.85	6,104.89	16.30	13.40	-98.16	-1,182.72	-4,463.35	4,585.89	4,558.49	27.40	167.373		
6,150.00	6,102.97	6,139.73	6,131.78	16.33	13.44	-98.16	-1,182.58	-4,463.21	4,575.13	4,548.25	26.88	170.224		
6,175.00	6,125.00	6,165.88	6,157.92	16.37	13.48	-98.17	-1,182.52	-4,463.04	4,563.18	4,536.89	26.29	173.565		
6,200.00	6,146.38	6,191.22	6,183.26	16.40	13.52	-98.18	-1,182.53	-4,462.84	4,550.09	4,524.44	25.64	177.437		
6,225.00	6,167.06	6,213.94	6,205.98	16.44	13.56	-98.18	-1,182.59	-4,462.64	4,535.88	4,510.93	24.95	181.828		
6,250.00	6,186.98	6,234.85	6,226.89	16.48	13.61	-98.19	-1,182.69	-4,462.44	4,520.61	4,496.41	24.20	186.819		
6,275.00	6,206.07	6,254.88	6,246.92	16.52	13.66	-98.20	-1,182.83	-4,462.24	4,504.33	4,480.93	23.40	192.506		
6,300.00	6,224.30	6,273.97	6,266.01	16.56	13.71	-98.22	-1,182.99	-4,462.04	4,487.07	4,464.52	22.55	198.957		
6,325.00	6,241.61	6,292.06	6,284.10	16.61	13.75	-98.23	-1,183.17	-4,461.85	4,468.89	4,447.22	21.67	206.244		
6,350.00	6,257.94	6,300.00	6,292.04	16.66	13.77	-98.24	-1,183.26	-4,461.76	4,449.84	4,429.10	20.74	214.595		
6,375.00	6,273.27	6,300.00	6,292.04	16.71	13.77	-98.25	-1,183.26	-4,461.76	4,430.02	4,410.25	19.77	224.061		
6,400.00	6,287.54	6,300.00	6,292.04	16.77	13.77	-98.26	-1,183.26	-4,461.76	4,409.48	4,390.68	18.80	234.564		
6,425.00	6,300.72	6,300.00	6,292.04	16.85	13.77	-98.28	-1,183.26	-4,461.76	4,388.26	4,370.43	17.83	246.103		
6,450.00	6,312.77	6,330.66	6,322.69	16.93	13.82	-98.29	-1,183.56	-4,461.53	4,366.20	4,349.28	16.92	257.988		
6,475.00	6,323.65	6,335.97	6,328.01	17.03	13.83	-98.31	-1,183.60	-4,461.51	4,343.70	4,327.67	16.04	270.888		
6,500.00	6,333.35	6,340.73	6,332.76	17.15	13.83	-98.32	-1,183.63	-4,461.51	4,320.68	4,305.45	15.23	283.708		
6,525.00	6,341.82	6,344.91	6,336.95	17.30	13.84	-98.33	-1,183.66	-4,461.51	4,297.19	4,282.63	14.56	295.142		
6,550.00	6,349.05	6,348.50	6,340.54	17.47	13.85	-98.35	-1,183.68	-4,461.51	4,273.30	4,259.19	14.11	302.816		
6,575.00	6,355.02	6,351.49	6,343.52	17.68	13.85	-98.36	-1,183.69	-4,461.51	4,249.07	4,235.03	14.04	302.723		
6,600.00	6,359.71	6,353.86	6,345.89	17.91	13.86	-98.38	-1,183.71	-4,461.52	4,224.55	4,209.92	14.63	288.731		
6,625.00	6,363.11	6,355.59	6,347.63	18.19	13.86	-98.39	-1,183.72	-4,461.52	4,199.83	4,183.23	16.60	253.019		
6,650.00	6,365.21	6,356.69	6,348.72	18.50	13.86	-98.41	-1,183.72	-4,461.53	4,174.95	4,153.10	21.85	191.085		
6,675.00	6,366.00	6,357.13	6,349.17	18.83	13.86	-98.43	-1,183.72	-4,461.53	4,150.00	4,118.88	31.12	133.372		
6,677.62	6,366.00	6,357.14	6,349.17	18.87	13.86	-98.43	-1,183.72	-4,461.53	4,147.38	4,116.01	31.37	132.206		
6,700.00	6,366.00	6,357.19	6,349.22	19.20	13.86	-98.44	-1,183.72	-4,461.53	4,125.02	4,093.27	31.76	129.891		
6,800.00	6,366.00	6,357.38	6,349.42	20.87	13.86	-98.51	-1,183.72	-4,461.53	4,025.14	3,991.51	33.63	119.687		
6,900.00	6,366.00	6,357.59	6,349.62	22.81	13.86	-98.58	-1,183.73	-4,461.53	3,925.26	3,889.56	35.69	109.972		
7,000.00	6,366.00	6,357.79	6,349.83	24.93	13.86	-98.65	-1,183.73	-4,461.53	3,825.38	3,787.48	37.90	100.940		
7,100.00	6,366.00	6,358.01	6,350.04	27.17	13.86	-98.73	-1,183.73	-4,461.53	3,725.51	3,685.31	40.21	92.656		
7,200.00	6,366.00	6,358.23	6,350.26	29.51	13.86	-98.81	-1,183.73	-4,461.53	3,625.65	3,583.05	42.60	85.110		
7,300.00	6,366.00	6,358.45	6,350.48	31.93	13.86	-98.90	-1,183.73	-4,461.53	3,525.80	3,480.75	45.05	78.257		
7,400.00	6,366.00	6,358.68	6,350.71	34.40	13.86	-98.99	-1,183.73	-4,461.53	3,425.96	3,378.40	47.56	72.038		
7,500.00	6,366.00	6,358.92	6,350.95	36.91	13.86	-99.09	-1,183.73	-4,461.53	3,326.12	3,276.02	50.10	66.389		
7,600.00	6,366.00	6,359.16	6,351.19	39.46	13.86	-99.19	-1,183.73	-4,461.54	3,226.30	3,173.62	52.68	61.249		
7,700.00	6,366.00	6,359.41	6,351.44	42.04	13.87	-99.30	-1,183.73	-4,461.54	3,126.48	3,071.21	55.28	56.562		
7,800.00	6,366.00	6,359.67	6,351.70	44.65	13.87	-99.42	-1,183.74	-4,461.54	3,026.68	2,968.78	57.90	52.277		
7,900.00	6,366.00	6,359.94	6,351.97	47.27	13.87	-99.54	-1,183.74	-4,461.54	2,926.89	2,866.36	60.54	48.348		
8,000.00	6,366.00	6,360.21	6,352.24	49.91	13.87	-99.68	-1,183.74	-4,461.54	2,827.12	2,763.93	63.19	44.738		
8,100.00	6,366.00	6,360.49	6,352.52	52.57	13.87	-99.82	-1,183.74	-4,461.54	2,727.36	2,661.50	65.86	41.411		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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													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		
8,200.00	6,366.00	6,360.78	6,352.81	55.23	13.87	-99.98	-1,183.74	-4,461.54	2,627.63	2,559.09	68.54	38.337		
8,300.00	6,366.00	6,361.08	6,353.11	57.91	13.87	-100.14	-1,183.74	-4,461.54	2,527.91	2,456.68	71.23	35.490		
8,400.00	6,366.00	6,361.39	6,353.42	60.60	13.87	-100.32	-1,183.74	-4,461.54	2,428.22	2,354.29	73.93	32.847		
8,500.00	6,366.00	6,361.70	6,353.74	63.29	13.87	-100.52	-1,183.74	-4,461.55	2,328.55	2,251.92	76.63	30.387		
8,600.00	6,366.00	6,362.03	6,354.06	66.00	13.87	-100.73	-1,183.75	-4,461.55	2,228.91	2,149.57	79.34	28.092		
8,700.00	6,366.00	6,362.37	6,354.40	68.70	13.87	-100.97	-1,183.75	-4,461.55	2,129.30	2,047.25	82.06	25.948		
8,800.00	6,366.00	6,362.72	6,354.75	71.42	13.87	-101.22	-1,183.75	-4,461.55	2,029.74	1,944.96	84.78	23.941		
8,900.00	6,366.00	6,363.08	6,355.12	74.13	13.87	-101.50	-1,183.75	-4,461.55	1,930.22	1,842.71	87.51	22.058		
9,000.00	6,366.00	6,363.46	6,355.49	76.86	13.87	-101.82	-1,183.75	-4,461.55	1,830.75	1,740.51	90.24	20.288		
9,100.00	6,366.00	6,363.85	6,355.88	79.58	13.87	-102.17	-1,183.75	-4,461.56	1,731.34	1,638.37	92.97	18.622		
9,200.00	6,366.00	6,364.25	6,356.28	82.31	13.87	-102.56	-1,183.75	-4,461.56	1,632.01	1,536.29	95.71	17.051		
9,300.00	6,366.00	6,364.66	6,356.70	85.05	13.87	-103.00	-1,183.76	-4,461.56	1,532.76	1,434.30	98.46	15.568		
9,400.00	6,366.00	6,365.10	6,357.13	87.78	13.87	-103.51	-1,183.76	-4,461.56	1,433.61	1,332.41	101.20	14.166		
9,500.00	6,366.00	6,365.55	6,357.58	90.52	13.88	-104.08	-1,183.76	-4,461.57	1,334.60	1,230.65	103.95	12.839		
9,600.00	6,366.00	6,366.01	6,358.04	93.26	13.88	-104.76	-1,183.76	-4,461.57	1,235.74	1,129.04	106.70	11.582		
9,700.00	6,366.00	6,366.49	6,358.53	96.00	13.88	-105.54	-1,183.76	-4,461.57	1,137.08	1,027.63	109.45	10.389		
9,800.00	6,366.00	6,367.00	6,359.03	98.75	13.88	-106.48	-1,183.76	-4,461.57	1,038.68	926.47	112.20	9.257		
9,900.00	6,366.00	6,367.52	6,359.55	101.49	13.88	-107.62	-1,183.77	-4,461.58	940.61	825.65	114.96	8.182		
10,000.00	6,366.00	6,368.07	6,360.10	104.24	13.88	-109.01	-1,183.77	-4,461.58	843.00	725.28	117.71	7.161		
10,100.00	6,366.00	6,368.64	6,360.67	106.99	13.88	-110.77	-1,183.77	-4,461.58	746.01	625.54	120.47	6.192		
10,200.00	6,366.00	6,369.23	6,361.26	109.74	13.88	-113.06	-1,183.77	-4,461.59	649.95	526.72	123.23	5.274		
10,300.00	6,366.00	6,369.85	6,361.88	112.50	13.88	-116.13	-1,183.77	-4,461.59	555.27	429.28	125.99	4.407		
10,400.00	6,366.00	6,370.50	6,362.53	115.25	13.88	-120.44	-1,183.78	-4,461.60	462.84	334.09	128.75	3.595		
10,500.00	6,366.00	6,371.18	6,363.21	118.00	13.88	-126.85	-1,183.78	-4,461.60	374.32	242.81	131.51	2.846		
10,600.00	6,366.00	6,371.89	6,363.92	120.76	13.89	-136.99	-1,183.78	-4,461.61	293.27	159.00	134.27	2.184		
10,700.00	6,366.00	6,372.64	6,364.67	123.52	13.89	-153.81	-1,183.78	-4,461.61	227.80	90.78	137.03	1.662		
10,806.11	6,366.00	6,373.47	6,365.50	126.44	13.89	178.52	-1,183.79	-4,461.62	193.83	53.88	139.95	1.385	Level 3, CC, ES, SF	

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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													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	10.00	0.00	0.00	-100.56	-826.55	-4,434.01	4,510.41					
100.00	100.00	106.86	116.86	0.09	0.15	-100.56	-826.54	-4,433.80	4,510.21	4,509.97	0.24	N/A		
200.00	200.00	200.00	210.00	0.32	0.40	-100.56	-826.55	-4,433.48	4,509.89	4,509.17	0.71	6,321.288		
255.67	255.67	245.69	255.68	0.44	0.47	-100.56	-826.60	-4,433.41	4,509.81	4,508.90	0.91	4,953.453		
300.00	300.00	280.54	290.54	0.54	0.52	-100.56	-826.68	-4,433.43	4,509.86	4,508.79	1.06	4,235.034		
400.00	400.00	400.00	410.00	0.77	0.73	-100.57	-827.10	-4,433.42	4,509.92	4,508.42	1.50	3,006.701		
500.00	500.00	490.71	500.71	0.99	0.95	-100.57	-827.38	-4,433.22	4,509.77	4,507.82	1.94	2,318.831		
503.13	503.13	493.45	503.45	1.00	0.96	-100.57	-827.39	-4,433.22	4,509.77	4,507.81	1.96	2,303.606		
600.00	599.98	588.11	598.10	1.19	1.18	-100.55	-827.53	-4,433.22	4,509.85	4,507.48	2.37	1,902.302		
700.00	699.84	686.79	696.79	1.38	1.42	-100.49	-827.79	-4,433.22	4,510.08	4,507.28	2.80	1,613.034		
800.00	799.45	800.00	809.99	1.59	1.71	-100.39	-828.42	-4,432.92	4,510.20	4,506.90	3.30	1,368.286		
900.00	898.70	888.68	898.67	1.84	1.93	-100.24	-829.14	-4,432.58	4,510.43	4,506.65	3.77	1,195.064		
930.67	929.05	916.28	926.27	1.93	2.01	-100.19	-829.40	-4,432.55	4,510.61	4,506.68	3.93	1,147.631		
1,000.00	997.60	2,292.50	2,275.22	2.13	5.64	-101.36	-891.76	-4,221.98	4,500.84	4,493.32	7.53	597.941		
1,100.00	1,096.47	2,381.72	2,359.89	2.44	5.93	-101.33	-899.48	-4,194.94	4,473.11	4,465.03	8.07	553.997		
1,200.00	1,195.34	2,474.58	2,448.04	2.77	6.24	-101.31	-907.54	-4,166.89	4,445.49	4,436.85	8.65	514.086		
1,300.00	1,294.21	2,625.18	2,590.72	3.10	6.75	-101.41	-920.79	-4,120.52	4,417.31	4,407.92	9.39	470.438		
1,400.00	1,393.09	2,719.21	2,679.37	3.44	7.07	-101.42	-930.64	-4,090.80	4,388.57	4,378.58	9.99	439.241		
1,500.00	1,491.96	2,812.36	2,767.03	3.79	7.40	-101.44	-941.48	-4,061.18	4,359.82	4,349.22	10.60	411.315		
1,600.00	1,590.83	2,885.18	2,835.78	4.14	7.66	-101.39	-949.02	-4,038.41	4,331.40	4,320.25	11.15	388.345		
1,700.00	1,689.70	2,956.88	2,903.75	4.49	7.91	-101.33	-955.47	-4,016.52	4,303.51	4,291.80	11.71	367.632		
1,800.00	1,788.57	3,000.00	2,944.66	4.85	8.06	-101.22	-959.55	-4,003.51	4,276.28	4,264.10	12.18	351.061		
1,900.00	1,887.45	3,060.19	3,001.94	5.20	8.27	-101.13	-965.27	-3,985.96	4,249.99	4,237.29	12.71	334.479		
2,000.00	1,986.32	3,100.00	3,040.02	5.56	8.41	-101.00	-968.94	-3,974.94	4,225.00	4,211.82	13.18	320.660		
2,100.00	2,085.19	3,171.73	3,108.87	5.92	8.65	-100.93	-975.22	-3,955.81	4,200.92	4,187.18	13.74	305.848		
2,200.00	2,184.06	3,518.93	3,440.37	6.28	9.86	-101.40	-1,004.48	-3,857.20	4,176.94	4,161.87	15.07	277.134		
2,300.00	2,282.94	3,600.00	3,516.63	6.64	10.16	-101.38	-1,013.24	-3,831.12	4,147.68	4,132.02	15.67	264.730		
2,400.00	2,381.81	3,750.34	3,657.76	7.01	10.72	-101.52	-1,028.26	-3,781.55	4,117.30	4,100.84	16.46	250.112		
2,500.00	2,480.68	3,800.00	3,704.47	7.37	10.91	-101.41	-1,032.60	-3,765.25	4,087.25	4,070.28	16.97	240.912		
2,600.00	2,579.55	3,870.66	3,771.16	7.73	11.17	-101.34	-1,038.58	-3,742.67	4,057.95	4,040.42	17.53	231.503		
2,700.00	2,678.42	3,926.12	3,823.71	8.09	11.37	-101.24	-1,043.24	-3,725.57	4,029.66	4,011.61	18.05	223.265		
2,800.00	2,777.30	4,000.00	3,894.01	8.46	11.64	-101.16	-1,049.21	-3,703.65	4,002.40	3,983.78	18.62	214.940		
2,900.00	2,876.17	4,087.97	3,977.82	8.82	11.95	-101.12	-1,056.35	-3,677.88	3,975.56	3,956.32	19.23	206.692		
3,000.00	2,975.04	4,157.83	4,044.30	9.19	12.20	-101.04	-1,062.46	-3,657.31	3,948.74	3,928.94	19.80	199.447		
3,100.00	3,073.91	4,241.21	4,123.74	9.55	12.50	-101.01	-1,070.49	-3,633.29	3,922.62	3,902.22	20.40	192.254		
3,200.00	3,172.78	4,338.54	4,216.41	9.92	12.85	-101.00	-1,079.89	-3,605.08	3,896.36	3,875.31	21.05	185.105		
3,300.00	3,271.66	4,423.76	4,297.74	10.28	13.16	-100.96	-1,087.56	-3,580.79	3,870.47	3,848.81	21.66	178.695		
3,400.00	3,370.53	4,565.63	4,432.98	10.65	13.67	-101.04	-1,099.93	-3,539.74	3,844.15	3,821.72	22.43	171.371		
3,500.00	3,469.40	4,668.91	4,531.24	11.01	14.05	-101.02	-1,108.25	-3,509.07	3,816.93	3,793.84	23.09	165.299		
3,600.00	3,568.27	4,791.16	4,647.67	11.38	14.49	-101.03	-1,116.78	-3,472.77	3,789.59	3,765.79	23.80	159.223		
3,700.00	3,667.15	4,878.25	4,730.42	11.74	14.80	-100.97	-1,123.53	-3,446.47	3,761.85	3,737.43	24.41	154.085		
3,800.00	3,766.02	4,968.95	4,816.55	12.11	15.14	-100.94	-1,131.43	-3,419.18	3,734.35	3,709.31	25.04	149.137		
3,900.00	3,864.89	5,000.00	4,846.07	12.48	15.25	-100.77	-1,133.91	-3,409.89	3,707.48	3,681.99	25.49	145.423		
4,000.00	3,963.76	5,066.12	4,909.22	12.84	15.49	-100.67	-1,139.02	-3,390.96	3,681.56	3,655.51	26.05	141.340		
4,108.41	4,070.95	5,100.00	4,941.76	13.24	15.61	-100.47	-1,141.62	-3,381.91	3,655.42	3,628.88	26.54	137.733		
4,200.00	4,161.71	5,169.05	5,008.29	13.51	15.84	-100.41	-1,147.12	-3,364.27	3,634.22	3,607.20	27.02	134.498		
4,300.00	4,261.20	5,200.00	5,038.16	13.72	15.95	-100.31	-1,149.73	-3,356.60	3,612.08	3,584.75	27.34	132.131		
4,400.00	4,360.97	5,268.92	5,104.83	13.91	16.18	-100.36	-1,156.07	-3,340.33	3,590.80	3,563.06	27.74	129.463		
4,500.00	4,460.92	5,325.81	5,160.04	14.06	16.37	-100.43	-1,161.84	-3,327.83	3,570.86	3,542.79	28.07	127.210		
4,539.08	4,500.00	5,356.20	5,189.56	14.11	16.47	-100.50	-1,164.88	-3,321.31	3,563.26	3,536.82	26.45	134.730		
4,600.00	4,560.92	5,400.00	5,232.16	14.20	16.62	-100.59	-1,169.12	-3,312.05	3,551.58	3,524.89	26.69	133.046		
4,700.00	4,660.92	5,442.03	5,273.16	14.32	16.75	-100.68	-1,172.89	-3,303.63	3,533.44	3,506.45	26.99	130.920		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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													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	4,760.92	5,500.00	5,330.02	14.45	16.93	-100.79	-1,177.41	-3,293.30	3,517.04	3,489.70	27.33	128.671		
4,900.00	4,860.92	5,500.00	5,330.02	14.57	16.93	-100.79	-1,177.41	-3,293.30	3,502.25	3,474.74	27.51	127.313		
5,000.00	4,960.92	5,567.15	5,396.25	14.70	17.13	-100.89	-1,181.79	-3,283.11	3,488.77	3,460.90	27.87	125.172		
5,100.00	5,060.92	5,600.00	5,428.76	14.84	17.22	-100.93	-1,183.64	-3,278.80	3,477.13	3,448.99	28.14	123.558		
5,200.00	5,160.92	5,664.37	5,492.63	14.97	17.40	-101.00	-1,186.65	-3,271.40	3,466.84	3,438.35	28.49	121.682		
5,300.00	5,260.92	5,720.05	5,548.02	15.11	17.54	-101.05	-1,188.59	-3,266.00	3,457.94	3,429.12	28.82	119.994		
5,400.00	5,360.92	5,800.00	5,627.65	15.25	17.75	-101.11	-1,190.91	-3,259.33	3,450.23	3,421.03	29.20	118.144		
5,500.00	5,460.92	5,852.08	5,679.58	15.39	17.88	-101.14	-1,192.14	-3,255.56	3,443.39	3,413.87	29.52	116.659		
5,600.00	5,560.92	5,925.35	5,752.69	15.53	18.06	-101.18	-1,193.38	-3,250.88	3,437.45	3,407.56	29.88	115.034		
5,700.00	5,660.92	6,000.00	5,827.22	15.68	18.24	-101.20	-1,194.07	-3,246.73	3,432.19	3,401.94	30.25	113.466		
5,800.00	5,760.92	6,066.41	5,893.55	15.82	18.39	-101.22	-1,194.49	-3,243.66	3,427.79	3,397.20	30.59	112.044		
5,900.00	5,860.92	6,146.95	5,974.04	15.97	18.58	-101.24	-1,195.01	-3,240.74	3,424.33	3,393.36	30.97	110.569		
5,927.62	5,888.54	6,174.31	6,001.39	16.01	18.64	-101.24	-1,195.10	-3,239.81	3,423.42	3,392.34	31.09	110.128		
5,950.00	5,910.91	6,196.45	6,023.52	16.05	18.69	-101.25	-1,195.14	-3,239.06	3,422.16	3,389.94	32.23	106.193		
5,975.00	5,935.84	6,217.09	6,044.14	16.09	18.74	-101.25	-1,195.15	-3,238.37	3,419.54	3,387.48	32.06	106.665		
6,000.00	5,960.64	6,236.91	6,063.96	16.12	18.78	-101.26	-1,195.15	-3,237.74	3,415.66	3,383.85	31.81	107.375		
6,025.00	5,985.25	6,256.56	6,083.60	16.16	18.82	-101.27	-1,195.15	-3,237.15	3,410.54	3,379.05	31.48	108.324		
6,050.00	6,009.58	6,275.98	6,103.01	16.20	18.87	-101.28	-1,195.14	-3,236.60	3,404.18	3,373.10	31.08	109.523		
6,075.00	6,033.59	6,300.00	6,127.02	16.23	18.92	-101.29	-1,195.11	-3,235.95	3,396.61	3,365.99	30.62	110.943		
6,100.00	6,057.20	6,316.62	6,143.64	16.26	18.96	-101.31	-1,195.10	-3,235.52	3,387.83	3,357.76	30.06	112.694		
6,125.00	6,080.35	6,338.59	6,165.60	16.30	19.00	-101.33	-1,195.09	-3,234.95	3,377.85	3,348.39	29.45	114.691		
6,150.00	6,102.97	6,360.03	6,187.03	16.33	19.05	-101.34	-1,195.11	-3,234.40	3,366.69	3,337.92	28.78	116.999		
6,175.00	6,125.00	6,380.88	6,207.87	16.37	19.10	-101.37	-1,195.14	-3,233.87	3,354.40	3,326.36	28.04	119.642		
6,200.00	6,146.38	6,400.00	6,226.99	16.40	19.14	-101.39	-1,195.18	-3,233.38	3,341.00	3,313.76	27.24	122.652		
6,225.00	6,167.06	6,418.84	6,245.82	16.44	19.18	-101.42	-1,195.23	-3,232.91	3,326.53	3,300.13	26.39	126.041		
6,250.00	6,186.98	6,436.01	6,262.98	16.48	19.22	-101.44	-1,195.25	-3,232.49	3,311.03	3,285.53	25.50	129.843		
6,275.00	6,206.07	6,452.46	6,279.43	16.52	19.26	-101.47	-1,195.27	-3,232.11	3,294.55	3,269.98	24.57	134.063		
6,300.00	6,224.30	6,468.15	6,295.12	16.56	19.29	-101.51	-1,195.27	-3,231.76	3,277.14	3,253.51	23.63	138.706		
6,325.00	6,241.61	6,483.04	6,310.00	16.61	19.32	-101.54	-1,195.26	-3,231.44	3,258.83	3,236.16	22.67	143.746		
6,350.00	6,257.94	6,500.00	6,326.96	16.66	19.36	-101.57	-1,195.23	-3,231.09	3,239.67	3,217.94	21.73	149.077		
6,375.00	6,273.27	6,511.02	6,337.98	16.71	19.38	-101.61	-1,195.21	-3,230.86	3,219.72	3,198.90	20.82	154.676		
6,400.00	6,287.54	6,524.18	6,351.14	16.77	19.41	-101.65	-1,195.19	-3,230.60	3,199.02	3,179.05	19.97	160.167		
6,425.00	6,300.72	6,536.30	6,363.25	16.85	19.44	-101.69	-1,195.17	-3,230.36	3,177.64	3,158.40	19.24	165.172		
6,450.00	6,312.77	6,547.34	6,374.29	16.93	19.46	-101.73	-1,195.14	-3,230.14	3,155.62	3,136.95	18.67	169.041		
6,475.00	6,323.65	6,557.27	6,384.22	17.03	19.48	-101.77	-1,195.12	-3,229.95	3,133.03	3,114.70	18.34	170.869		
6,500.00	6,333.35	6,566.07	6,393.01	17.15	19.50	-101.82	-1,195.10	-3,229.78	3,109.94	3,091.60	18.34	169.553		
6,525.00	6,341.82	6,573.70	6,400.65	17.30	19.52	-101.86	-1,195.08	-3,229.64	3,086.40	3,067.58	18.82	163.989		
6,550.00	6,349.05	6,580.15	6,407.09	17.47	19.53	-101.91	-1,195.07	-3,229.52	3,062.47	3,042.51	19.96	153.425		
6,575.00	6,355.02	6,585.39	6,412.34	17.68	19.54	-101.96	-1,195.06	-3,229.42	3,038.23	3,016.20	22.03	137.896		
6,600.00	6,359.71	6,589.42	6,416.36	17.91	19.55	-102.01	-1,195.05	-3,229.34	3,013.74	2,988.34	25.40	118.658		
6,625.00	6,363.11	6,592.22	6,419.16	18.19	19.56	-102.06	-1,195.04	-3,229.29	2,989.06	2,958.79	30.27	98.736		
6,650.00	6,365.21	6,593.77	6,420.71	18.50	19.56	-102.11	-1,195.03	-3,229.26	2,964.27	2,928.88	35.39	83.770		
6,675.00	6,366.00	6,594.08	6,421.02	18.83	19.56	-102.17	-1,195.03	-3,229.25	2,939.43	2,903.21	36.22	81.159		
6,677.62	6,366.00	6,594.04	6,420.98	18.87	19.56	-102.17	-1,195.03	-3,229.26	2,936.82	2,900.91	35.91	81.776		
6,700.00	6,366.00	6,593.64	6,420.58	19.20	19.56	-102.22	-1,195.03	-3,229.26	2,914.59	2,878.29	36.30	80.283		
6,800.00	6,366.00	6,591.84	6,418.78	20.87	19.56	-102.45	-1,195.04	-3,229.30	2,815.27	2,777.07	38.20	73.702		
6,900.00	6,366.00	6,590.04	6,416.98	22.81	19.55	-102.70	-1,195.04	-3,229.33	2,715.99	2,675.71	40.29	67.418		
7,000.00	6,366.00	6,588.23	6,415.18	24.93	19.55	-102.96	-1,195.05	-3,229.36	2,616.77	2,574.25	42.52	61.546		
7,100.00	6,366.00	6,586.42	6,413.36	27.17	19.55	-103.25	-1,195.05	-3,229.40	2,517.61	2,472.75	44.86	56.124		
7,200.00	6,366.00	6,584.60	6,411.54	29.51	19.54	-103.56	-1,195.06	-3,229.43	2,418.51	2,371.23	47.28	51.152		
7,300.00	6,366.00	6,582.78	6,409.72	31.93	19.54	-103.89	-1,195.06	-3,229.47	2,319.50	2,269.73	49.77	46.606		
7,400.00	6,366.00	6,580.94	6,407.89	34.40	19.53	-104.26	-1,195.07	-3,229.50	2,220.56	2,168.26	52.31	42.453		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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.32-T5N-R63W - Centennial Rein 23-32 (Existing) - Wellbore #1 - Wellbore #1		Offset Site Error:		0.00 usft	
Survey Program:		100-NS-GYRO-MS											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						
7,500.00	6,366.00	6,579.11	6,406.05	36.91	19.53	-104.66	-1,195.07	-3,229.54	2,121.73	2,066.85	54.88	38.658						
7,600.00	6,366.00	6,577.26	6,404.21	39.46	19.53	-105.09	-1,195.07	-3,229.57	2,023.01	1,965.52	57.49	35.186						
7,700.00	6,366.00	6,575.41	6,402.36	42.04	19.52	-105.58	-1,195.08	-3,229.61	1,924.42	1,864.29	60.13	32.003						
7,800.00	6,366.00	6,573.55	6,400.50	44.65	19.52	-106.11	-1,195.08	-3,229.64	1,825.98	1,763.19	62.79	29.080						
7,900.00	6,366.00	6,571.69	6,398.64	47.27	19.51	-106.71	-1,195.09	-3,229.68	1,727.72	1,662.26	65.47	26.390						
8,000.00	6,366.00	6,569.82	6,396.77	49.91	19.51	-107.38	-1,195.09	-3,229.71	1,629.67	1,561.51	68.16	23.909						
8,100.00	6,366.00	6,567.94	6,394.89	52.57	19.51	-108.13	-1,195.10	-3,229.75	1,531.87	1,461.00	70.87	21.616						
8,200.00	6,366.00	6,566.06	6,393.01	55.23	19.50	-108.98	-1,195.10	-3,229.78	1,434.37	1,360.79	73.58	19.493						
8,300.00	6,366.00	6,564.17	6,391.12	57.91	19.50	-109.96	-1,195.11	-3,229.82	1,337.24	1,260.93	76.31	17.524						
8,400.00	6,366.00	6,562.28	6,389.22	60.60	19.49	-111.10	-1,195.11	-3,229.86	1,240.55	1,161.51	79.04	15.695						
8,500.00	6,366.00	6,560.38	6,387.32	63.29	19.49	-112.42	-1,195.11	-3,229.89	1,144.44	1,062.66	81.78	13.994						
8,600.00	6,366.00	6,558.47	6,385.42	66.00	19.49	-113.99	-1,195.12	-3,229.93	1,049.05	964.52	84.53	12.411						
8,700.00	6,366.00	6,556.55	6,383.50	68.70	19.48	-115.87	-1,195.12	-3,229.97	954.60	867.32	87.28	10.937						
8,800.00	6,366.00	6,554.63	6,381.58	71.42	19.48	-118.15	-1,195.13	-3,230.00	861.39	771.36	90.03	9.568						
8,900.00	6,366.00	6,552.70	6,379.65	74.13	19.47	-120.99	-1,195.13	-3,230.04	769.89	677.11	92.79	8.297						
9,000.00	6,366.00	6,550.77	6,377.72	76.86	19.47	-124.58	-1,195.13	-3,230.08	680.78	585.24	95.54	7.125						
9,100.00	6,366.00	6,548.82	6,375.77	79.58	19.47	-129.22	-1,195.14	-3,230.12	595.14	496.83	98.30	6.054						
9,200.00	6,366.00	6,546.88	6,373.83	82.31	19.46	-135.37	-1,195.14	-3,230.15	514.69	413.62	101.06	5.093						
9,300.00	6,366.00	6,544.92	6,371.87	85.05	19.46	-143.66	-1,195.15	-3,230.19	442.28	338.46	103.82	4.260						
9,400.00	6,366.00	6,542.96	6,369.91	87.78	19.45	-154.84	-1,195.15	-3,230.23	382.51	275.92	106.58	3.589						
9,500.00	6,366.00	6,540.99	6,367.94	90.52	19.45	-169.36	-1,195.16	-3,230.27	342.06	232.71	109.34	3.128						
9,596.60	6,366.00	6,539.08	6,366.03	93.17	19.44	174.24	-1,195.16	-3,230.31	328.14	216.13	112.01	2.930 CC						
9,600.00	6,366.00	6,539.01	6,365.96	93.26	19.44	173.65	-1,195.16	-3,230.31	328.16	216.06	112.10	2.927 ES, SF						
9,700.00	6,366.00	6,537.03	6,363.98	96.00	19.44	156.76	-1,195.16	-3,230.35	344.04	229.19	114.85	2.995						
9,800.00	6,366.00	6,535.04	6,361.99	98.75	19.44	142.46	-1,195.17	-3,230.39	386.05	268.44	117.61	3.283						
9,900.00	6,366.00	6,533.04	6,359.99	101.49	19.43	131.50	-1,195.17	-3,230.42	446.87	326.51	120.36	3.713						
10,000.00	6,366.00	6,531.04	6,357.99	104.24	19.43	123.38	-1,195.18	-3,230.46	519.95	396.84	123.10	4.224						
10,100.00	6,366.00	6,529.02	6,355.98	106.99	19.42	117.35	-1,195.18	-3,230.50	600.82	474.98	125.84	4.774						
10,200.00	6,366.00	6,527.01	6,353.96	109.74	19.42	112.79	-1,195.18	-3,230.54	686.75	558.17	128.58	5.341						
10,300.00	6,366.00	6,524.98	6,351.93	112.50	19.41	109.26	-1,195.19	-3,230.58	776.05	644.73	131.32	5.910						
10,400.00	6,366.00	6,522.95	6,349.90	115.25	19.41	106.47	-1,195.19	-3,230.62	867.68	733.64	134.04	6.473						
10,500.00	6,366.00	6,520.91	6,347.86	118.00	19.41	104.21	-1,195.20	-3,230.67	960.98	824.21	136.77	7.026						
10,600.00	6,366.00	6,518.86	6,345.81	120.76	19.40	102.36	-1,195.20	-3,230.71	1,055.50	916.02	139.48	7.567						
10,700.00	6,366.00	6,516.80	6,343.76	123.52	19.40	100.81	-1,195.20	-3,230.75	1,150.95	1,008.76	142.19	8.094						
10,806.11	6,366.00	6,514.61	6,341.57	126.44	19.39	99.43	-1,195.21	-3,230.79	1,253.00	1,107.94	145.06	8.638						



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 6500-NS-GYRO-MS													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	18.00	0.00	0.00	-161.72	-1,307.81	-431.98	1,377.43					
100.00	100.00	82.00	100.00	0.09	0.11	-161.72	-1,307.81	-431.98	1,377.31	1,377.11	0.20	6,845.987		
200.00	200.00	182.00	200.00	0.32	0.24	-161.72	-1,307.81	-431.98	1,377.31	1,376.75	0.56	2,465.330		
300.00	300.00	282.00	300.00	0.54	0.37	-161.72	-1,307.81	-431.98	1,377.31	1,376.39	0.92	1,503.353		
400.00	400.00	382.00	400.00	0.77	0.51	-161.72	-1,307.81	-431.98	1,377.31	1,376.03	1.27	1,081.392		
500.00	500.00	482.00	500.00	0.99	0.64	-161.72	-1,307.81	-431.98	1,377.31	1,375.68	1.63	844.389		
600.00	599.98	581.98	599.98	1.19	0.77	-161.68	-1,307.81	-431.98	1,375.81	1,373.84	1.96	701.182		
700.00	699.84	681.84	699.84	1.38	0.91	-161.57	-1,307.81	-431.98	1,371.31	1,369.03	2.28	601.837		
800.00	799.45	781.45	799.45	1.59	1.04	-161.38	-1,307.81	-431.98	1,363.83	1,361.23	2.61	522.778		
900.00	898.70	880.70	898.70	1.84	1.17	-161.12	-1,307.81	-431.98	1,353.40	1,350.45	2.95	458.179		
930.67	929.05	911.05	929.05	1.93	1.21	-161.02	-1,307.81	-431.98	1,349.62	1,346.56	3.06	440.627		
1,000.00	997.60	979.60	997.60	2.13	1.30	-160.79	-1,307.81	-431.98	1,340.77	1,337.45	3.32	403.833		
1,100.00	1,096.47	1,078.47	1,096.47	2.44	1.43	-160.45	-1,307.81	-431.98	1,328.03	1,324.33	3.70	358.859		
1,200.00	1,195.34	1,177.34	1,195.34	2.77	1.56	-160.11	-1,307.81	-431.98	1,315.35	1,311.26	4.09	321.585		
1,300.00	1,294.21	1,276.21	1,294.21	3.10	1.69	-159.75	-1,307.81	-431.98	1,302.72	1,298.23	4.49	290.356		
1,400.00	1,393.09	1,375.09	1,393.09	3.44	1.83	-159.40	-1,307.81	-431.98	1,290.13	1,285.24	4.89	263.908		
1,500.00	1,491.96	1,473.96	1,491.96	3.79	1.96	-159.03	-1,307.81	-431.98	1,277.60	1,272.30	5.30	241.276		
1,600.00	1,590.83	1,572.83	1,590.83	4.14	2.09	-158.66	-1,307.81	-431.98	1,265.12	1,259.41	5.71	221.725		
1,700.00	1,689.70	1,671.70	1,689.70	4.49	2.22	-158.28	-1,307.81	-431.98	1,252.69	1,246.57	6.12	204.689		
1,800.00	1,788.57	1,770.57	1,788.57	4.85	2.35	-157.89	-1,307.81	-431.98	1,240.32	1,233.78	6.54	189.727		
1,900.00	1,887.45	1,869.45	1,887.45	5.20	2.48	-157.49	-1,307.81	-431.98	1,228.01	1,221.05	6.96	176.492		
2,000.00	1,986.32	1,968.32	1,986.32	5.56	2.61	-157.09	-1,307.81	-431.98	1,215.76	1,208.38	7.38	164.710		
2,100.00	2,085.19	2,067.19	2,085.19	5.92	2.74	-156.68	-1,307.81	-431.98	1,203.57	1,195.76	7.81	154.159		
2,200.00	2,184.06	2,166.06	2,184.06	6.28	2.88	-156.26	-1,307.81	-431.98	1,191.44	1,183.20	8.24	144.662		
2,300.00	2,282.94	2,264.94	2,282.94	6.64	3.01	-155.83	-1,307.81	-431.98	1,179.38	1,170.71	8.67	136.070		
2,400.00	2,381.81	2,363.81	2,381.81	7.01	3.14	-155.39	-1,307.81	-431.98	1,167.39	1,158.29	9.10	128.264		
2,500.00	2,480.68	2,462.68	2,480.68	7.37	3.27	-154.94	-1,307.81	-431.98	1,155.46	1,145.92	9.54	121.142		
2,600.00	2,579.55	2,561.55	2,579.55	7.73	3.40	-154.48	-1,307.81	-431.98	1,143.61	1,133.63	9.98	114.621		
2,700.00	2,678.42	2,660.42	2,678.42	8.09	3.53	-154.02	-1,307.81	-431.98	1,131.83	1,121.41	10.42	108.630		
2,800.00	2,777.30	2,759.30	2,777.30	8.46	3.66	-153.54	-1,307.81	-431.98	1,120.13	1,109.27	10.86	103.108		
2,900.00	2,876.17	2,858.17	2,876.17	8.82	3.79	-153.06	-1,307.81	-431.98	1,108.51	1,097.20	11.31	98.004		
3,000.00	2,975.04	2,957.04	2,975.04	9.19	3.92	-152.56	-1,307.81	-431.98	1,096.97	1,085.21	11.76	93.273		
3,100.00	3,073.91	3,055.91	3,073.91	9.55	4.06	-152.06	-1,307.81	-431.98	1,085.51	1,073.30	12.21	88.877		
3,200.00	3,172.78	3,154.78	3,172.78	9.92	4.19	-151.54	-1,307.81	-431.98	1,074.14	1,061.47	12.67	84.784		
3,300.00	3,271.66	3,253.66	3,271.66	10.28	4.32	-151.01	-1,307.81	-431.98	1,062.86	1,049.73	13.13	80.964		
3,400.00	3,370.53	3,352.53	3,370.53	10.65	4.45	-150.47	-1,307.81	-431.98	1,051.67	1,038.08	13.59	77.392		
3,500.00	3,469.40	3,451.40	3,469.40	11.01	4.58	-149.92	-1,307.81	-431.98	1,040.58	1,026.52	14.05	74.045		
3,600.00	3,568.27	3,550.27	3,568.27	11.38	4.71	-149.36	-1,307.81	-431.98	1,029.58	1,015.06	14.52	70.905		
3,700.00	3,667.15	3,649.15	3,667.15	11.74	4.84	-148.78	-1,307.81	-431.98	1,018.69	1,003.69	14.99	67.953		
3,800.00	3,766.02	3,748.02	3,766.02	12.11	4.97	-148.19	-1,307.81	-431.98	1,007.90	992.43	15.46	65.174		
3,900.00	3,864.89	3,846.89	3,864.89	12.48	5.11	-147.59	-1,307.81	-431.98	997.22	981.27	15.94	62.554		
4,000.00	3,963.76	3,945.76	3,963.76	12.84	5.24	-146.98	-1,307.81	-431.98	986.65	970.22	16.42	60.082		
4,108.41	4,070.95	4,052.95	4,070.95	13.24	5.38	-146.30	-1,307.81	-431.98	975.32	958.37	16.95	57.555		
4,200.00	4,161.71	4,143.71	4,161.71	13.51	5.50	-145.78	-1,307.81	-431.98	966.85	949.51	17.34	55.745		
4,300.00	4,261.20	4,243.20	4,261.20	13.72	5.63	-145.34	-1,307.81	-431.98	959.96	942.25	17.71	54.212		
4,400.00	4,360.97	4,342.97	4,360.97	13.91	5.76	-145.05	-1,307.81	-431.98	955.48	937.45	18.04	52.979		
4,500.00	4,460.92	4,442.92	4,460.92	14.06	5.90	-144.91	-1,307.81	-431.98	953.38	935.05	18.33	52.024		
4,539.08	4,500.00	4,482.00	4,500.00	14.11	5.95	-144.90	-1,307.81	-431.98	953.20	935.41	17.79	53.595		
4,600.00	4,560.92	4,542.92	4,560.92	14.20	6.03	-144.90	-1,307.81	-431.98	953.20	935.23	17.97	53.055		
4,700.00	4,660.92	4,642.92	4,660.92	14.32	6.16	-144.90	-1,307.81	-431.98	953.20	934.95	18.25	52.241		
4,800.00	4,760.92	4,742.92	4,760.92	14.45	6.30	-144.90	-1,307.81	-431.98	953.20	934.67	18.53	51.444		
4,900.00	4,860.92	4,842.92	4,860.92	14.57	6.43	-144.90	-1,307.81	-431.98	953.20	934.38	18.81	50.666		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 6500-NS-GYRO-MS													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		
5,000.00	4,960.92	4,942.92	4,960.92	14.70	6.56	-144.90	-1,307.81	-431.98	953.20	934.10	19.10	49.905		
5,100.00	5,060.92	5,042.92	5,060.92	14.84	6.69	-144.90	-1,307.81	-431.98	953.20	933.81	19.39	49.161		
5,200.00	5,160.92	5,142.92	5,160.92	14.97	6.83	-144.90	-1,307.81	-431.98	953.20	933.52	19.68	48.434		
5,300.00	5,260.92	5,242.92	5,260.92	15.11	6.96	-144.90	-1,307.81	-431.98	953.20	933.22	19.97	47.723		
5,400.00	5,360.92	5,342.92	5,360.92	15.25	7.09	-144.90	-1,307.81	-431.98	953.20	932.93	20.27	47.029		
5,500.00	5,460.92	5,442.92	5,460.92	15.39	7.22	-144.90	-1,307.81	-431.98	953.20	932.63	20.57	46.350		
5,600.00	5,560.92	5,542.92	5,560.92	15.53	7.36	-144.90	-1,307.81	-431.98	953.20	932.33	20.86	45.687		
5,700.00	5,660.92	5,642.92	5,660.92	15.68	7.49	-144.90	-1,307.81	-431.98	953.20	932.03	21.16	45.039		
5,800.00	5,760.92	5,742.92	5,760.92	15.82	7.62	-144.90	-1,307.81	-431.98	953.20	931.73	21.47	44.406		
5,900.00	5,860.92	5,842.92	5,860.92	15.97	7.75	-144.90	-1,307.81	-431.98	953.20	931.43	21.77	43.787		
5,927.62	5,888.54	5,870.54	5,888.54	16.01	7.79	-144.90	-1,307.81	-431.98	953.20	931.34	21.85	43.619		
5,950.00	5,910.91	5,892.91	5,910.91	16.05	7.82	-144.93	-1,307.81	-431.98	952.85	930.35	22.50	42.342		
5,975.00	5,935.84	5,917.84	5,935.84	16.09	7.85	-145.01	-1,307.81	-431.98	951.66	929.12	22.54	42.213		
6,000.00	5,960.64	5,942.64	5,960.64	16.12	7.89	-145.15	-1,307.81	-431.98	949.62	927.08	22.55	42.120		
6,025.00	5,985.25	5,967.25	5,985.25	16.16	7.92	-145.36	-1,307.81	-431.98	946.75	924.24	22.51	42.058		
6,050.00	6,009.58	5,991.58	6,009.58	16.20	7.95	-145.62	-1,307.81	-431.98	943.07	920.63	22.44	42.020		
6,075.00	6,033.59	6,015.59	6,033.59	16.23	7.98	-145.94	-1,307.81	-431.98	938.59	916.24	22.35	41.999		
6,100.00	6,057.20	6,039.20	6,057.20	16.26	8.02	-146.33	-1,307.81	-431.98	933.35	911.12	22.23	41.984		
6,125.00	6,080.35	6,062.35	6,080.35	16.30	8.05	-146.78	-1,307.81	-431.98	927.39	905.29	22.10	41.963		
6,150.00	6,102.97	6,084.97	6,102.97	16.33	8.08	-147.30	-1,307.81	-431.98	920.73	898.77	21.96	41.922		
6,175.00	6,125.00	6,107.00	6,125.00	16.37	8.11	-147.88	-1,307.81	-431.98	913.44	891.61	21.83	41.846		
6,200.00	6,146.38	6,128.38	6,146.38	16.40	8.13	-148.52	-1,307.81	-431.98	905.55	883.84	21.71	41.718		
6,225.00	6,167.06	6,149.06	6,167.06	16.44	8.16	-149.24	-1,307.81	-431.98	897.12	875.51	21.61	41.520		
6,250.00	6,186.98	6,168.98	6,186.98	16.48	8.19	-150.02	-1,307.81	-431.98	888.21	866.67	21.54	41.236		
6,275.00	6,206.07	6,188.07	6,206.07	16.52	8.21	-150.87	-1,307.81	-431.98	878.89	857.37	21.51	40.855		
6,300.00	6,224.30	6,206.30	6,224.30	16.56	8.24	-151.80	-1,307.81	-431.98	869.22	847.68	21.53	40.367		
6,325.00	6,241.61	6,223.61	6,241.61	16.61	8.26	-152.80	-1,307.81	-431.98	859.27	837.67	21.60	39.773		
6,350.00	6,257.94	6,239.94	6,257.94	16.66	8.28	-153.87	-1,307.81	-431.98	849.13	827.40	21.73	39.077		
6,375.00	6,273.27	6,255.27	6,273.27	16.71	8.30	-155.01	-1,307.81	-431.98	838.86	816.95	21.91	38.292		
6,400.00	6,287.54	6,269.54	6,287.54	16.77	8.32	-156.23	-1,307.81	-431.98	828.56	806.42	22.13	37.437		
6,425.00	6,300.72	6,282.72	6,300.72	16.85	8.34	-157.53	-1,307.81	-431.98	818.30	795.90	22.40	36.532		
6,450.00	6,312.77	6,294.77	6,312.77	16.93	8.35	-158.90	-1,307.81	-431.98	808.17	785.47	22.70	35.601		
6,475.00	6,323.65	6,305.65	6,323.65	17.03	8.37	-160.34	-1,307.81	-431.98	798.25	775.22	23.03	34.663		
6,500.00	6,333.35	6,315.35	6,333.35	17.15	8.38	-161.85	-1,307.81	-431.98	788.64	765.26	23.38	33.736		
6,525.00	6,341.82	6,323.82	6,341.82	17.30	8.39	-163.43	-1,307.81	-431.98	779.40	755.66	23.74	32.833		
6,550.00	6,349.05	6,331.05	6,349.05	17.47	8.40	-165.08	-1,307.81	-431.98	770.63	746.52	24.11	31.965		
6,575.00	6,355.02	6,337.02	6,355.02	17.68	8.41	-166.78	-1,307.81	-431.98	762.39	737.91	24.49	31.136		
6,600.00	6,359.71	6,341.71	6,359.71	17.91	8.42	-168.54	-1,307.81	-431.98	754.77	729.90	24.87	30.350		
6,625.00	6,363.11	6,345.11	6,363.11	18.19	8.42	-170.36	-1,307.81	-431.98	747.81	722.55	25.26	29.607		
6,650.00	6,365.21	6,347.21	6,365.21	18.50	8.42	-172.21	-1,307.81	-431.98	741.59	715.93	25.65	28.907		
6,675.00	6,366.00	6,348.00	6,366.00	18.83	8.43	-174.10	-1,307.81	-431.98	736.14	710.08	26.06	28.248		
6,677.62	6,366.00	6,348.00	6,366.00	18.87	8.43	-174.30	-1,307.81	-431.98	735.61	709.51	26.10	28.182		
6,700.00	6,366.00	6,348.00	6,366.00	19.20	8.43	-176.02	-1,307.81	-431.98	731.50	705.00	26.49	27.613		
6,800.00	6,366.00	6,348.00	6,366.00	20.87	8.43	-176.12	-1,307.81	-431.98	721.35	692.98	28.37	25.427		
6,823.69	6,366.00	6,348.00	6,366.00	21.32	8.43	-174.24	-1,307.81	-431.98	720.96	692.10	28.86	24.981 CC, ES		
6,900.00	6,366.00	6,348.00	6,366.00	22.81	8.43	-168.20	-1,307.81	-431.98	724.99	694.55	30.44	23.817		
7,000.00	6,366.00	6,348.00	6,366.00	24.93	8.43	-160.50	-1,307.81	-431.98	742.20	709.55	32.65	22.730		
7,100.00	6,366.00	6,348.00	6,366.00	27.17	8.43	-153.27	-1,307.81	-431.98	772.09	737.12	34.97	22.078		
7,200.00	6,366.00	6,348.00	6,366.00	29.51	8.43	-146.68	-1,307.81	-431.98	813.26	775.89	37.37	21.762		
7,300.00	6,366.00	6,348.00	6,366.00	31.93	8.43	-140.79	-1,307.81	-431.98	864.09	824.26	39.83	21.693 SF		
7,400.00	6,366.00	6,348.00	6,366.00	34.40	8.43	-135.60	-1,307.81	-431.98	922.99	880.65	42.34	21.797		
7,500.00	6,366.00	6,348.00	6,366.00	36.91	8.43	-131.07	-1,307.81	-431.98	988.52	943.63	44.89	22.019		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 6500-NS-GYRO-MS													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		
7,600.00	6,366.00	6,348.00	6,366.00	39.46	8.43	127.13	-1,307.81	-431.98	1,059.45	1,011.97	47.48	22.316		
7,700.00	6,366.00	6,348.00	6,366.00	42.04	8.43	123.69	-1,307.81	-431.98	1,134.77	1,084.68	50.08	22.658		
7,800.00	6,366.00	6,348.00	6,366.00	44.65	8.43	120.69	-1,307.81	-431.98	1,213.65	1,160.94	52.71	23.025		
7,900.00	6,366.00	6,348.00	6,366.00	47.27	8.43	118.06	-1,307.81	-431.98	1,295.46	1,240.11	55.35	23.403		
8,000.00	6,366.00	6,348.00	6,366.00	49.91	8.43	115.75	-1,307.81	-431.98	1,379.67	1,321.65	58.01	23.782		
8,100.00	6,366.00	6,348.00	6,366.00	52.57	8.43	113.70	-1,307.81	-431.98	1,465.86	1,405.17	60.69	24.155		
8,200.00	6,366.00	6,348.00	6,366.00	55.23	8.43	111.89	-1,307.81	-431.98	1,553.70	1,490.34	63.37	24.519		
8,300.00	6,366.00	6,348.00	6,366.00	57.91	8.43	110.27	-1,307.81	-431.98	1,642.94	1,576.88	66.06	24.871		
8,400.00	6,366.00	6,348.00	6,366.00	60.60	8.43	108.82	-1,307.81	-431.98	1,733.36	1,664.60	68.76	25.210		
8,500.00	6,366.00	6,348.00	6,366.00	63.29	8.43	107.51	-1,307.81	-431.98	1,824.77	1,753.30	71.46	25.534		
8,600.00	6,366.00	6,348.00	6,366.00	66.00	8.43	106.33	-1,307.81	-431.98	1,917.04	1,842.86	74.18	25.844		
8,700.00	6,366.00	6,348.00	6,366.00	68.70	8.43	105.26	-1,307.81	-431.98	2,010.05	1,933.16	76.89	26.141		
8,800.00	6,366.00	6,348.00	6,366.00	71.42	8.43	104.28	-1,307.81	-431.98	2,103.70	2,024.09	79.62	26.423		
8,900.00	6,366.00	6,348.00	6,366.00	74.13	8.43	103.39	-1,307.81	-431.98	2,197.91	2,115.57	82.34	26.693		
9,000.00	6,366.00	6,348.00	6,366.00	76.86	8.43	102.57	-1,307.81	-431.98	2,292.62	2,207.54	85.07	26.949		
9,100.00	6,366.00	6,348.00	6,366.00	79.58	8.43	101.82	-1,307.81	-431.98	2,387.75	2,299.94	87.81	27.194		
9,200.00	6,366.00	6,348.00	6,366.00	82.31	8.43	101.12	-1,307.81	-431.98	2,483.27	2,392.72	90.54	27.427		
9,300.00	6,366.00	6,348.00	6,366.00	85.05	8.43	100.47	-1,307.81	-431.98	2,579.12	2,485.84	93.28	27.649		
9,400.00	6,366.00	6,348.00	6,366.00	87.78	8.43	99.88	-1,307.81	-431.98	2,675.28	2,579.26	96.02	27.861		
9,500.00	6,366.00	6,348.00	6,366.00	90.52	8.43	99.32	-1,307.81	-431.98	2,771.71	2,672.95	98.77	28.063		
9,600.00	6,366.00	6,348.00	6,366.00	93.26	8.43	98.80	-1,307.81	-431.98	2,868.39	2,766.88	101.51	28.257		
9,700.00	6,366.00	6,348.00	6,366.00	96.00	8.43	98.31	-1,307.81	-431.98	2,965.28	2,861.03	104.26	28.441		
9,800.00	6,366.00	6,348.00	6,366.00	98.75	8.43	97.86	-1,307.81	-431.98	3,062.38	2,955.37	107.01	28.618		
9,900.00	6,366.00	6,348.00	6,366.00	101.49	8.43	97.43	-1,307.81	-431.98	3,159.66	3,049.90	109.76	28.787		
10,000.00	6,366.00	6,348.00	6,366.00	104.24	8.43	97.03	-1,307.81	-431.98	3,257.10	3,144.59	112.51	28.949		
10,100.00	6,366.00	6,348.00	6,366.00	106.99	8.43	96.65	-1,307.81	-431.98	3,354.69	3,239.43	115.27	29.104		
10,200.00	6,366.00	6,348.00	6,366.00	109.74	8.43	96.30	-1,307.81	-431.98	3,452.42	3,334.40	118.02	29.253		
10,300.00	6,366.00	6,348.00	6,366.00	112.50	8.43	95.96	-1,307.81	-431.98	3,550.28	3,429.50	120.78	29.395		
10,400.00	6,366.00	6,348.00	6,366.00	115.25	8.43	95.64	-1,307.81	-431.98	3,648.25	3,524.72	123.53	29.532		
10,500.00	6,366.00	6,348.00	6,366.00	118.00	8.43	95.34	-1,307.81	-431.98	3,746.33	3,620.04	126.29	29.664		
10,600.00	6,366.00	6,348.00	6,366.00	120.76	8.43	95.05	-1,307.81	-431.98	3,844.51	3,715.46	129.05	29.791		
10,700.00	6,366.00	6,348.00	6,366.00	123.52	8.43	94.78	-1,307.81	-431.98	3,942.78	3,810.97	131.81	29.912		
10,806.11	6,366.00	6,348.00	6,366.00	126.44	8.43	94.50	-1,307.81	-431.98	4,047.15	3,912.41	134.74	30.037		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 6500-NS-GYRO-MS													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	19.00	0.00	0.00	-125.50	-1,129.26	-1,583.00	1,944.60					
100.00	100.00	81.00	100.00	0.09	0.11	-125.50	-1,129.26	-1,583.00	1,944.51	1,944.31	0.20	9,729.472		
200.00	200.00	181.00	200.00	0.32	0.24	-125.50	-1,129.26	-1,583.00	1,944.51	1,943.95	0.56	3,488.885		
300.00	300.00	281.00	300.00	0.54	0.37	-125.50	-1,129.26	-1,583.00	1,944.51	1,943.59	0.91	2,125.541		
400.00	400.00	381.00	400.00	0.77	0.51	-125.50	-1,129.26	-1,583.00	1,944.51	1,943.24	1.27	1,528.321		
500.00	500.00	481.00	500.00	0.99	0.64	-125.50	-1,129.26	-1,583.00	1,944.51	1,942.88	1.63	1,193.094		
600.00	599.98	580.98	599.98	1.19	0.77	-125.46	-1,129.26	-1,583.00	1,943.82	1,941.86	1.96	991.593		
700.00	699.84	680.84	699.84	1.38	0.90	-125.31	-1,129.26	-1,583.00	1,941.78	1,939.50	2.28	851.826		
800.00	799.45	780.45	799.45	1.59	1.04	-125.08	-1,129.26	-1,583.00	1,938.40	1,935.78	2.62	739.013		
900.00	898.70	879.70	898.70	1.84	1.17	-124.74	-1,129.26	-1,583.00	1,933.74	1,930.74	3.00	645.028		
930.67	929.05	910.05	929.05	1.93	1.21	-124.62	-1,129.26	-1,583.00	1,932.06	1,928.94	3.12	619.146		
1,000.00	997.60	978.60	997.60	2.13	1.30	-124.34	-1,129.26	-1,583.00	1,928.16	1,924.75	3.41	565.648		
1,100.00	1,096.47	1,077.47	1,096.47	2.44	1.43	-123.92	-1,129.26	-1,583.00	1,922.61	1,918.77	3.84	500.599		
1,200.00	1,195.34	1,176.34	1,195.34	2.77	1.56	-123.51	-1,129.26	-1,583.00	1,917.17	1,912.88	4.29	447.288		
1,300.00	1,294.21	1,275.21	1,294.21	3.10	1.69	-123.09	-1,129.26	-1,583.00	1,911.83	1,907.08	4.74	403.203		
1,400.00	1,393.09	1,374.09	1,393.09	3.44	1.82	-122.67	-1,129.26	-1,583.00	1,906.59	1,901.38	5.20	366.348		
1,500.00	1,491.96	1,472.96	1,491.96	3.79	1.96	-122.24	-1,129.26	-1,583.00	1,901.45	1,895.78	5.67	335.197		
1,600.00	1,590.83	1,571.83	1,590.83	4.14	2.09	-121.82	-1,129.26	-1,583.00	1,896.42	1,890.28	6.15	308.591		
1,700.00	1,689.70	1,670.70	1,689.70	4.49	2.22	-121.39	-1,129.26	-1,583.00	1,891.49	1,884.87	6.62	285.645		
1,800.00	1,788.57	1,769.57	1,788.57	4.85	2.35	-120.96	-1,129.26	-1,583.00	1,886.68	1,879.57	7.10	265.680		
1,900.00	1,887.45	1,868.45	1,887.45	5.20	2.48	-120.53	-1,129.26	-1,583.00	1,881.96	1,874.38	7.58	248.170		
2,000.00	1,986.32	1,967.32	1,986.32	5.56	2.61	-120.09	-1,129.26	-1,583.00	1,877.36	1,869.29	8.07	232.702		
2,100.00	2,085.19	2,066.19	2,085.19	5.92	2.74	-119.66	-1,129.26	-1,583.00	1,872.86	1,864.31	8.55	218.948		
2,200.00	2,184.06	2,165.06	2,184.06	6.28	2.87	-119.22	-1,129.26	-1,583.00	1,868.47	1,859.43	9.04	206.646		
2,300.00	2,282.94	2,263.94	2,282.94	6.64	3.00	-118.78	-1,129.26	-1,583.00	1,864.19	1,854.66	9.53	195.583		
2,400.00	2,381.81	2,362.81	2,381.81	7.01	3.14	-118.33	-1,129.26	-1,583.00	1,860.03	1,850.01	10.02	185.585		
2,500.00	2,480.68	2,461.68	2,480.68	7.37	3.27	-117.89	-1,129.26	-1,583.00	1,855.97	1,845.46	10.51	176.510		
2,600.00	2,579.55	2,560.55	2,579.55	7.73	3.40	-117.44	-1,129.26	-1,583.00	1,852.03	1,841.02	11.01	168.239		
2,700.00	2,678.42	2,659.42	2,678.42	8.09	3.53	-116.99	-1,129.26	-1,583.00	1,848.20	1,836.70	11.50	160.672		
2,800.00	2,777.30	2,758.30	2,777.30	8.46	3.66	-116.54	-1,129.26	-1,583.00	1,844.48	1,832.48	12.00	153.726		
2,900.00	2,876.17	2,857.17	2,876.17	8.82	3.79	-116.09	-1,129.26	-1,583.00	1,840.88	1,828.39	12.50	147.329		
3,000.00	2,975.04	2,956.04	2,975.04	9.19	3.92	-115.64	-1,129.26	-1,583.00	1,837.39	1,824.40	12.99	141.420		
3,100.00	3,073.91	3,054.91	3,073.91	9.55	4.05	-115.18	-1,129.26	-1,583.00	1,834.02	1,820.53	13.49	135.948		
3,200.00	3,172.78	3,153.78	3,172.78	9.92	4.19	-114.73	-1,129.26	-1,583.00	1,830.77	1,816.78	13.99	130.867		
3,300.00	3,271.66	3,252.66	3,271.66	10.28	4.32	-114.27	-1,129.26	-1,583.00	1,827.63	1,813.14	14.49	126.139		
3,400.00	3,370.53	3,351.53	3,370.53	10.65	4.45	-113.81	-1,129.26	-1,583.00	1,824.61	1,809.62	14.99	121.728		
3,500.00	3,469.40	3,450.40	3,469.40	11.01	4.58	-113.34	-1,129.26	-1,583.00	1,821.70	1,806.21	15.49	117.606		
3,600.00	3,568.27	3,549.27	3,568.27	11.38	4.71	-112.88	-1,129.26	-1,583.00	1,818.92	1,802.93	15.99	113.746		
3,700.00	3,667.15	3,648.15	3,667.15	11.74	4.84	-112.42	-1,129.26	-1,583.00	1,816.26	1,799.76	16.49	110.125		
3,800.00	3,766.02	3,747.02	3,766.02	12.11	4.97	-111.95	-1,129.26	-1,583.00	1,813.71	1,796.72	16.99	106.722		
3,900.00	3,864.89	3,845.89	3,864.89	12.48	5.10	-111.48	-1,129.26	-1,583.00	1,811.29	1,793.79	17.50	103.519		
4,000.00	3,963.76	3,944.76	3,963.76	12.84	5.24	-111.02	-1,129.26	-1,583.00	1,808.98	1,790.98	18.00	100.500		
4,108.41	4,070.95	4,051.95	4,070.95	13.24	5.38	-110.51	-1,129.26	-1,583.00	1,806.62	1,788.08	18.54	97.418		
4,200.00	4,161.71	4,142.71	4,161.71	13.51	5.50	-110.12	-1,129.26	-1,583.00	1,804.93	1,785.99	18.94	95.284		
4,300.00	4,261.20	4,242.20	4,261.20	13.72	5.63	-109.80	-1,129.26	-1,583.00	1,803.61	1,784.31	19.29	93.485		
4,400.00	4,360.97	4,341.97	4,360.97	13.91	5.76	-109.60	-1,129.26	-1,583.00	1,802.77	1,783.16	19.61	91.929		
4,500.00	4,460.92	4,441.92	4,460.92	14.06	5.90	-109.50	-1,129.26	-1,583.00	1,802.38	1,782.49	19.89	90.600		
4,539.08	4,500.00	4,481.00	4,500.00	14.11	5.95	-109.49	-1,129.26	-1,583.00	1,802.35	1,786.10	16.25	110.909		
4,600.00	4,560.92	4,541.92	4,560.92	14.20	6.03	-109.49	-1,129.26	-1,583.00	1,802.35	1,785.90	16.45	109.593		
4,700.00	4,660.92	4,641.92	4,660.92	14.32	6.16	-109.49	-1,129.26	-1,583.00	1,802.35	1,785.60	16.75	107.599		
4,800.00	4,760.92	4,741.92	4,760.92	14.45	6.29	-109.49	-1,129.26	-1,583.00	1,802.35	1,785.29	17.06	105.664		
4,900.00	4,860.92	4,841.92	4,860.92	14.57	6.43	-109.49	-1,129.26	-1,583.00	1,802.35	1,784.98	17.37	103.786		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 6500-NS-GYRO-MS													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		
5,000.00	4,960.92	4,941.92	4,960.92	14.70	6.56	-109.49	-1,129.26	-1,583.00	1,802.35	1,784.67	17.68	101.964		
5,100.00	5,060.92	5,041.92	5,060.92	14.84	6.69	-109.49	-1,129.26	-1,583.00	1,802.35	1,784.36	17.99	100.195		
5,200.00	5,160.92	5,141.92	5,160.92	14.97	6.82	-109.49	-1,129.26	-1,583.00	1,802.35	1,784.05	18.30	98.478		
5,300.00	5,260.92	5,241.92	5,260.92	15.11	6.96	-109.49	-1,129.26	-1,583.00	1,802.35	1,783.73	18.62	96.811		
5,400.00	5,360.92	5,341.92	5,360.92	15.25	7.09	-109.49	-1,129.26	-1,583.00	1,802.35	1,783.42	18.93	95.192		
5,500.00	5,460.92	5,441.92	5,460.92	15.39	7.22	-109.49	-1,129.26	-1,583.00	1,802.35	1,783.10	19.25	93.619		
5,600.00	5,560.92	5,541.92	5,560.92	15.53	7.36	-109.49	-1,129.26	-1,583.00	1,802.35	1,782.78	19.57	92.092		
5,700.00	5,660.92	5,641.92	5,660.92	15.68	7.49	-109.49	-1,129.26	-1,583.00	1,802.35	1,782.46	19.89	90.607		
5,800.00	5,760.92	5,741.92	5,760.92	15.82	7.62	-109.49	-1,129.26	-1,583.00	1,802.35	1,782.14	20.21	89.165		
5,900.00	5,860.92	5,841.92	5,860.92	15.97	7.75	-109.49	-1,129.26	-1,583.00	1,802.35	1,781.81	20.54	87.763		
5,927.62	5,888.54	5,869.54	5,888.54	16.01	7.79	-109.49	-1,129.26	-1,583.00	1,802.35	1,781.72	20.63	87.382		
5,950.00	5,910.91	5,891.91	5,910.91	16.05	7.82	-109.49	-1,129.26	-1,583.00	1,801.84	1,778.03	23.81	75.691		
5,975.00	5,935.84	5,916.84	5,935.84	16.09	7.85	-109.51	-1,129.26	-1,583.00	1,800.07	1,776.27	23.80	75.625		
6,000.00	5,960.64	5,941.64	5,960.64	16.12	7.89	-109.53	-1,129.26	-1,583.00	1,797.03	1,773.29	23.74	75.685		
6,025.00	5,985.25	5,966.25	5,985.25	16.16	7.92	-109.56	-1,129.26	-1,583.00	1,792.74	1,769.11	23.63	75.872		
6,050.00	6,009.58	5,990.58	6,009.58	16.20	7.95	-109.61	-1,129.26	-1,583.00	1,787.20	1,763.74	23.46	76.186		
6,075.00	6,033.59	6,014.59	6,033.59	16.23	7.98	-109.66	-1,129.26	-1,583.00	1,780.44	1,757.20	23.23	76.628		
6,100.00	6,057.20	6,038.20	6,057.20	16.26	8.01	-109.73	-1,129.26	-1,583.00	1,772.46	1,749.50	22.96	77.200		
6,125.00	6,080.35	6,061.35	6,080.35	16.30	8.04	-109.80	-1,129.26	-1,583.00	1,763.31	1,740.67	22.63	77.903		
6,150.00	6,102.97	6,083.97	6,102.97	16.33	8.07	-109.88	-1,129.26	-1,583.00	1,752.99	1,730.72	22.26	78.737		
6,175.00	6,125.00	6,106.00	6,125.00	16.37	8.10	-109.98	-1,129.26	-1,583.00	1,741.54	1,719.69	21.85	79.700		
6,200.00	6,146.38	6,127.38	6,146.38	16.40	8.13	-110.08	-1,129.26	-1,583.00	1,729.00	1,707.60	21.40	80.791		
6,225.00	6,167.06	6,148.06	6,167.06	16.44	8.16	-110.20	-1,129.26	-1,583.00	1,715.39	1,694.47	20.92	81.998		
6,250.00	6,186.98	6,167.98	6,186.98	16.48	8.19	-110.33	-1,129.26	-1,583.00	1,700.76	1,680.35	20.42	83.307		
6,275.00	6,206.07	6,187.07	6,206.07	16.52	8.21	-110.47	-1,129.26	-1,583.00	1,685.16	1,665.26	19.90	84.689		
6,300.00	6,224.30	6,205.30	6,224.30	16.56	8.24	-110.61	-1,129.26	-1,583.00	1,668.62	1,649.24	19.38	86.098		
6,325.00	6,241.61	6,222.61	6,241.61	16.61	8.26	-110.77	-1,129.26	-1,583.00	1,651.19	1,632.31	18.88	87.464		
6,350.00	6,257.94	6,238.94	6,257.94	16.66	8.28	-110.95	-1,129.26	-1,583.00	1,632.92	1,614.51	18.41	88.683		
6,375.00	6,273.27	6,254.27	6,273.27	16.71	8.30	-111.13	-1,129.26	-1,583.00	1,613.87	1,595.86	18.01	89.606		
6,400.00	6,287.54	6,268.54	6,287.54	16.77	8.32	-111.33	-1,129.26	-1,583.00	1,594.10	1,576.39	17.70	90.039		
6,425.00	6,300.72	6,281.72	6,300.72	16.85	8.34	-111.53	-1,129.26	-1,583.00	1,573.64	1,556.11	17.53	89.746		
6,450.00	6,312.77	6,293.77	6,312.77	16.93	8.35	-111.75	-1,129.26	-1,583.00	1,552.58	1,535.03	17.55	88.482		
6,475.00	6,323.65	6,304.65	6,323.65	17.03	8.37	-111.99	-1,129.26	-1,583.00	1,530.96	1,513.17	17.79	86.054		
6,500.00	6,333.35	6,314.35	6,333.35	17.15	8.38	-112.23	-1,129.26	-1,583.00	1,508.85	1,490.54	18.31	82.403		
6,525.00	6,341.82	6,322.82	6,341.82	17.30	8.39	-112.49	-1,129.26	-1,583.00	1,486.31	1,467.18	19.13	77.677		
6,550.00	6,349.05	6,330.05	6,349.05	17.47	8.40	-112.76	-1,129.26	-1,583.00	1,463.41	1,443.16	20.26	72.240		
6,575.00	6,355.02	6,336.02	6,355.02	17.68	8.41	-113.04	-1,129.26	-1,583.00	1,440.22	1,418.60	21.62	66.614		
6,600.00	6,359.71	6,340.71	6,359.71	17.91	8.42	-113.33	-1,129.26	-1,583.00	1,416.79	1,393.70	23.09	61.352		
6,625.00	6,363.11	6,344.11	6,363.11	18.19	8.42	-113.64	-1,129.26	-1,583.00	1,393.20	1,368.73	24.47	56.929		
6,650.00	6,365.21	6,346.21	6,365.21	18.50	8.42	-113.96	-1,129.26	-1,583.00	1,369.52	1,343.99	25.53	53.648		
6,675.00	6,366.00	6,347.00	6,366.00	18.83	8.42	-114.29	-1,129.26	-1,583.00	1,345.81	1,319.73	26.08	51.610		
6,677.62	6,366.00	6,347.00	6,366.00	18.87	8.42	-114.33	-1,129.26	-1,583.00	1,343.32	1,317.22	26.10	51.466		
6,700.00	6,366.00	6,347.00	6,366.00	19.20	8.42	-114.64	-1,129.26	-1,583.00	1,322.13	1,295.64	26.49	49.912		
6,800.00	6,366.00	6,347.00	6,366.00	20.87	8.42	-116.15	-1,129.26	-1,583.00	1,227.93	1,199.57	28.37	43.285		
6,900.00	6,366.00	6,347.00	6,366.00	22.81	8.42	-117.91	-1,129.26	-1,583.00	1,134.74	1,104.30	30.44	37.279		
7,000.00	6,366.00	6,347.00	6,366.00	24.93	8.42	-119.98	-1,129.26	-1,583.00	1,042.80	1,010.15	32.65	31.938		
7,100.00	6,366.00	6,347.00	6,366.00	27.17	8.42	-122.45	-1,129.26	-1,583.00	952.49	917.52	34.97	27.237		
7,200.00	6,366.00	6,347.00	6,366.00	29.51	8.42	-125.43	-1,129.26	-1,583.00	864.31	826.94	37.37	23.128		
7,300.00	6,366.00	6,347.00	6,366.00	31.93	8.42	-129.07	-1,129.26	-1,583.00	778.99	739.16	39.83	19.557		
7,400.00	6,366.00	6,347.00	6,366.00	34.40	8.42	-133.59	-1,129.26	-1,583.00	697.59	655.25	42.34	16.475		
7,500.00	6,366.00	6,347.00	6,366.00	36.91	8.42	-139.25	-1,129.26	-1,583.00	621.64	576.75	44.89	13.847		
7,600.00	6,366.00	6,347.00	6,366.00	39.46	8.42	-146.39	-1,129.26	-1,583.00	553.39	505.91	47.47	11.657		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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.32-T5N-R63W - Hergenreder BB 32-10DI (Existing) - Wellbore #1 - Wellbore #1		Offset Site Error:		0.00 usft	
Survey Program: 6500-NS-GYRO-MS														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					
7,700.00	6,366.00	6,347.00	6,366.00	42.04	8.42	-155.36	-1,129.26	-1,583.00	496.02	445.94	50.08	9.904					
7,800.00	6,366.00	6,347.00	6,366.00	44.65	8.42	-166.32	-1,129.26	-1,583.00	453.70	400.99	52.71	8.608					
7,900.00	6,366.00	6,347.00	6,366.00	47.27	8.42	-178.96	-1,129.26	-1,583.00	430.86	375.51	55.35	7.784					
7,950.99	6,366.00	6,347.00	6,366.00	48.62	8.42	174.24	-1,129.26	-1,583.00	427.84	371.13	56.71	7.544	CC, ES				
8,000.00	6,366.00	6,347.00	6,366.00	49.91	8.42	167.71	-1,129.26	-1,583.00	430.63	372.62	58.01	7.423	SF				
8,100.00	6,366.00	6,347.00	6,366.00	52.57	8.42	155.04	-1,129.26	-1,583.00	453.04	392.36	60.68	7.466					
8,200.00	6,366.00	6,347.00	6,366.00	55.23	8.42	144.04	-1,129.26	-1,583.00	495.02	431.66	63.37	7.812					
8,300.00	6,366.00	6,347.00	6,366.00	57.91	8.42	135.04	-1,129.26	-1,583.00	552.13	486.08	66.06	8.358					
8,400.00	6,366.00	6,347.00	6,366.00	60.60	8.42	127.86	-1,129.26	-1,583.00	620.20	551.45	68.76	9.020					
8,500.00	6,366.00	6,347.00	6,366.00	63.29	8.42	122.17	-1,129.26	-1,583.00	696.03	624.57	71.46	9.740					
8,600.00	6,366.00	6,347.00	6,366.00	66.00	8.42	117.64	-1,129.26	-1,583.00	777.34	703.17	74.17	10.480					
8,700.00	6,366.00	6,347.00	6,366.00	68.70	8.42	113.98	-1,129.26	-1,583.00	862.59	785.70	76.89	11.218					
8,800.00	6,366.00	6,347.00	6,366.00	71.42	8.42	110.99	-1,129.26	-1,583.00	950.72	871.10	79.61	11.942					
8,900.00	6,366.00	6,347.00	6,366.00	74.13	8.42	108.51	-1,129.26	-1,583.00	1,040.99	958.65	82.34	12.643					
9,000.00	6,366.00	6,347.00	6,366.00	76.86	8.42	106.43	-1,129.26	-1,583.00	1,132.90	1,047.83	85.07	13.317					
9,100.00	6,366.00	6,347.00	6,366.00	79.58	8.42	104.67	-1,129.26	-1,583.00	1,226.08	1,138.27	87.80	13.964					
9,200.00	6,366.00	6,347.00	6,366.00	82.31	8.42	103.15	-1,129.26	-1,583.00	1,320.25	1,229.71	90.54	14.582					
9,300.00	6,366.00	6,347.00	6,366.00	85.05	8.42	101.84	-1,129.26	-1,583.00	1,415.23	1,321.95	93.28	15.172					
9,400.00	6,366.00	6,347.00	6,366.00	87.78	8.42	100.69	-1,129.26	-1,583.00	1,510.85	1,414.83	96.02	15.735					
9,500.00	6,366.00	6,347.00	6,366.00	90.52	8.42	99.68	-1,129.26	-1,583.00	1,607.01	1,508.24	98.76	16.271					
9,600.00	6,366.00	6,347.00	6,366.00	93.26	8.42	98.79	-1,129.26	-1,583.00	1,703.61	1,602.10	101.51	16.783					
9,700.00	6,366.00	6,347.00	6,366.00	96.00	8.42	97.99	-1,129.26	-1,583.00	1,800.58	1,696.32	104.26	17.270					
9,800.00	6,366.00	6,347.00	6,366.00	98.75	8.42	97.27	-1,129.26	-1,583.00	1,897.86	1,790.85	107.01	17.736					
9,900.00	6,366.00	6,347.00	6,366.00	101.49	8.42	96.62	-1,129.26	-1,583.00	1,995.42	1,885.66	109.76	18.180					
10,000.00	6,366.00	6,347.00	6,366.00	104.24	8.42	96.04	-1,129.26	-1,583.00	2,093.20	1,980.69	112.51	18.604					
10,100.00	6,366.00	6,347.00	6,366.00	106.99	8.42	95.50	-1,129.26	-1,583.00	2,191.18	2,075.92	115.26	19.010					
10,200.00	6,366.00	6,347.00	6,366.00	109.74	8.42	95.01	-1,129.26	-1,583.00	2,289.34	2,171.32	118.02	19.398					
10,300.00	6,366.00	6,347.00	6,366.00	112.50	8.42	94.56	-1,129.26	-1,583.00	2,387.65	2,266.88	120.78	19.769					
10,400.00	6,366.00	6,347.00	6,366.00	115.25	8.42	94.15	-1,129.26	-1,583.00	2,486.10	2,362.57	123.53	20.125					
10,500.00	6,366.00	6,347.00	6,366.00	118.00	8.42	93.77	-1,129.26	-1,583.00	2,584.67	2,458.37	126.29	20.466					
10,600.00	6,366.00	6,347.00	6,366.00	120.76	8.42	93.42	-1,129.26	-1,583.00	2,683.34	2,554.29	129.05	20.793					
10,700.00	6,366.00	6,347.00	6,366.00	123.52	8.42	93.09	-1,129.26	-1,583.00	2,782.10	2,650.29	131.81	21.107					
10,806.11	6,366.00	6,347.00	6,366.00	126.44	8.42	92.76	-1,129.26	-1,583.00	2,887.00	2,752.26	134.74	21.427					



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 6500-NS-GYRO-MS													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	15.00	0.00	0.00	-112.92	-1,322.19	-3,127.00	3,395.08					
100.00	100.00	85.00	100.00	0.09	0.11	-112.92	-1,322.19	-3,127.00	3,395.04	3,394.84	0.21	N/A		
200.00	200.00	185.00	200.00	0.32	0.25	-112.92	-1,322.19	-3,127.00	3,395.04	3,394.48	0.56	6,034.001		
300.00	300.00	285.00	300.00	0.54	0.38	-112.92	-1,322.19	-3,127.00	3,395.04	3,394.12	0.92	3,689.711		
400.00	400.00	385.00	400.00	0.77	0.51	-112.92	-1,322.19	-3,127.00	3,395.04	3,393.77	1.28	2,657.310		
500.00	500.00	485.00	500.00	0.99	0.64	-112.92	-1,322.19	-3,127.00	3,395.04	3,393.41	1.64	2,076.339		
600.00	599.98	584.98	599.98	1.19	0.78	-112.89	-1,322.19	-3,127.00	3,394.73	3,392.76	1.97	1,727.230		
700.00	699.84	684.84	699.84	1.38	0.91	-112.80	-1,322.19	-3,127.00	3,393.78	3,391.49	2.29	1,485.209		
800.00	799.45	784.45	799.45	1.59	1.04	-112.66	-1,322.19	-3,127.00	3,392.21	3,389.58	2.63	1,289.385		
900.00	898.70	883.70	898.70	1.84	1.17	-112.46	-1,322.19	-3,127.00	3,390.07	3,387.05	3.01	1,125.777		
930.67	929.05	914.05	929.05	1.93	1.21	-112.38	-1,322.19	-3,127.00	3,389.29	3,386.16	3.14	1,080.658		
1,000.00	997.60	982.60	997.60	2.13	1.30	-112.21	-1,322.19	-3,127.00	3,387.51	3,384.08	3.43	987.630		
1,100.00	1,096.47	1,081.47	1,096.47	2.44	1.44	-111.96	-1,322.19	-3,127.00	3,384.99	3,381.12	3.87	874.625		
1,200.00	1,195.34	1,180.34	1,195.34	2.77	1.57	-111.71	-1,322.19	-3,127.00	3,382.54	3,378.21	4.32	782.193		
1,300.00	1,294.21	1,279.21	1,294.21	3.10	1.70	-111.46	-1,322.19	-3,127.00	3,380.15	3,375.36	4.79	705.920		
1,400.00	1,393.09	1,378.09	1,393.09	3.44	1.83	-111.21	-1,322.19	-3,127.00	3,377.82	3,372.56	5.26	642.285		
1,500.00	1,491.96	1,476.96	1,491.96	3.79	1.96	-110.96	-1,322.19	-3,127.00	3,375.56	3,369.82	5.73	588.591		
1,600.00	1,590.83	1,575.83	1,590.83	4.14	2.09	-110.71	-1,322.19	-3,127.00	3,373.36	3,367.15	6.21	542.795		
1,700.00	1,689.70	1,674.70	1,689.70	4.49	2.22	-110.45	-1,322.19	-3,127.00	3,371.23	3,364.53	6.70	503.344		
1,800.00	1,788.57	1,773.57	1,788.57	4.85	2.35	-110.20	-1,322.19	-3,127.00	3,369.17	3,361.98	7.18	469.050		
1,900.00	1,887.45	1,872.45	1,887.45	5.20	2.49	-109.95	-1,322.19	-3,127.00	3,367.17	3,359.50	7.67	438.992		
2,000.00	1,986.32	1,971.32	1,986.32	5.56	2.62	-109.70	-1,322.19	-3,127.00	3,365.23	3,357.07	8.16	412.452		
2,100.00	2,085.19	2,070.19	2,085.19	5.92	2.75	-109.44	-1,322.19	-3,127.00	3,363.36	3,354.71	8.65	388.858		
2,200.00	2,184.06	2,169.06	2,184.06	6.28	2.88	-109.19	-1,322.19	-3,127.00	3,361.56	3,352.42	9.14	367.757		
2,300.00	2,282.94	2,267.94	2,282.94	6.64	3.01	-108.94	-1,322.19	-3,127.00	3,359.82	3,350.19	9.63	348.779		
2,400.00	2,381.81	2,366.81	2,381.81	7.01	3.14	-108.68	-1,322.19	-3,127.00	3,358.15	3,348.02	10.13	331.627		
2,500.00	2,480.68	2,465.68	2,480.68	7.37	3.27	-108.43	-1,322.19	-3,127.00	3,356.54	3,345.92	10.62	316.052		
2,600.00	2,579.55	2,564.55	2,579.55	7.73	3.40	-108.17	-1,322.19	-3,127.00	3,355.00	3,343.89	11.11	301.849		
2,700.00	2,678.42	2,663.42	2,678.42	8.09	3.54	-107.92	-1,322.19	-3,127.00	3,353.53	3,341.92	11.61	288.849		
2,800.00	2,777.30	2,762.30	2,777.30	8.46	3.67	-107.66	-1,322.19	-3,127.00	3,352.12	3,340.02	12.11	276.906		
2,900.00	2,876.17	2,861.17	2,876.17	8.82	3.80	-107.41	-1,322.19	-3,127.00	3,350.78	3,338.18	12.60	265.899		
3,000.00	2,975.04	2,960.04	2,975.04	9.19	3.93	-107.15	-1,322.19	-3,127.00	3,349.51	3,336.41	13.10	255.723		
3,100.00	3,073.91	3,058.91	3,073.91	9.55	4.06	-106.90	-1,322.19	-3,127.00	3,348.30	3,334.71	13.60	246.289		
3,200.00	3,172.78	3,157.78	3,172.78	9.92	4.19	-106.64	-1,322.19	-3,127.00	3,347.16	3,333.07	14.09	237.519		
3,300.00	3,271.66	3,256.66	3,271.66	10.28	4.32	-106.39	-1,322.19	-3,127.00	3,346.08	3,331.50	14.59	229.348		
3,400.00	3,370.53	3,355.53	3,370.53	10.65	4.45	-106.13	-1,322.19	-3,127.00	3,345.08	3,329.99	15.09	221.717		
3,500.00	3,469.40	3,454.40	3,469.40	11.01	4.58	-105.88	-1,322.19	-3,127.00	3,344.14	3,328.55	15.59	214.574		
3,600.00	3,568.27	3,553.27	3,568.27	11.38	4.72	-105.62	-1,322.19	-3,127.00	3,343.26	3,327.18	16.08	207.875		
3,700.00	3,667.15	3,652.15	3,667.15	11.74	4.85	-105.36	-1,322.19	-3,127.00	3,342.45	3,325.87	16.58	201.581		
3,800.00	3,766.02	3,751.02	3,766.02	12.11	4.98	-105.11	-1,322.19	-3,127.00	3,341.71	3,324.63	17.08	195.657		
3,900.00	3,864.89	3,849.89	3,864.89	12.48	5.11	-104.85	-1,322.19	-3,127.00	3,341.04	3,323.46	17.58	190.071		
4,000.00	3,963.76	3,948.76	3,963.76	12.84	5.24	-104.59	-1,322.19	-3,127.00	3,340.43	3,322.36	18.08	184.796		
4,108.41	4,070.95	4,055.95	4,070.95	13.24	5.38	-104.32	-1,322.19	-3,127.00	3,339.85	3,321.23	18.62	179.400		
4,200.00	4,161.71	4,146.71	4,161.71	13.51	5.50	-104.11	-1,322.19	-3,127.00	3,339.46	3,320.45	19.01	175.666		
4,300.00	4,261.20	4,246.20	4,261.20	13.72	5.64	-103.93	-1,322.19	-3,127.00	3,339.18	3,319.82	19.36	172.510		
4,400.00	4,360.97	4,345.97	4,360.97	13.91	5.77	-103.82	-1,322.19	-3,127.00	3,339.01	3,319.34	19.67	169.743		
4,500.00	4,460.92	4,445.92	4,460.92	14.06	5.90	-103.77	-1,322.19	-3,127.00	3,338.93	3,318.98	19.95	167.339		
4,539.08	4,500.00	4,485.00	4,500.00	14.11	5.95	-103.76	-1,322.19	-3,127.00	3,338.93	3,322.65	16.27	205.185		
4,600.00	4,560.92	4,545.92	4,560.92	14.20	6.03	-103.76	-1,322.19	-3,127.00	3,338.93	3,322.46	16.47	202.755		
4,700.00	4,660.92	4,645.92	4,660.92	14.32	6.17	-103.76	-1,322.19	-3,127.00	3,338.93	3,322.15	16.77	199.069		
4,800.00	4,760.92	4,745.92	4,760.92	14.45	6.30	-103.76	-1,322.19	-3,127.00	3,338.93	3,321.85	17.08	195.493		
4,900.00	4,860.92	4,845.92	4,860.92	14.57	6.43	-103.76	-1,322.19	-3,127.00	3,338.93	3,321.54	17.39	192.022		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 6500-NS-GYRO-MS													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		
5,000.00	4,960.92	4,945.92	4,960.92	14.70	6.56	-103.76	-1,322.19	-3,127.00	3,338.93	3,321.23	17.70	188.654		
5,100.00	5,060.92	5,045.92	5,060.92	14.84	6.70	-103.76	-1,322.19	-3,127.00	3,338.93	3,320.92	18.01	185.384		
5,200.00	5,160.92	5,145.92	5,160.92	14.97	6.83	-103.76	-1,322.19	-3,127.00	3,338.93	3,320.60	18.32	182.211		
5,300.00	5,260.92	5,245.92	5,260.92	15.11	6.96	-103.76	-1,322.19	-3,127.00	3,338.93	3,320.29	18.64	179.129		
5,400.00	5,360.92	5,345.92	5,360.92	15.25	7.10	-103.76	-1,322.19	-3,127.00	3,338.93	3,319.97	18.96	176.136		
5,500.00	5,460.92	5,445.92	5,460.92	15.39	7.23	-103.76	-1,322.19	-3,127.00	3,338.93	3,319.65	19.27	173.230		
5,600.00	5,560.92	5,545.92	5,560.92	15.53	7.36	-103.76	-1,322.19	-3,127.00	3,338.93	3,319.33	19.59	170.406		
5,700.00	5,660.92	5,645.92	5,660.92	15.68	7.49	-103.76	-1,322.19	-3,127.00	3,338.93	3,319.01	19.91	167.662		
5,800.00	5,760.92	5,745.92	5,760.92	15.82	7.63	-103.76	-1,322.19	-3,127.00	3,338.93	3,318.69	20.24	164.995		
5,900.00	5,860.92	5,845.92	5,860.92	15.97	7.76	-103.76	-1,322.19	-3,127.00	3,338.93	3,318.37	20.56	162.403		
5,927.62	5,888.54	5,873.54	5,888.54	16.01	7.80	-103.76	-1,322.19	-3,127.00	3,338.93	3,318.28	20.65	161.700		
5,950.00	5,910.91	5,895.91	5,910.91	16.05	7.83	-103.76	-1,322.19	-3,127.00	3,338.41	3,314.56	23.85	139.978		
5,975.00	5,935.84	5,920.84	5,935.84	16.09	7.86	-103.77	-1,322.19	-3,127.00	3,336.60	3,312.76	23.84	139.945		
6,000.00	5,960.64	5,945.64	5,960.64	16.12	7.89	-103.77	-1,322.19	-3,127.00	3,333.51	3,309.73	23.78	140.195		
6,025.00	5,985.25	5,970.25	5,985.25	16.16	7.92	-103.79	-1,322.19	-3,127.00	3,329.13	3,305.47	23.66	140.729		
6,050.00	6,009.58	5,994.58	6,009.58	16.20	7.96	-103.80	-1,322.19	-3,127.00	3,323.48	3,300.00	23.48	141.553		
6,075.00	6,033.59	6,018.59	6,033.59	16.23	7.99	-103.82	-1,322.19	-3,127.00	3,316.58	3,293.34	23.25	142.672		
6,100.00	6,057.20	6,042.20	6,057.20	16.26	8.02	-103.84	-1,322.19	-3,127.00	3,308.45	3,285.49	22.96	144.098		
6,125.00	6,080.35	6,065.35	6,080.35	16.30	8.05	-103.86	-1,322.19	-3,127.00	3,299.10	3,276.48	22.62	145.841		
6,150.00	6,102.97	6,087.97	6,102.97	16.33	8.08	-103.88	-1,322.19	-3,127.00	3,288.57	3,266.34	22.23	147.915		
6,175.00	6,125.00	6,110.00	6,125.00	16.37	8.11	-103.91	-1,322.19	-3,127.00	3,276.89	3,255.09	21.80	150.336		
6,200.00	6,146.38	6,131.38	6,146.38	16.40	8.14	-103.95	-1,322.19	-3,127.00	3,264.07	3,242.76	21.32	153.118		
6,225.00	6,167.06	6,152.06	6,167.06	16.44	8.17	-103.98	-1,322.19	-3,127.00	3,250.17	3,229.37	20.80	156.277		
6,250.00	6,186.98	6,171.98	6,186.98	16.48	8.19	-104.02	-1,322.19	-3,127.00	3,235.22	3,214.98	20.24	159.824		
6,275.00	6,206.07	6,191.07	6,206.07	16.52	8.22	-104.06	-1,322.19	-3,127.00	3,219.26	3,199.60	19.66	163.763		
6,300.00	6,224.30	6,209.30	6,224.30	16.56	8.24	-104.11	-1,322.19	-3,127.00	3,202.33	3,183.28	19.05	168.085		
6,325.00	6,241.61	6,226.61	6,241.61	16.61	8.26	-104.15	-1,322.19	-3,127.00	3,184.49	3,166.05	18.43	172.759		
6,350.00	6,257.94	6,242.94	6,257.94	16.66	8.29	-104.20	-1,322.19	-3,127.00	3,165.77	3,147.96	17.81	177.712		
6,375.00	6,273.27	6,258.27	6,273.27	16.71	8.31	-104.26	-1,322.19	-3,127.00	3,146.24	3,129.03	17.21	182.813		
6,400.00	6,287.54	6,272.54	6,287.54	16.77	8.33	-104.31	-1,322.19	-3,127.00	3,125.94	3,109.30	16.64	187.830		
6,425.00	6,300.72	6,285.72	6,300.72	16.85	8.34	-104.37	-1,322.19	-3,127.00	3,104.94	3,088.80	16.14	192.392		
6,450.00	6,312.77	6,297.77	6,312.77	16.93	8.36	-104.43	-1,322.19	-3,127.00	3,083.29	3,067.55	15.74	195.929		
6,475.00	6,323.65	6,308.65	6,323.65	17.03	8.37	-104.49	-1,322.19	-3,127.00	3,061.04	3,045.55	15.49	197.632		
6,500.00	6,333.35	6,318.35	6,333.35	17.15	8.39	-104.56	-1,322.19	-3,127.00	3,038.27	3,022.81	15.46	196.472		
6,525.00	6,341.82	6,326.82	6,341.82	17.30	8.40	-104.63	-1,322.19	-3,127.00	3,015.03	2,999.28	15.76	191.355		
6,550.00	6,349.05	6,334.05	6,349.05	17.47	8.41	-104.70	-1,322.19	-3,127.00	2,991.39	2,974.91	16.48	181.496		
6,575.00	6,355.02	6,340.02	6,355.02	17.68	8.41	-104.77	-1,322.19	-3,127.00	2,967.42	2,949.64	17.77	166.960		
6,600.00	6,359.71	6,344.71	6,359.71	17.91	8.42	-104.85	-1,322.19	-3,127.00	2,943.17	2,923.44	19.73	149.157		
6,625.00	6,363.11	6,348.11	6,363.11	18.19	8.43	-104.92	-1,322.19	-3,127.00	2,918.72	2,896.44	22.28	131.008		
6,650.00	6,365.21	6,350.21	6,365.21	18.50	8.43	-105.00	-1,322.19	-3,127.00	2,894.13	2,869.31	24.82	116.593		
6,675.00	6,366.00	6,351.00	6,366.00	18.83	8.43	-105.08	-1,322.19	-3,127.00	2,869.47	2,843.37	26.10	109.957		
6,677.62	6,366.00	6,351.00	6,366.00	18.87	8.43	-105.09	-1,322.19	-3,127.00	2,866.88	2,840.78	26.11	109.815		
6,700.00	6,366.00	6,351.00	6,366.00	19.20	8.43	-105.16	-1,322.19	-3,127.00	2,844.80	2,818.31	26.49	107.373		
6,800.00	6,366.00	6,351.00	6,366.00	20.87	8.43	-105.50	-1,322.19	-3,127.00	2,746.20	2,717.82	28.37	96.786		
6,900.00	6,366.00	6,351.00	6,366.00	22.81	8.43	-105.87	-1,322.19	-3,127.00	2,647.69	2,617.25	30.44	86.969		
7,000.00	6,366.00	6,351.00	6,366.00	24.93	8.43	-106.27	-1,322.19	-3,127.00	2,549.31	2,516.65	32.66	78.065		
7,100.00	6,366.00	6,351.00	6,366.00	27.17	8.43	-106.69	-1,322.19	-3,127.00	2,451.05	2,416.08	34.98	70.080		
7,200.00	6,366.00	6,351.00	6,366.00	29.51	8.43	-107.15	-1,322.19	-3,127.00	2,352.94	2,315.57	37.38	62.955		
7,300.00	6,366.00	6,351.00	6,366.00	31.93	8.43	-107.66	-1,322.19	-3,127.00	2,255.00	2,215.16	39.84	56.605		
7,400.00	6,366.00	6,351.00	6,366.00	34.40	8.43	-108.20	-1,322.19	-3,127.00	2,157.25	2,114.90	42.35	50.940		
7,500.00	6,366.00	6,351.00	6,366.00	36.91	8.43	-108.80	-1,322.19	-3,127.00	2,059.71	2,014.81	44.90	45.875		
7,600.00	6,366.00	6,351.00	6,366.00	39.46	8.43	-109.46	-1,322.19	-3,127.00	1,962.42	1,914.94	47.48	41.332		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 6500-NS-GYRO-MS													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		
7,700.00	6,366.00	6,351.00	6,366.00	42.04	8.43	-110.19	-1,322.19	-3,127.00	1,865.42	1,815.33	50.09	37.244		
7,800.00	6,366.00	6,351.00	6,366.00	44.65	8.43	-111.00	-1,322.19	-3,127.00	1,768.75	1,716.04	52.71	33.554		
7,900.00	6,366.00	6,351.00	6,366.00	47.27	8.43	-111.90	-1,322.19	-3,127.00	1,672.47	1,617.11	55.36	30.212		
8,000.00	6,366.00	6,351.00	6,366.00	49.91	8.43	-112.91	-1,322.19	-3,127.00	1,576.66	1,518.64	58.02	27.176		
8,100.00	6,366.00	6,351.00	6,366.00	52.57	8.43	-114.05	-1,322.19	-3,127.00	1,481.40	1,420.71	60.69	24.410		
8,200.00	6,366.00	6,351.00	6,366.00	55.23	8.43	-115.34	-1,322.19	-3,127.00	1,386.80	1,323.43	63.37	21.884		
8,300.00	6,366.00	6,351.00	6,366.00	57.91	8.43	-116.83	-1,322.19	-3,127.00	1,293.02	1,226.96	66.06	19.573		
8,400.00	6,366.00	6,351.00	6,366.00	60.60	8.43	-118.55	-1,322.19	-3,127.00	1,200.25	1,131.49	68.76	17.455		
8,500.00	6,366.00	6,351.00	6,366.00	63.29	8.43	-120.55	-1,322.19	-3,127.00	1,108.73	1,037.26	71.47	15.514		
8,600.00	6,366.00	6,351.00	6,366.00	66.00	8.43	-122.91	-1,322.19	-3,127.00	1,018.81	944.63	74.18	13.734		
8,700.00	6,366.00	6,351.00	6,366.00	68.70	8.43	-125.72	-1,322.19	-3,127.00	930.95	854.05	76.90	12.106		
8,800.00	6,366.00	6,351.00	6,366.00	71.42	8.43	-129.10	-1,322.19	-3,127.00	845.78	766.16	79.62	10.623		
8,900.00	6,366.00	6,351.00	6,366.00	74.13	8.43	-133.23	-1,322.19	-3,127.00	764.22	681.88	82.35	9.281		
9,000.00	6,366.00	6,351.00	6,366.00	76.86	8.43	-138.30	-1,322.19	-3,127.00	687.55	602.48	85.08	8.082		
9,100.00	6,366.00	6,351.00	6,366.00	79.58	8.43	-144.59	-1,322.19	-3,127.00	617.59	529.78	87.81	7.033		
9,200.00	6,366.00	6,351.00	6,366.00	82.31	8.43	-152.36	-1,322.19	-3,127.00	556.87	466.32	90.55	6.150		
9,300.00	6,366.00	6,351.00	6,366.00	85.05	8.43	-161.80	-1,322.19	-3,127.00	508.71	415.43	93.28	5.453		
9,400.00	6,366.00	6,351.00	6,366.00	87.78	8.43	-172.85	-1,322.19	-3,127.00	476.95	380.92	96.03	4.967		
9,500.00	6,366.00	6,351.00	6,366.00	90.52	8.43	175.05	-1,322.19	-3,127.00	464.94	366.17	98.77	4.707		
9,506.56	6,366.00	6,351.00	6,366.00	90.70	8.43	174.24	-1,322.19	-3,127.00	464.89	365.94	98.95	4.698 CC, ES		
9,600.00	6,366.00	6,351.00	6,366.00	93.26	8.43	162.88	-1,322.19	-3,127.00	474.19	372.67	101.52	4.671 SF		
9,700.00	6,366.00	6,351.00	6,366.00	96.00	8.43	151.65	-1,322.19	-3,127.00	503.53	399.27	104.26	4.829		
9,800.00	6,366.00	6,351.00	6,366.00	98.75	8.43	141.98	-1,322.19	-3,127.00	549.75	442.74	107.01	5.137		
9,900.00	6,366.00	6,351.00	6,366.00	101.49	8.43	134.00	-1,322.19	-3,127.00	609.03	499.27	109.76	5.549		
10,000.00	6,366.00	6,351.00	6,366.00	104.24	8.43	127.54	-1,322.19	-3,127.00	677.94	565.43	112.52	6.025		
10,100.00	6,366.00	6,351.00	6,366.00	106.99	8.43	122.32	-1,322.19	-3,127.00	753.85	638.58	115.27	6.540		
10,200.00	6,366.00	6,351.00	6,366.00	109.74	8.43	118.08	-1,322.19	-3,127.00	834.85	716.83	118.02	7.074		
10,300.00	6,366.00	6,351.00	6,366.00	112.50	8.43	114.61	-1,322.19	-3,127.00	919.60	798.82	120.78	7.614		
10,400.00	6,366.00	6,351.00	6,366.00	115.25	8.43	111.73	-1,322.19	-3,127.00	1,007.15	883.61	123.54	8.153		
10,500.00	6,366.00	6,351.00	6,366.00	118.00	8.43	109.32	-1,322.19	-3,127.00	1,096.83	970.54	126.30	8.685		
10,600.00	6,366.00	6,351.00	6,366.00	120.76	8.43	107.28	-1,322.19	-3,127.00	1,188.16	1,059.11	129.06	9.207		
10,700.00	6,366.00	6,351.00	6,366.00	123.52	8.43	105.52	-1,322.19	-3,127.00	1,280.79	1,148.97	131.82	9.717		
10,806.11	6,366.00	6,351.00	6,366.00	126.44	8.43	103.93	-1,322.19	-3,127.00	1,380.20	1,245.46	134.74	10.243		

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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													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	17.00	0.00	0.00	-85.41	36.43	-454.25	456.03					
100.00	100.00	85.78	102.78	0.09	0.11	-85.41	36.44	-453.99	455.46	455.25	0.21	2,209.841		
200.00	200.00	183.92	200.91	0.32	0.32	-85.38	36.61	-453.50	454.97	454.33	0.64	708.869		
227.66	227.66	210.66	227.66	0.38	0.38	-85.37	36.73	-453.46	454.94	454.19	0.76	600.554 CC		
300.00	300.00	279.96	296.95	0.54	0.49	-85.34	37.00	-453.67	455.19	454.16	1.03	442.442		
400.00	400.00	384.36	401.35	0.77	0.66	-85.31	37.22	-454.05	455.57	454.14	1.43	318.700		
470.30	470.30	453.19	470.18	0.92	0.79	-85.30	37.33	-453.84	455.38	453.66	1.72	264.938		
500.00	500.00	481.57	498.56	0.99	0.85	-85.29	37.44	-453.88	455.43	453.59	1.84	247.335 ES		
600.00	599.98	583.58	600.57	1.19	1.03	-85.04	37.73	-454.09	456.17	453.95	2.22	205.141		
700.00	699.84	685.07	702.06	1.38	1.24	-84.41	37.78	-453.74	457.42	454.80	2.62	174.725		
800.00	799.45	784.73	801.72	1.59	1.48	-83.33	38.09	-453.19	459.68	456.61	3.07	149.735		
900.00	898.70	882.10	899.09	1.84	1.66	-81.88	38.25	-452.86	463.50	460.01	3.49	132.937		
930.67	929.05	911.81	928.80	1.93	1.70	-81.38	38.17	-452.87	465.07	461.45	3.61	128.720		
1,000.00	997.60	978.91	995.90	2.13	1.78	-80.19	38.19	-453.01	469.03	465.14	3.89	120.514		
1,100.00	1,096.47	1,077.86	1,094.84	2.44	1.91	-78.50	38.43	-453.37	475.30	470.99	4.31	110.175		
1,200.00	1,195.34	1,178.11	1,195.09	2.77	2.03	-76.90	38.26	-453.63	481.77	477.03	4.74	101.633		
1,300.00	1,294.21	1,277.62	1,294.61	3.10	2.20	-75.30	38.31	-453.57	488.37	483.16	5.21	93.725		
1,400.00	1,393.09	1,376.52	1,393.50	3.44	2.37	-73.74	38.50	-453.43	495.29	489.59	5.70	86.966		
1,500.00	1,491.96	1,475.96	1,492.94	3.79	2.55	-72.25	38.36	-453.34	502.51	496.33	6.18	81.257		
1,600.00	1,590.83	1,573.30	1,590.29	4.14	2.72	-70.79	38.37	-453.24	510.10	503.44	6.66	76.558		
1,700.00	1,689.70	1,670.67	1,687.65	4.49	2.88	-69.38	38.43	-453.49	518.37	511.24	7.13	72.699		
1,800.00	1,788.57	1,775.94	1,792.91	4.85	3.08	-67.89	39.52	-453.06	526.71	519.07	7.63	69.019		
1,900.00	1,887.45	1,877.75	1,894.71	5.20	3.29	-66.37	40.76	-451.17	534.13	525.98	8.14	65.578		
2,000.00	1,986.32	1,982.03	1,998.93	5.56	3.52	-64.82	42.31	-448.46	541.37	532.71	8.66	62.479		
2,100.00	2,085.19	2,082.93	2,099.79	5.92	3.75	-63.38	42.87	-445.30	548.11	538.93	9.18	59.715		
2,200.00	2,184.06	2,181.60	2,198.39	6.28	3.97	-61.96	43.61	-441.98	555.06	545.37	9.69	57.285		
2,300.00	2,282.94	2,281.10	2,297.83	6.64	4.20	-60.57	44.36	-438.64	562.35	552.15	10.20	55.137		
2,400.00	2,381.81	2,375.10	2,391.79	7.01	4.42	-59.30	44.57	-436.01	570.18	559.48	10.70	53.293		
2,500.00	2,480.68	2,468.27	2,484.94	7.37	4.64	-58.03	45.58	-434.06	579.33	568.13	11.20	51.739		
2,600.00	2,579.55	2,567.46	2,584.12	7.73	4.88	-56.86	46.41	-432.84	589.33	577.62	11.70	50.350		
2,700.00	2,678.42	2,666.35	2,683.00	8.09	5.12	-55.79	46.58	-431.70	599.26	587.05	12.21	49.073		
2,800.00	2,777.30	2,764.75	2,781.39	8.46	5.36	-54.71	47.15	-430.49	609.57	596.85	12.72	47.928		
2,900.00	2,876.17	2,862.50	2,879.14	8.82	5.60	-53.72	47.36	-429.59	620.12	606.90	13.23	46.888		
3,000.00	2,975.04	2,955.59	2,972.22	9.19	5.78	-52.78	47.60	-429.26	631.32	617.64	13.68	46.155		
3,100.00	3,073.91	3,049.11	3,065.74	9.55	5.90	-51.94	47.99	-430.12	643.76	629.70	14.06	45.773		
3,200.00	3,172.78	3,146.08	3,162.70	9.92	5.99	-51.15	48.43	-431.53	656.79	642.37	14.42	45.541		
3,300.00	3,271.66	3,243.96	3,260.56	10.28	6.10	-50.39	49.10	-433.02	670.12	655.33	14.79	45.302		
3,400.00	3,370.53	3,342.02	3,358.61	10.65	6.23	-49.63	50.00	-434.43	683.66	668.48	15.18	45.045		
3,500.00	3,469.40	3,440.11	3,456.69	11.01	6.36	-48.91	50.94	-435.94	697.41	681.84	15.57	44.800		
3,600.00	3,568.27	3,538.01	3,554.57	11.38	6.49	-48.26	51.43	-437.93	711.33	695.38	15.95	44.588		
3,700.00	3,667.15	3,635.84	3,652.37	11.74	6.62	-47.66	51.89	-440.16	725.50	709.16	16.34	44.389		
3,800.00	3,766.02	3,734.39	3,750.90	12.11	6.77	-47.02	52.98	-441.87	739.77	723.02	16.75	44.154		
3,900.00	3,864.89	3,831.47	3,847.96	12.48	6.95	-46.36	54.46	-443.29	754.24	737.06	17.18	43.899		
4,000.00	3,963.76	3,927.41	3,943.87	12.84	7.13	-45.70	56.48	-444.58	769.10	751.48	17.62	43.655		
4,108.41	4,070.95	4,032.02	4,048.43	13.24	7.36	-44.94	59.56	-445.55	785.66	767.55	18.10	43.399		
4,200.00	4,161.71	4,122.07	4,138.42	13.51	7.55	-44.35	62.59	-446.27	798.70	780.20	18.50	43.175		
4,300.00	4,261.20	4,226.10	4,242.39	13.72	7.79	-43.81	66.11	-446.61	809.92	791.02	18.90	42.855		
4,400.00	4,360.97	4,331.37	4,347.61	13.91	8.04	-43.37	69.47	-445.96	817.44	798.15	19.29	42.373		
4,500.00	4,460.92	4,429.39	4,445.56	14.06	8.27	-43.03	72.88	-444.67	821.76	802.10	19.65	41.817		
4,539.08	4,500.00	4,465.60	4,481.73	14.11	8.36	-42.93	74.35	-444.18	822.78	800.93	21.85	37.653		
4,600.00	4,560.92	4,527.88	4,543.95	14.20	8.50	-42.76	77.13	-443.34	824.22	802.12	22.10	37.302		
4,700.00	4,660.92	4,637.90	4,653.85	14.32	8.77	-42.42	81.39	-440.68	825.41	802.90	22.50	36.681		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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													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	4,760.92	4,739.35	4,755.19	14.45	9.01	-42.10	85.18	-437.84	826.30	803.41	22.89	36.099		
4,900.00	4,860.92	4,842.74	4,858.49	14.57	9.25	-41.79	88.42	-434.83	826.68	803.40	23.28	35.507		
5,000.00	4,960.92	4,943.47	4,959.15	14.70	9.49	-41.54	91.03	-432.37	826.99	803.32	23.67	34.941		
5,100.00	5,060.92	5,045.22	5,060.85	14.84	9.74	-41.32	93.24	-429.97	827.06	803.00	24.06	34.378		
5,200.00	5,160.92	5,149.36	5,164.95	14.97	9.98	-41.13	94.98	-427.81	826.95	802.50	24.45	33.826		
5,300.00	5,260.92	5,254.98	5,270.55	15.11	10.20	-40.99	95.56	-425.67	826.03	801.21	24.82	33.281		
5,400.00	5,360.92	5,356.78	5,372.34	15.25	10.39	-40.90	95.42	-423.81	824.73	799.57	25.16	32.777		
5,500.00	5,460.92	5,455.75	5,471.29	15.39	10.58	-40.84	94.97	-422.26	823.35	797.86	25.49	32.298		
5,600.00	5,560.92	5,553.08	5,568.60	15.53	10.77	-40.75	94.93	-420.66	822.25	796.42	25.84	31.823		
5,700.00	5,660.92	5,648.05	5,663.57	15.68	10.98	-40.66	95.32	-419.19	821.56	795.36	26.20	31.353		
5,737.06	5,697.98	5,682.47	5,697.98	15.73	11.06	-40.61	95.69	-418.67	821.50	795.16	26.34	31.187		
5,800.00	5,760.92	5,745.91	5,761.40	15.82	11.21	-40.52	96.57	-417.71	821.54	794.95	26.59	30.893		
5,900.00	5,860.92	5,846.65	5,862.12	15.97	11.46	-40.39	97.66	-416.10	821.33	794.33	27.00	30.424		
5,927.62	5,888.54	5,873.44	5,888.91	16.01	11.52	-40.35	97.96	-415.71	821.30	794.19	27.11	30.300		
5,950.00	5,910.91	5,895.13	5,910.60	16.05	11.58	-40.30	98.21	-415.41	821.00	795.82	25.18	32.602		
5,975.00	5,935.84	5,920.23	5,935.70	16.09	11.64	-40.16	98.51	-415.08	819.98	794.75	25.23	32.503		
6,000.00	5,960.64	5,945.43	5,960.89	16.12	11.70	-39.95	98.76	-414.77	818.22	792.97	25.25	32.404		
6,025.00	5,985.25	5,970.42	5,985.87	16.16	11.76	-39.67	98.97	-414.49	815.73	790.48	25.25	32.304		
6,050.00	6,009.58	5,995.14	6,010.59	16.20	11.82	-39.31	99.15	-414.25	812.54	787.30	25.24	32.198		
6,075.00	6,033.59	6,018.59	6,034.04	16.23	11.88	-38.89	99.28	-414.04	808.68	783.48	25.21	32.082		
6,100.00	6,057.20	6,041.44	6,056.89	16.26	11.93	-38.38	99.41	-413.87	804.22	779.05	25.17	31.950		
6,125.00	6,080.35	6,063.85	6,079.31	16.30	11.99	-37.80	99.54	-413.75	799.19	774.06	25.14	31.795		
6,150.00	6,102.97	6,085.79	6,101.24	16.33	12.04	-37.14	99.65	-413.66	793.64	768.53	25.11	31.609		
6,175.00	6,125.00	6,107.52	6,122.97	16.37	12.10	-36.40	99.77	-413.60	787.61	762.52	25.10	31.384		
6,200.00	6,146.38	6,129.30	6,144.75	16.40	12.15	-35.57	99.86	-413.55	781.15	756.04	25.11	31.112		
6,225.00	6,167.06	6,150.37	6,165.82	16.44	12.20	-34.66	99.94	-413.51	774.30	749.15	25.15	30.791		
6,250.00	6,186.98	6,170.66	6,186.11	16.48	12.25	-33.67	100.00	-413.48	767.14	741.92	25.22	30.419		
6,275.00	6,206.07	6,190.13	6,205.58	16.52	12.30	-32.59	100.03	-413.45	759.74	734.41	25.33	29.997		
6,300.00	6,224.30	6,208.44	6,223.89	16.56	12.34	-31.43	100.06	-413.43	752.18	726.72	25.46	29.540		
6,325.00	6,241.61	6,225.58	6,241.03	16.61	12.37	-30.18	100.06	-413.44	744.56	718.93	25.63	29.055		
6,350.00	6,257.94	6,241.82	6,257.27	16.66	12.39	-28.84	100.06	-413.48	736.95	711.13	25.82	28.539		
6,375.00	6,273.27	6,257.12	6,272.57	16.71	12.42	-27.42	100.04	-413.54	729.45	703.40	26.05	28.001		
6,400.00	6,287.54	6,271.44	6,286.89	16.77	12.44	-25.91	100.02	-413.61	722.14	695.83	26.31	27.452		
6,425.00	6,300.72	6,284.72	6,300.17	16.85	12.46	-24.32	99.99	-413.70	715.11	688.52	26.58	26.901		
6,450.00	6,312.77	6,296.94	6,312.39	16.93	12.48	-22.65	99.96	-413.80	708.45	681.57	26.88	26.357		
6,475.00	6,323.65	6,307.82	6,323.27	17.03	12.49	-20.90	99.93	-413.89	702.24	675.05	27.19	25.831		
6,500.00	6,333.35	6,317.43	6,332.88	17.15	12.50	-19.08	99.91	-413.97	696.58	669.07	27.51	25.323		
6,525.00	6,341.82	6,325.85	6,341.30	17.30	12.51	-17.19	99.89	-414.03	691.55	663.70	27.84	24.837		
6,550.00	6,349.05	6,333.04	6,348.49	17.47	12.52	-15.23	99.88	-414.09	687.21	659.02	28.19	24.375		
6,575.00	6,355.02	6,339.00	6,354.44	17.68	12.53	-13.23	99.88	-414.13	683.64	655.08	28.56	23.938		
6,600.00	6,359.71	6,343.71	6,359.15	17.91	12.53	-11.18	99.87	-414.16	680.88	651.94	28.94	23.528		
6,625.00	6,363.11	6,347.16	6,362.60	18.19	12.54	-9.11	99.87	-414.19	678.99	649.66	29.33	23.147		
6,650.00	6,365.21	6,349.34	6,364.79	18.50	12.54	-7.01	99.87	-414.20	677.99	648.25	29.74	22.795		
6,664.77	6,365.83	6,350.04	6,365.49	18.69	12.54	-5.76	99.87	-414.20	677.83	647.84	29.99	22.600		
6,675.00	6,366.00	6,350.26	6,365.71	18.83	12.54	-4.89	99.87	-414.21	677.91	647.75	30.16	22.474		
6,677.62	6,366.00	6,350.29	6,365.73	18.87	12.54	-4.67	99.87	-414.21	677.96	647.75	30.21	22.443		
6,700.00	6,366.00	6,350.43	6,365.88	19.20	12.54	-2.78	99.87	-414.21	678.75	648.15	30.60	22.184		
6,800.00	6,366.00	6,351.06	6,366.50	20.87	12.54	5.52	99.87	-414.21	691.19	658.71	32.48	21.282		
6,900.00	6,366.00	6,351.68	6,367.13	22.81	12.54	13.38	99.87	-414.22	717.48	682.93	34.55	20.767		
7,000.00	6,366.00	6,352.30	6,367.74	24.93	12.54	20.56	99.87	-414.22	756.19	719.43	36.76	20.569 SF		
7,100.00	6,366.00	6,352.91	6,368.35	27.17	12.54	26.94	99.87	-414.22	805.52	766.44	39.08	20.610		
7,200.00	6,366.00	6,353.51	6,368.96	29.51	12.54	32.54	99.87	-414.23	863.66	822.17	41.49	20.818		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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													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		
7,300.00	6,366.00	6,354.11	6,369.56	31.93	12.54	37.38	99.87	-414.23	928.95	885.00	43.95	21.137		
7,400.00	6,366.00	6,354.71	6,370.15	34.40	12.55	41.57	99.87	-414.23	999.99	953.53	46.46	21.523		
7,500.00	6,366.00	6,355.29	6,370.74	36.91	12.55	45.18	99.87	-414.24	1,075.65	1,026.64	49.01	21.946		
7,600.00	6,366.00	6,355.88	6,371.32	39.46	12.55	48.31	99.87	-414.24	1,155.01	1,103.42	51.60	22.386		
7,700.00	6,366.00	6,356.46	6,371.90	42.04	12.55	51.03	99.87	-414.25	1,237.37	1,183.17	54.20	22.829		
7,800.00	6,366.00	6,357.03	6,372.48	44.65	12.55	53.40	99.87	-414.25	1,322.17	1,265.34	56.83	23.265		
7,900.00	6,366.00	6,357.60	6,373.04	47.27	12.55	55.48	99.87	-414.25	1,408.96	1,349.48	59.48	23.689		
8,000.00	6,366.00	6,358.16	6,373.61	49.91	12.55	57.33	99.87	-414.26	1,497.40	1,435.26	62.14	24.099		
8,100.00	6,366.00	6,358.72	6,374.17	52.57	12.55	58.96	99.87	-414.26	1,587.21	1,522.40	64.81	24.491		
8,200.00	6,366.00	6,359.27	6,374.72	55.23	12.55	60.42	99.87	-414.26	1,678.17	1,610.68	67.49	24.865		
8,300.00	6,366.00	6,359.82	6,375.27	57.91	12.55	61.73	99.87	-414.27	1,770.11	1,699.93	70.18	25.221		
8,400.00	6,366.00	6,360.36	6,375.81	60.60	12.55	62.90	99.87	-414.27	1,862.88	1,790.00	72.88	25.560		
8,500.00	6,366.00	6,360.90	6,376.35	63.29	12.55	63.97	99.87	-414.27	1,956.36	1,880.77	75.59	25.882		
8,600.00	6,366.00	6,361.44	6,376.89	66.00	12.55	64.94	99.87	-414.28	2,050.46	1,972.16	78.30	26.187		
8,700.00	6,366.00	6,361.97	6,377.42	68.70	12.55	65.82	99.87	-414.28	2,145.09	2,064.07	81.02	26.477		
8,800.00	6,366.00	6,362.49	6,377.94	71.42	12.55	66.63	99.87	-414.28	2,240.19	2,156.45	83.74	26.752		
8,900.00	6,366.00	6,363.02	6,378.46	74.13	12.55	67.37	99.87	-414.29	2,335.69	2,249.23	86.46	27.013		
9,000.00	6,366.00	6,363.53	6,378.98	76.86	12.56	68.06	99.87	-414.29	2,431.56	2,342.37	89.19	27.261		
9,100.00	6,366.00	6,364.04	6,379.49	79.58	12.56	68.69	99.87	-414.29	2,527.75	2,435.82	91.93	27.497		
9,200.00	6,366.00	6,364.55	6,380.00	82.31	12.56	69.27	99.87	-414.30	2,624.22	2,529.56	94.66	27.722		
9,300.00	6,366.00	6,365.06	6,380.50	85.05	12.56	69.82	99.87	-414.30	2,720.95	2,623.55	97.40	27.936		
9,400.00	6,366.00	6,365.56	6,381.00	87.78	12.56	70.32	99.88	-414.30	2,817.91	2,717.77	100.14	28.139		
9,500.00	6,366.00	6,366.05	6,381.50	90.52	12.56	70.80	99.88	-414.30	2,915.07	2,812.18	102.88	28.334		
9,600.00	6,366.00	6,366.54	6,381.99	93.26	12.56	71.24	99.88	-414.31	3,012.42	2,906.79	105.63	28.519		
9,700.00	6,366.00	6,367.03	6,382.48	96.00	12.56	71.65	99.88	-414.31	3,109.93	3,001.56	108.37	28.696		
9,800.00	6,366.00	6,367.51	6,382.96	98.75	12.56	72.04	99.88	-414.31	3,207.60	3,096.48	111.12	28.866		
9,900.00	6,366.00	6,367.99	6,383.44	101.49	12.56	72.41	99.88	-414.32	3,305.41	3,191.54	113.87	29.028		
10,000.00	6,366.00	6,368.47	6,383.92	104.24	12.56	72.75	99.88	-414.32	3,403.34	3,286.72	116.62	29.183		
10,100.00	6,366.00	6,368.94	6,384.39	106.99	12.56	73.08	99.88	-414.32	3,501.39	3,382.02	119.37	29.332		
10,200.00	6,366.00	6,369.41	6,384.85	109.74	12.56	73.39	99.88	-414.32	3,599.55	3,477.43	122.13	29.474		
10,300.00	6,366.00	6,369.87	6,385.32	112.50	12.56	73.68	99.88	-414.33	3,697.81	3,572.93	124.88	29.611		
10,400.00	6,366.00	6,370.33	6,385.78	115.25	12.56	73.96	99.88	-414.33	3,796.16	3,668.52	127.63	29.743		
10,500.00	6,366.00	6,370.79	6,386.24	118.00	12.56	74.22	99.88	-414.33	3,894.59	3,764.20	130.39	29.869		
10,600.00	6,366.00	6,371.24	6,386.69	120.76	12.56	74.47	99.88	-414.33	3,993.10	3,859.95	133.15	29.990		
10,700.00	6,366.00	6,371.69	6,387.14	123.52	12.56	74.71	99.88	-414.34	4,091.68	3,955.78	135.90	30.107		
10,806.11	6,366.00	6,372.17	6,387.61	126.44	12.56	74.95	99.88	-414.34	4,196.37	4,057.54	138.83	30.227		



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 0-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	0.01	69.22	0.00	69.22					
100.00	100.00	100.00	100.00	0.09	0.09	0.01	69.22	0.00	69.22	69.03	0.18	375.543		
200.00	200.00	200.00	200.00	0.32	0.32	0.01	69.22	0.00	69.22	68.58	0.63	109.201		
300.00	300.00	300.00	300.00	0.54	0.54	0.01	69.22	0.00	69.22	68.13	1.08	63.889		
400.00	400.00	400.00	400.00	0.77	0.77	0.01	69.22	0.00	69.22	67.68	1.53	45.153		
466.67	466.67	466.67	466.67	0.92	0.92	0.01	69.22	0.00	69.22	67.38	1.83	37.769		
500.00	500.00	500.00	500.00	0.99	0.99	0.01	69.22	0.00	69.22	67.23	1.98	34.915 CC, ES		
600.00	599.98	597.54	597.52	1.19	1.21	-0.19	70.87	0.14	72.62	70.21	2.41	30.185		
700.00	699.84	694.40	694.25	1.38	1.44	-0.66	75.79	0.54	82.80	79.97	2.83	29.297		
800.00	799.45	789.93	789.44	1.59	1.66	-1.25	83.82	1.21	99.68	96.42	3.26	30.575		
900.00	898.70	883.52	882.37	1.84	1.90	-1.82	94.76	2.11	123.14	119.44	3.70	33.272		
930.67	929.05	911.74	910.32	1.93	1.98	-1.98	98.65	2.44	131.63	127.79	3.84	34.306		
1,000.00	997.60	974.84	972.67	2.13	2.16	-2.26	108.34	3.24	152.21	148.07	4.14	36.764		
1,100.00	1,096.47	1,064.29	1,060.65	2.44	2.45	-2.48	124.42	4.57	184.43	179.85	4.58	40.244		
1,200.00	1,195.34	1,151.81	1,146.20	2.77	2.78	-2.55	142.80	6.09	219.53	214.50	5.03	43.653		
1,300.00	1,294.21	1,237.30	1,229.18	3.10	3.13	-2.54	163.25	7.78	257.42	251.94	5.48	46.991		
1,400.00	1,393.09	1,320.67	1,309.49	3.44	3.52	-2.49	185.56	9.63	298.01	292.08	5.93	50.262		
1,500.00	1,491.96	1,400.00	1,385.27	3.79	3.92	-2.42	208.95	11.57	341.18	334.81	6.38	53.509		
1,600.00	1,590.83	1,480.88	1,461.82	4.14	4.38	-2.32	234.94	13.72	386.84	380.01	6.83	56.607		
1,700.00	1,689.70	1,561.29	1,537.23	4.49	4.87	-2.20	262.77	16.02	434.78	427.47	7.30	59.543		
1,800.00	1,788.57	1,648.75	1,619.06	4.85	5.42	-2.07	293.54	18.57	483.25	475.48	7.77	62.183		
1,900.00	1,887.45	1,736.20	1,700.88	5.20	5.99	-1.96	324.30	21.11	531.74	523.49	8.24	64.493		
2,000.00	1,986.32	1,823.66	1,782.71	5.56	6.56	-1.86	355.06	23.66	580.22	571.49	8.72	66.512		
2,100.00	2,085.19	1,911.12	1,864.54	5.92	7.14	-1.79	385.83	26.21	628.70	619.50	9.21	68.289		
2,200.00	2,184.06	1,998.57	1,946.37	6.28	7.72	-1.72	416.59	28.75	677.19	667.49	9.69	69.862		
2,300.00	2,282.94	2,086.03	2,028.20	6.64	8.30	-1.66	447.35	31.30	725.67	715.49	10.18	71.261		
2,400.00	2,381.81	2,173.49	2,110.02	7.01	8.89	-1.61	478.12	33.84	774.16	763.48	10.68	72.514		
2,500.00	2,480.68	2,260.95	2,191.85	7.37	9.48	-1.56	508.88	36.39	822.64	811.47	11.17	73.642		
2,600.00	2,579.55	2,348.40	2,273.68	7.73	10.08	-1.52	539.65	38.94	871.13	859.46	11.67	74.662		
2,700.00	2,678.42	2,435.86	2,355.51	8.09	10.67	-1.49	570.41	41.48	919.62	907.45	12.17	75.587		
2,800.00	2,777.30	2,523.32	2,437.34	8.46	11.27	-1.46	601.17	44.03	968.11	955.44	12.67	76.430		
2,900.00	2,876.17	2,610.77	2,519.17	8.82	11.86	-1.43	631.94	46.58	1,016.59	1,003.43	13.17	77.201		
3,000.00	2,975.04	2,698.23	2,600.99	9.19	12.46	-1.40	662.70	49.12	1,065.08	1,051.41	13.67	77.907		
3,100.00	3,073.91	2,785.69	2,682.82	9.55	13.06	-1.38	693.46	51.67	1,113.57	1,099.39	14.18	78.557		
3,200.00	3,172.78	2,873.14	2,764.65	9.92	13.66	-1.35	724.23	54.22	1,162.06	1,147.38	14.68	79.156		
3,300.00	3,271.66	2,960.60	2,846.48	10.28	14.26	-1.33	754.99	56.76	1,210.55	1,195.36	15.19	79.711		
3,400.00	3,370.53	3,048.06	2,928.31	10.65	14.86	-1.31	785.75	59.31	1,259.04	1,243.34	15.69	80.225		
3,500.00	3,469.40	3,135.51	3,010.13	11.01	15.46	-1.30	816.52	61.85	1,307.52	1,291.32	16.20	80.704		
3,600.00	3,568.27	3,222.97	3,091.96	11.38	16.06	-1.28	847.28	64.40	1,356.01	1,339.30	16.71	81.150		
3,700.00	3,667.15	3,310.43	3,173.79	11.74	16.67	-1.27	878.05	66.95	1,404.50	1,387.28	17.22	81.566		
3,800.00	3,766.02	3,397.89	3,255.62	12.11	17.27	-1.25	908.81	69.49	1,452.99	1,435.26	17.73	81.955		
3,900.00	3,864.89	3,485.34	3,337.45	12.48	17.87	-1.24	939.57	72.04	1,501.48	1,483.24	18.24	82.320		
4,000.00	3,963.76	3,572.80	3,419.27	12.84	18.47	-1.23	970.34	74.59	1,549.97	1,531.22	18.75	82.662		
4,108.41	4,070.95	3,693.31	3,532.15	13.24	19.26	-1.18	1,012.38	78.07	1,602.37	1,583.00	19.37	82.726		
4,200.00	4,161.71	3,883.03	3,712.71	13.51	20.18	-1.05	1,070.32	82.86	1,641.54	1,621.37	20.17	81.393		
4,300.00	4,261.20	4,105.67	3,928.94	13.72	21.07	-0.93	1,122.95	87.22	1,674.65	1,653.65	21.00	79.754		
4,400.00	4,360.97	4,341.08	4,161.30	13.91	21.76	-0.85	1,160.22	90.30	1,696.83	1,675.06	21.77	77.941		
4,500.00	4,460.92	4,584.49	4,403.93	14.06	22.22	-0.81	1,178.64	91.83	1,707.43	1,684.98	22.46	76.037		
4,539.08	4,500.00	4,680.58	4,500.00	14.11	22.33	-0.81	1,180.25	91.96	1,708.35	1,672.19	36.16	47.244		
4,600.00	4,560.92	4,741.50	4,560.92	14.20	22.38	-0.81	1,180.25	91.96	1,708.35	1,672.05	36.30	47.061		
4,700.00	4,660.92	4,841.50	4,660.92	14.32	22.48	-0.81	1,180.25	91.96	1,708.35	1,671.83	36.52	46.782		
4,800.00	4,760.92	4,941.50	4,760.92	14.45	22.57	-0.81	1,180.25	91.96	1,708.35	1,671.61	36.74	46.500		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 0-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		
4,900.00	4,860.92	5,041.50	4,860.92	14.57	22.66	-0.81	1,180.25	91.96	1,708.35	1,671.38	36.96	46.217		
5,000.00	4,960.92	5,141.50	4,960.92	14.70	22.76	-0.81	1,180.25	91.96	1,708.35	1,671.15	37.19	45.932		
5,100.00	5,060.92	5,241.50	5,060.92	14.84	22.86	-0.81	1,180.25	91.96	1,708.35	1,670.92	37.43	45.646		
5,200.00	5,160.92	5,341.50	5,160.92	14.97	22.96	-0.81	1,180.25	91.96	1,708.35	1,670.68	37.66	45.359		
5,300.00	5,260.92	5,441.50	5,260.92	15.11	23.06	-0.81	1,180.25	91.96	1,708.35	1,670.44	37.90	45.070		
5,400.00	5,360.92	5,541.50	5,360.92	15.25	23.17	-0.81	1,180.25	91.96	1,708.35	1,670.20	38.15	44.781		
5,500.00	5,460.92	5,641.50	5,460.92	15.39	23.27	-0.81	1,180.25	91.96	1,708.35	1,669.95	38.40	44.490		
5,600.00	5,560.92	5,741.50	5,560.92	15.53	23.38	-0.81	1,180.25	91.96	1,708.35	1,669.70	38.65	44.200		
5,700.00	5,660.92	5,841.50	5,660.92	15.68	23.49	-0.81	1,180.25	91.96	1,708.35	1,669.44	38.91	43.909		
5,800.00	5,760.92	5,941.50	5,760.92	15.82	23.60	-0.81	1,180.25	91.96	1,708.35	1,669.18	39.17	43.618		
5,900.00	5,860.92	6,041.50	5,860.92	15.97	23.71	-0.81	1,180.25	91.96	1,708.35	1,668.92	39.43	43.328		
5,927.62	5,888.54	6,069.12	5,888.54	16.01	23.74	-0.81	1,180.25	91.96	1,708.35	1,668.84	39.50	43.248		
5,950.00	5,910.91	6,091.22	5,910.63	16.05	23.76	-0.81	1,180.24	91.45	1,708.39	1,680.66	27.73	61.611		
5,975.00	5,935.84	6,115.91	5,935.25	16.09	23.79	-0.81	1,180.22	89.67	1,708.56	1,680.75	27.80	61.454		
6,000.00	5,960.64	6,140.59	5,959.75	16.12	23.81	-0.81	1,180.19	86.62	1,708.84	1,680.97	27.87	61.313		
6,025.00	5,985.25	6,165.28	5,984.05	16.16	23.83	-0.80	1,180.14	82.31	1,709.23	1,681.30	27.93	61.187		
6,050.00	6,009.58	6,189.97	6,008.10	16.20	23.86	-0.80	1,180.08	76.75	1,709.75	1,681.75	28.00	61.073		
6,075.00	6,033.59	6,214.66	6,031.84	16.23	23.88	-0.79	1,180.01	69.95	1,710.37	1,682.32	28.05	60.968		
6,100.00	6,057.20	6,239.35	6,055.18	16.26	23.90	-0.79	1,179.93	61.94	1,711.11	1,683.00	28.11	60.870		
6,125.00	6,080.35	6,264.04	6,078.09	16.30	23.91	-0.78	1,179.83	52.73	1,711.96	1,683.79	28.17	60.774		
6,150.00	6,102.97	6,288.73	6,100.48	16.33	23.93	-0.77	1,179.72	42.34	1,712.91	1,684.68	28.23	60.675		
6,175.00	6,125.00	6,313.42	6,122.32	16.37	23.95	-0.77	1,179.60	30.82	1,713.97	1,685.67	28.30	60.567		
6,200.00	6,146.38	6,338.11	6,143.52	16.40	23.97	-0.76	1,179.46	18.18	1,715.13	1,686.76	28.38	60.444		
6,225.00	6,167.06	6,362.80	6,164.05	16.44	23.99	-0.75	1,179.32	4.46	1,716.39	1,687.93	28.46	60.301		
6,250.00	6,186.98	6,387.50	6,183.85	16.48	24.01	-0.74	1,179.16	-10.31	1,717.75	1,689.18	28.57	60.118		
6,275.00	6,206.07	6,412.20	6,202.85	16.52	24.03	-0.73	1,179.00	-26.08	1,719.20	1,690.50	28.70	59.911		
6,300.00	6,224.30	6,436.90	6,221.02	16.56	24.06	-0.72	1,178.82	-42.81	1,720.73	1,691.89	28.84	59.655		
6,325.00	6,241.61	6,461.61	6,238.30	16.61	24.08	-0.71	1,178.63	-60.47	1,722.35	1,693.33	29.02	59.347		
6,350.00	6,257.94	6,486.32	6,254.65	16.66	24.11	-0.70	1,178.44	-79.00	1,724.05	1,694.82	29.23	58.980		
6,375.00	6,273.27	6,511.04	6,270.02	16.71	24.15	-0.69	1,178.23	-98.35	1,725.82	1,696.35	29.48	58.549		
6,400.00	6,287.54	6,535.77	6,284.37	16.77	24.18	-0.68	1,178.02	-118.48	1,727.66	1,697.90	29.76	58.050		
6,425.00	6,300.72	6,560.50	6,297.66	16.85	24.23	-0.67	1,177.80	-139.34	1,729.57	1,699.48	30.09	57.482		
6,450.00	6,312.77	6,585.25	6,309.86	16.93	24.28	-0.66	1,177.57	-160.86	1,731.54	1,701.08	30.46	56.844		
6,475.00	6,323.65	6,610.00	6,320.94	17.03	24.33	-0.65	1,177.34	-182.99	1,733.56	1,702.68	30.88	56.137		
6,500.00	6,333.35	6,634.76	6,330.85	17.15	24.40	-0.64	1,177.10	-205.68	1,735.63	1,704.28	31.35	55.366		
6,525.00	6,341.82	6,659.54	6,339.59	17.30	24.47	-0.63	1,176.85	-228.86	1,737.74	1,705.87	31.86	54.536		
6,550.00	6,349.05	6,684.33	6,347.11	17.47	24.56	-0.62	1,176.60	-252.48	1,739.88	1,707.46	32.43	53.655		
6,575.00	6,355.02	6,709.14	6,353.39	17.68	24.66	-0.62	1,176.35	-276.47	1,742.06	1,709.03	33.04	52.731		
6,600.00	6,359.71	6,733.96	6,358.43	17.91	24.76	-0.61	1,176.09	-300.78	1,744.27	1,710.58	33.69	51.773		
6,625.00	6,363.11	6,758.80	6,362.20	18.19	24.89	-0.61	1,175.83	-325.32	1,746.49	1,712.11	34.39	50.791		
6,650.00	6,365.21	6,783.66	6,364.69	18.50	25.03	-0.61	1,175.57	-350.05	1,748.73	1,713.61	35.12	49.794		
6,675.00	6,366.00	6,808.54	6,365.89	18.83	25.18	-0.61	1,175.30	-374.90	1,750.97	1,715.09	35.89	48.793		
6,677.62	6,366.00	6,811.15	6,365.94	18.87	25.20	-0.61	1,175.28	-377.51	1,751.21	1,715.24	35.97	48.688		
6,700.00	6,366.00	6,833.44	6,366.00	19.20	25.35	-0.61	1,175.04	-399.80	1,753.22	1,716.53	36.69	47.787		
6,800.00	6,366.00	6,933.03	6,366.00	20.87	26.22	-0.61	1,173.99	-499.39	1,762.19	1,722.02	40.18	43.858		
6,900.00	6,366.00	7,032.63	6,366.00	22.81	27.39	-0.61	1,172.93	-598.98	1,771.17	1,727.09	44.08	40.181		
7,000.00	6,366.00	7,132.23	6,366.00	24.93	28.86	-0.61	1,171.88	-698.57	1,780.15	1,731.85	48.31	36.851		
7,100.00	6,366.00	7,231.82	6,366.00	27.17	30.58	-0.61	1,170.83	-798.16	1,789.13	1,736.35	52.78	33.897		
7,200.00	6,366.00	7,331.42	6,366.00	29.51	32.51	-0.61	1,169.77	-897.75	1,798.11	1,740.66	57.45	31.300		
7,300.00	6,366.00	7,431.01	6,366.00	31.93	34.59	-0.61	1,168.72	-997.34	1,807.09	1,744.83	62.26	29.025		
7,400.00	6,366.00	7,530.61	6,366.00	34.40	36.79	-0.61	1,167.66	-1,096.93	1,816.07	1,748.88	67.19	27.030		
7,500.00	6,366.00	7,630.21	6,366.00	36.91	39.08	-0.61	1,166.61	-1,196.52	1,825.05	1,752.84	72.21	25.275		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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.32-T5N-R63W - Siebring 5-63-32-16H - Wellbore #1 - Design #1												Offset Site Error:	0.00 usft
Survey Program:      0-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
7,600.00	6,366.00	7,729.80	6,366.00	39.46	41.45	-0.61	1,165.55	-1,296.11	1,834.03	1,756.72	77.30	23.725	
7,700.00	6,366.00	7,829.40	6,366.00	42.04	43.87	-0.61	1,164.50	-1,395.70	1,843.01	1,760.55	82.46	22.351	
7,800.00	6,366.00	7,928.99	6,366.00	44.65	46.34	-0.61	1,163.45	-1,495.29	1,851.98	1,764.32	87.66	21.126	
7,900.00	6,366.00	8,028.59	6,366.00	47.27	48.86	-0.61	1,162.39	-1,594.88	1,860.96	1,768.05	92.91	20.030	
8,000.00	6,366.00	8,128.19	6,366.00	49.91	51.40	-0.61	1,161.34	-1,694.47	1,869.94	1,771.75	98.19	19.044	
8,100.00	6,366.00	8,227.78	6,366.00	52.57	53.97	-0.61	1,160.28	-1,794.06	1,878.92	1,775.42	103.50	18.154	
8,200.00	6,366.00	8,327.38	6,366.00	55.23	56.56	-0.61	1,159.23	-1,893.65	1,887.90	1,779.06	108.84	17.346	
8,300.00	6,366.00	8,426.98	6,366.00	57.91	59.17	-0.61	1,158.18	-1,993.24	1,896.88	1,782.69	114.19	16.611	
8,400.00	6,366.00	8,526.57	6,366.00	60.60	61.80	-0.61	1,157.12	-2,092.83	1,905.86	1,786.29	119.57	15.940	
8,500.00	6,366.00	8,626.17	6,366.00	63.29	64.45	-0.61	1,156.07	-2,192.43	1,914.84	1,789.88	124.96	15.324	
8,600.00	6,366.00	8,725.76	6,366.00	66.00	67.10	-0.61	1,155.01	-2,292.02	1,923.82	1,793.45	130.37	14.757	
8,700.00	6,366.00	8,825.36	6,366.00	68.70	69.77	-0.61	1,153.96	-2,391.61	1,932.79	1,797.01	135.78	14.234	
8,800.00	6,366.00	8,924.96	6,366.00	71.42	72.45	-0.61	1,152.91	-2,491.20	1,941.77	1,800.56	141.21	13.751	
8,900.00	6,366.00	9,024.55	6,366.00	74.13	75.13	-0.61	1,151.85	-2,590.79	1,950.75	1,804.10	146.65	13.302	
9,000.00	6,366.00	9,124.15	6,366.00	76.86	77.83	-0.61	1,150.80	-2,690.38	1,959.73	1,807.63	152.10	12.884	
9,100.00	6,366.00	9,223.74	6,366.00	79.58	80.53	-0.61	1,149.74	-2,789.97	1,968.71	1,811.15	157.56	12.495	
9,200.00	6,366.00	9,323.34	6,366.00	82.31	83.24	-0.61	1,148.69	-2,889.56	1,977.69	1,814.67	163.02	12.132	
9,300.00	6,366.00	9,422.94	6,366.00	85.05	85.95	-0.61	1,147.64	-2,989.15	1,986.67	1,818.18	168.49	11.791	
9,400.00	6,366.00	9,522.53	6,366.00	87.78	88.67	-0.61	1,146.58	-3,088.74	1,995.65	1,821.68	173.97	11.472	
9,500.00	6,366.00	9,622.13	6,366.00	90.52	91.39	-0.61	1,145.53	-3,188.33	2,004.63	1,825.18	179.45	11.171	
9,600.00	6,366.00	9,721.72	6,366.00	93.26	94.12	-0.61	1,144.47	-3,287.92	2,013.60	1,828.67	184.93	10.888	
9,700.00	6,366.00	9,821.32	6,366.00	96.00	96.85	-0.61	1,143.42	-3,387.51	2,022.58	1,832.16	190.42	10.622	
9,800.00	6,366.00	9,920.92	6,366.00	98.75	99.58	-0.61	1,142.37	-3,487.10	2,031.56	1,835.65	195.91	10.370	
9,900.00	6,366.00	10,020.51	6,366.00	101.49	102.32	-0.61	1,141.31	-3,586.69	2,040.54	1,839.13	201.41	10.131	
10,000.00	6,366.00	10,120.11	6,366.00	104.24	105.06	-0.61	1,140.26	-3,686.28	2,049.52	1,842.61	206.91	9.905	
10,100.00	6,366.00	10,219.70	6,366.00	106.99	107.80	-0.61	1,139.20	-3,785.87	2,058.50	1,846.08	212.42	9.691	
10,200.00	6,366.00	10,319.30	6,366.00	109.74	110.55	-0.61	1,138.15	-3,885.46	2,067.48	1,849.55	217.92	9.487	
10,300.00	6,366.00	10,418.90	6,366.00	112.50	113.30	-0.61	1,137.10	-3,985.05	2,076.46	1,853.02	223.43	9.293	
10,400.00	6,366.00	10,518.49	6,366.00	115.25	116.05	-0.61	1,136.04	-4,084.64	2,085.44	1,856.49	228.95	9.109	
10,500.00	6,366.00	10,618.09	6,366.00	118.00	118.80	-0.61	1,134.99	-4,184.24	2,094.41	1,859.95	234.46	8.933	
10,600.00	6,366.00	10,717.69	6,366.00	120.76	121.56	-0.61	1,133.93	-4,283.83	2,103.39	1,863.42	239.98	8.765	
10,700.00	6,366.00	10,817.28	6,366.00	123.52	124.31	-0.61	1,132.88	-4,383.42	2,112.37	1,866.88	245.49	8.605	
10,806.11	6,366.00	10,922.97	6,366.00	126.44	127.24	-0.61	1,131.76	-4,489.10	2,121.90	1,870.55	251.35	8.442 SF	

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 0-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	0.00	43.72	0.00	43.72					
100.00	100.00	100.00	100.00	0.09	0.09	0.00	43.72	0.00	43.72	43.53	0.18	237.185		
200.00	200.00	200.00	200.00	0.32	0.32	0.00	43.72	0.00	43.72	43.08	0.63	68.969		
300.00	300.00	300.00	300.00	0.54	0.54	0.00	43.72	0.00	43.72	42.63	1.08	40.351		
400.00	400.00	400.00	400.00	0.77	0.77	0.00	43.72	0.00	43.72	42.18	1.53	28.518		
500.00	500.00	500.00	500.00	0.99	0.99	0.00	43.72	0.00	43.72	41.73	1.98	22.051	CC, ES	
600.00	599.98	598.42	598.40	1.19	1.21	-0.03	45.37	0.35	47.10	44.69	2.41	19.564		
700.00	699.84	696.16	696.01	1.38	1.44	-0.12	50.28	1.38	57.23	54.40	2.83	20.226		
800.00	799.45	792.58	792.07	1.59	1.67	-0.23	58.32	3.07	74.02	70.75	3.27	22.666		
900.00	898.70	887.06	885.88	1.84	1.91	-0.36	69.26	5.37	97.34	93.63	3.71	26.234		
930.67	929.05	916.47	915.02	1.93	1.99	-0.41	73.17	6.20	105.67	101.81	3.85	27.415		
1,000.00	997.60	983.10	981.03	2.13	2.18	-0.51	82.02	8.06	124.83	120.68	4.15	30.068		
1,100.00	1,096.47	1,079.20	1,076.25	2.44	2.46	-0.62	94.80	10.75	152.48	147.89	4.59	33.217		
1,200.00	1,195.34	1,175.30	1,171.46	2.77	2.75	-0.70	107.57	13.43	180.12	175.09	5.04	35.756		
1,300.00	1,294.21	1,271.41	1,266.67	3.10	3.04	-0.75	120.34	16.12	207.77	202.28	5.49	37.836		
1,400.00	1,393.09	1,367.51	1,361.88	3.44	3.35	-0.79	133.11	18.81	235.42	229.47	5.95	39.566		
1,500.00	1,491.96	1,463.61	1,457.09	3.79	3.65	-0.83	145.88	21.49	263.06	256.65	6.41	41.008		
1,600.00	1,590.83	1,559.71	1,552.31	4.14	3.96	-0.85	158.65	24.18	290.71	283.83	6.88	42.256		
1,700.00	1,689.70	1,655.82	1,647.52	4.49	4.27	-0.87	171.42	26.87	318.35	311.01	7.35	43.325		
1,800.00	1,788.57	1,751.92	1,742.73	4.85	4.58	-0.89	184.19	29.55	346.00	338.18	7.82	44.253		
1,900.00	1,887.45	1,848.02	1,837.94	5.20	4.89	-0.91	196.96	32.24	373.65	365.36	8.29	45.067		
2,000.00	1,986.32	1,944.12	1,933.16	5.56	5.20	-0.92	209.73	34.93	401.29	392.53	8.76	45.784		
2,100.00	2,085.19	2,040.23	2,028.37	5.92	5.52	-0.93	222.50	37.61	428.94	419.70	9.24	46.422		
2,200.00	2,184.06	2,136.33	2,123.58	6.28	5.83	-0.95	235.28	40.30	456.59	446.87	9.72	46.993		
2,300.00	2,282.94	2,232.43	2,218.79	6.64	6.15	-0.95	248.05	42.99	484.23	474.04	10.19	47.505		
2,400.00	2,381.81	2,328.53	2,314.00	7.01	6.46	-0.96	260.82	45.67	511.88	501.21	10.67	47.969		
2,500.00	2,480.68	2,424.64	2,409.22	7.37	6.78	-0.97	273.59	48.36	539.53	528.38	11.15	48.389		
2,600.00	2,579.55	2,520.74	2,504.43	7.73	7.10	-0.98	286.36	51.04	567.17	555.54	11.63	48.772		
2,700.00	2,678.42	2,616.84	2,599.64	8.09	7.41	-0.98	299.13	53.73	594.82	582.71	12.11	49.123		
2,800.00	2,777.30	2,712.94	2,694.85	8.46	7.73	-0.99	311.90	56.42	622.47	609.88	12.59	49.445		
2,900.00	2,876.17	2,809.05	2,790.06	8.82	8.05	-0.99	324.67	59.10	650.11	637.04	13.07	49.741		
3,000.00	2,975.04	2,905.15	2,885.28	9.19	8.37	-1.00	337.44	61.79	677.76	664.21	13.55	50.015		
3,100.00	3,073.91	3,001.25	2,980.49	9.55	8.69	-1.00	350.21	64.48	705.40	691.37	14.03	50.269		
3,200.00	3,172.78	3,097.35	3,075.70	9.92	9.00	-1.01	362.98	67.16	733.05	718.54	14.51	50.505		
3,300.00	3,271.66	3,193.45	3,170.91	10.28	9.32	-1.01	375.76	69.85	760.70	745.70	15.00	50.724		
3,400.00	3,370.53	3,289.56	3,266.13	10.65	9.64	-1.01	388.53	72.54	788.34	772.87	15.48	50.929		
3,500.00	3,469.40	3,385.66	3,361.34	11.01	9.96	-1.02	401.30	75.22	815.99	800.03	15.96	51.121		
3,600.00	3,568.27	3,481.76	3,456.55	11.38	10.28	-1.02	414.07	77.91	843.64	827.19	16.44	51.301		
3,700.00	3,667.15	3,577.86	3,551.76	11.74	10.60	-1.02	426.84	80.60	871.28	854.36	16.93	51.469		
3,800.00	3,766.02	3,673.97	3,646.97	12.11	10.92	-1.02	439.61	83.28	898.93	881.52	17.41	51.628		
3,900.00	3,864.89	3,770.07	3,742.19	12.48	11.24	-1.03	452.38	85.97	926.58	908.68	17.90	51.777		
4,000.00	3,963.76	3,866.17	3,837.40	12.84	11.56	-1.03	465.15	88.66	954.22	935.84	18.38	51.918		
4,108.41	4,070.95	3,970.36	3,940.62	13.24	11.90	-1.03	479.00	91.57	984.20	965.29	18.90	52.062		
4,200.00	4,161.71	4,058.76	4,028.20	13.51	12.20	-1.02	490.74	94.04	1,008.14	988.75	19.39	52.001		
4,300.00	4,261.20	4,163.53	4,132.01	13.72	12.54	-0.95	504.59	96.95	1,031.05	1,011.17	19.88	51.859		
4,400.00	4,360.97	4,316.22	4,283.89	13.91	12.90	-0.83	519.83	100.16	1,047.41	1,027.02	20.39	51.377		
4,500.00	4,460.92	4,471.53	4,439.00	14.06	13.18	-0.78	527.18	101.71	1,055.17	1,034.33	20.84	50.628		
4,539.08	4,500.00	4,532.54	4,500.00	14.11	13.27	-0.77	527.82	101.84	1,055.84	1,028.78	27.07	39.011		
4,600.00	4,560.92	4,593.46	4,560.92	14.20	13.36	-0.77	527.82	101.84	1,055.84	1,028.60	27.24	38.759		
4,700.00	4,660.92	4,693.46	4,660.92	14.32	13.53	-0.77	527.82	101.84	1,055.84	1,028.31	27.53	38.356		
4,800.00	4,760.92	4,793.46	4,760.92	14.45	13.69	-0.77	527.82	101.84	1,055.84	1,028.02	27.82	37.954		
4,900.00	4,860.92	4,893.46	4,860.92	14.57	13.85	-0.77	527.82	101.84	1,055.84	1,027.73	28.12	37.554		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 0-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		
5,000.00	4,960.92	4,993.46	4,960.92	14.70	14.02	-0.77	527.82	101.84	1,055.84	1,027.43	28.41	37.158		
5,100.00	5,060.92	5,093.46	5,060.92	14.84	14.19	-0.77	527.82	101.84	1,055.84	1,027.12	28.72	36.766		
5,200.00	5,160.92	5,193.46	5,160.92	14.97	14.36	-0.77	527.82	101.84	1,055.84	1,026.82	29.03	36.376		
5,300.00	5,260.92	5,293.46	5,260.92	15.11	14.53	-0.77	527.82	101.84	1,055.84	1,026.50	29.34	35.991		
5,400.00	5,360.92	5,393.46	5,360.92	15.25	14.70	-0.77	527.82	101.84	1,055.84	1,026.19	29.65	35.609		
5,500.00	5,460.92	5,493.46	5,460.92	15.39	14.88	-0.77	527.82	101.84	1,055.84	1,025.87	29.97	35.231		
5,600.00	5,560.92	5,593.46	5,560.92	15.53	15.05	-0.77	527.82	101.84	1,055.84	1,025.55	30.29	34.858		
5,700.00	5,660.92	5,693.46	5,660.92	15.68	15.23	-0.77	527.82	101.84	1,055.84	1,025.23	30.61	34.489		
5,800.00	5,760.92	5,793.46	5,760.92	15.82	15.41	-0.77	527.82	101.84	1,055.84	1,024.90	30.94	34.124		
5,900.00	5,860.92	5,893.46	5,860.92	15.97	15.59	-0.77	527.82	101.84	1,055.84	1,024.57	31.27	33.763		
5,927.62	5,888.54	5,921.08	5,888.54	16.01	15.64	-0.77	527.82	101.84	1,055.84	1,024.48	31.36	33.664		
5,950.00	5,910.91	5,943.31	5,910.77	16.05	15.67	-0.77	527.81	101.32	1,055.89	1,029.38	26.51	39.829		
5,975.00	5,935.84	5,968.15	5,935.54	16.09	15.71	-0.77	527.79	99.52	1,056.05	1,029.46	26.60	39.706		
6,000.00	5,960.64	5,992.99	5,960.18	16.12	15.75	-0.77	527.76	96.43	1,056.33	1,029.66	26.68	39.597		
6,025.00	5,985.25	6,017.83	5,984.63	16.16	15.78	-0.77	527.71	92.07	1,056.73	1,029.98	26.75	39.501		
6,050.00	6,009.58	6,042.67	6,008.82	16.20	15.81	-0.77	527.65	86.44	1,057.24	1,030.42	26.82	39.416		
6,075.00	6,033.59	6,067.50	6,032.68	16.23	15.84	-0.76	527.58	79.56	1,057.87	1,030.98	26.89	39.340		
6,100.00	6,057.20	6,092.34	6,056.15	16.26	15.87	-0.76	527.49	71.46	1,058.60	1,031.65	26.96	39.270		
6,125.00	6,080.35	6,117.17	6,079.16	16.30	15.90	-0.75	527.40	62.14	1,059.45	1,032.43	27.02	39.204		
6,150.00	6,102.97	6,141.99	6,101.66	16.33	15.92	-0.75	527.28	51.64	1,060.41	1,033.31	27.09	39.137		
6,175.00	6,125.00	6,166.82	6,123.58	16.37	15.95	-0.74	527.16	39.99	1,061.47	1,034.30	27.17	39.065		
6,200.00	6,146.38	6,191.65	6,144.86	16.40	15.98	-0.74	527.03	27.21	1,062.63	1,035.37	27.26	38.984		
6,225.00	6,167.06	6,216.47	6,165.44	16.44	16.00	-0.73	526.88	13.35	1,063.89	1,036.53	27.36	38.888		
6,250.00	6,186.98	6,241.29	6,185.28	16.48	16.03	-0.72	526.72	-1.56	1,065.25	1,037.77	27.47	38.773		
6,275.00	6,206.07	6,266.10	6,204.31	16.52	16.06	-0.71	526.55	-17.48	1,066.69	1,039.08	27.61	38.629		
6,300.00	6,224.30	6,290.92	6,222.49	16.56	16.09	-0.71	526.37	-34.37	1,068.23	1,040.45	27.78	38.457		
6,325.00	6,241.61	6,315.74	6,239.77	16.61	16.13	-0.70	526.19	-52.18	1,069.85	1,041.88	27.97	38.249		
6,350.00	6,257.94	6,340.55	6,256.10	16.66	16.18	-0.69	525.99	-70.86	1,071.55	1,043.35	28.20	37.999		
6,375.00	6,273.27	6,365.37	6,271.43	16.71	16.23	-0.68	525.78	-90.37	1,073.32	1,044.86	28.47	37.705		
6,400.00	6,287.54	6,390.18	6,285.73	16.77	16.29	-0.67	525.57	-110.64	1,075.16	1,046.39	28.78	37.364		
6,425.00	6,300.72	6,415.00	6,298.96	16.85	16.36	-0.66	525.34	-131.64	1,077.07	1,047.94	29.13	36.976		
6,450.00	6,312.77	6,439.82	6,311.09	16.93	16.45	-0.65	525.12	-153.29	1,079.04	1,049.51	29.53	36.540		
6,475.00	6,323.65	6,464.64	6,322.07	17.03	16.57	-0.65	524.88	-175.55	1,081.06	1,051.08	29.98	36.058		
6,500.00	6,333.35	6,489.47	6,331.88	17.15	16.71	-0.64	524.64	-198.35	1,083.13	1,052.65	30.48	35.534		
6,525.00	6,341.82	6,514.30	6,340.50	17.30	16.89	-0.63	524.39	-221.63	1,085.24	1,054.21	31.03	34.973		
6,550.00	6,349.05	6,539.14	6,347.89	17.47	17.10	-0.62	524.14	-245.34	1,087.39	1,055.76	31.63	34.380		
6,575.00	6,355.02	6,563.99	6,354.05	17.68	17.34	-0.62	523.89	-269.41	1,089.56	1,057.29	32.27	33.760		
6,600.00	6,359.71	6,588.84	6,358.94	17.91	17.62	-0.61	523.63	-293.77	1,091.77	1,058.81	32.96	33.122		
6,625.00	6,363.11	6,613.71	6,362.56	18.19	17.93	-0.61	523.37	-318.37	1,093.99	1,060.30	33.69	32.470		
6,650.00	6,365.21	6,638.58	6,364.90	18.50	18.27	-0.61	523.11	-343.13	1,096.23	1,061.77	34.46	31.813		
6,675.00	6,366.00	6,663.47	6,365.94	18.83	18.63	-0.61	522.84	-367.99	1,098.47	1,063.22	35.26	31.157		
6,677.62	6,366.00	6,666.08	6,365.98	18.87	18.67	-0.61	522.82	-370.60	1,098.71	1,063.37	35.34	31.089		
6,700.00	6,366.00	6,688.37	6,366.00	19.20	19.02	-0.61	522.58	-392.89	1,100.72	1,064.63	36.09	30.502		
6,800.00	6,366.00	6,787.97	6,366.00	20.87	20.74	-0.61	521.53	-492.48	1,109.70	1,069.97	39.73	27.934		
6,900.00	6,366.00	6,887.56	6,366.00	22.81	22.68	-0.61	520.47	-592.07	1,118.68	1,074.92	43.76	25.564		
7,000.00	6,366.00	6,987.16	6,366.00	24.93	24.80	-0.61	519.42	-691.66	1,127.65	1,079.55	48.10	23.444		
7,100.00	6,366.00	7,086.75	6,366.00	27.17	27.03	-0.61	518.36	-791.25	1,136.63	1,083.96	52.67	21.580		
7,200.00	6,366.00	7,186.35	6,366.00	29.51	29.37	-0.61	517.31	-890.84	1,145.61	1,088.20	57.41	19.953		
7,300.00	6,366.00	7,285.95	6,366.00	31.93	31.78	-0.61	516.26	-990.43	1,154.59	1,092.30	62.30	18.534		
7,400.00	6,366.00	7,385.54	6,366.00	34.40	34.25	-0.61	515.20	-1,090.02	1,163.57	1,096.29	67.28	17.294		
7,500.00	6,366.00	7,485.14	6,366.00	36.91	36.76	-0.61	514.15	-1,189.61	1,172.55	1,100.20	72.35	16.206		
7,600.00	6,366.00	7,584.73	6,366.00	39.46	39.31	-0.61	513.09	-1,289.21	1,181.53	1,104.04	77.49	15.248		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 0-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		
7,700.00	6,366.00	7,684.33	6,366.00	42.04	41.90	-0.61	512.04	-1,388.80	1,190.51	1,107.82	82.68	14.399		
7,800.00	6,366.00	7,783.93	6,366.00	44.65	44.51	-0.61	510.99	-1,488.39	1,199.49	1,111.57	87.92	13.643		
7,900.00	6,366.00	7,883.52	6,366.00	47.27	47.14	-0.61	509.93	-1,587.98	1,208.46	1,115.27	93.20	12.967		
8,000.00	6,366.00	7,983.12	6,366.00	49.91	49.79	-0.61	508.88	-1,687.57	1,217.44	1,118.94	98.50	12.360		
8,100.00	6,366.00	8,082.72	6,366.00	52.57	52.45	-0.61	507.82	-1,787.16	1,226.42	1,122.59	103.83	11.811		
8,200.00	6,366.00	8,182.31	6,366.00	55.23	55.12	-0.61	506.77	-1,886.75	1,235.40	1,126.21	109.19	11.314		
8,300.00	6,366.00	8,281.91	6,366.00	57.91	57.81	-0.61	505.71	-1,986.34	1,244.38	1,129.81	114.57	10.862		
8,400.00	6,366.00	8,381.50	6,366.00	60.60	60.51	-0.61	504.66	-2,085.93	1,253.36	1,133.40	119.96	10.448		
8,500.00	6,366.00	8,481.10	6,366.00	63.29	63.21	-0.61	503.61	-2,185.52	1,262.34	1,136.97	125.37	10.069		
8,600.00	6,366.00	8,580.70	6,366.00	66.00	65.93	-0.61	502.55	-2,285.11	1,271.32	1,140.53	130.79	9.721		
8,700.00	6,366.00	8,680.29	6,366.00	68.70	68.65	-0.61	501.50	-2,384.70	1,280.30	1,144.08	136.22	9.399		
8,800.00	6,366.00	8,779.89	6,366.00	71.42	71.37	-0.61	500.44	-2,484.29	1,289.27	1,147.62	141.66	9.101		
8,900.00	6,366.00	8,879.48	6,366.00	74.13	74.10	-0.61	499.39	-2,583.88	1,298.25	1,151.15	147.11	8.825		
9,000.00	6,366.00	8,979.08	6,366.00	76.86	76.84	-0.61	498.34	-2,683.47	1,307.23	1,154.67	152.57	8.568		
9,100.00	6,366.00	9,078.68	6,366.00	79.58	79.57	-0.61	497.28	-2,783.06	1,316.21	1,158.18	158.03	8.329		
9,200.00	6,366.00	9,178.27	6,366.00	82.31	82.32	-0.61	496.23	-2,882.65	1,325.19	1,161.69	163.50	8.105		
9,300.00	6,366.00	9,277.87	6,366.00	85.05	85.06	-0.61	495.17	-2,982.24	1,334.17	1,165.19	168.98	7.895		
9,400.00	6,366.00	9,377.46	6,366.00	87.78	87.81	-0.61	494.12	-3,081.83	1,343.15	1,168.68	174.47	7.699		
9,500.00	6,366.00	9,477.06	6,366.00	90.52	90.56	-0.61	493.07	-3,181.42	1,352.13	1,172.17	179.95	7.514		
9,600.00	6,366.00	9,576.66	6,366.00	93.26	93.32	-0.61	492.01	-3,281.02	1,361.11	1,175.66	185.44	7.340		
9,700.00	6,366.00	9,676.25	6,366.00	96.00	96.07	-0.61	490.96	-3,380.61	1,370.09	1,179.14	190.94	7.175		
9,800.00	6,366.00	9,775.85	6,366.00	98.75	98.83	-0.61	489.90	-3,480.20	1,379.06	1,182.62	196.44	7.020		
9,900.00	6,366.00	9,875.44	6,366.00	101.49	101.59	-0.61	488.85	-3,579.79	1,388.04	1,186.10	201.94	6.873		
10,000.00	6,366.00	9,975.04	6,366.00	104.24	104.35	-0.61	487.80	-3,679.38	1,397.02	1,189.57	207.45	6.734		
10,100.00	6,366.00	10,074.64	6,366.00	106.99	107.12	-0.61	486.74	-3,778.97	1,406.00	1,193.04	212.96	6.602		
10,200.00	6,366.00	10,174.23	6,366.00	109.74	109.88	-0.61	485.69	-3,878.56	1,414.98	1,196.51	218.47	6.477		
10,300.00	6,366.00	10,273.83	6,366.00	112.50	112.65	-0.61	484.63	-3,978.15	1,423.96	1,199.97	223.98	6.357		
10,400.00	6,366.00	10,373.43	6,366.00	115.25	115.42	-0.61	483.58	-4,077.74	1,432.94	1,203.44	229.50	6.244		
10,500.00	6,366.00	10,473.02	6,366.00	118.00	118.19	-0.61	482.53	-4,177.33	1,441.92	1,206.90	235.02	6.135		
10,600.00	6,366.00	10,572.62	6,366.00	120.76	120.96	-0.61	481.47	-4,276.92	1,450.90	1,210.36	240.54	6.032		
10,700.00	6,366.00	10,672.21	6,366.00	123.52	123.73	-0.61	480.42	-4,376.51	1,459.87	1,213.81	246.06	5.933		
10,806.11	6,366.00	10,777.90	6,366.00	126.44	126.67	-0.61	479.30	-4,482.19	1,469.40	1,217.48	251.92	5.833 SF		



<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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: 0-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	1.00	0.00	0.00	0.00	21.86	0.00	21.88					
100.00	100.00	99.00	100.00	0.09	0.09	0.00	21.86	0.00	21.86	21.67	0.18	119.189		
200.00	200.00	199.00	200.00	0.32	0.31	0.00	21.86	0.00	21.86	21.23	0.63	34.607		
300.00	300.00	299.00	300.00	0.54	0.54	0.00	21.86	0.00	21.86	20.78	1.08	20.217		
400.00	400.00	399.00	400.00	0.77	0.76	0.00	21.86	0.00	21.86	20.33	1.53	14.280		
500.00	500.00	499.00	500.00	0.99	0.99	0.00	21.86	0.00	21.86	19.88	1.98	11.038 CC		
600.00	599.98	599.66	600.64	1.19	1.19	1.29	20.36	0.87	22.08	19.70	2.38	9.272 ES		
700.00	699.84	700.09	700.93	1.38	1.39	4.80	15.98	3.41	22.90	20.15	2.75	8.317		
800.00	799.45	800.01	800.69	1.59	1.59	6.46	10.93	6.34	26.46	23.31	3.15	8.394		
900.00	898.70	899.77	900.28	1.84	1.81	5.65	5.90	9.27	33.33	29.76	3.57	9.336		
930.67	929.05	930.31	930.77	1.93	1.88	5.13	4.36	10.16	36.10	32.40	3.70	9.755		
1,000.00	997.60	999.32	999.66	2.13	2.04	4.05	0.87	12.18	42.73	38.72	4.00	10.678		
1,100.00	1,096.47	1,098.86	1,099.03	2.44	2.27	2.98	-4.15	15.10	52.30	47.86	4.44	11.768		
1,200.00	1,195.34	1,198.40	1,198.40	2.77	2.50	2.24	-9.18	18.02	61.90	57.00	4.90	12.643		
1,300.00	1,294.21	1,297.93	1,297.76	3.10	2.74	1.70	-14.21	20.93	71.49	66.14	5.35	13.356		
1,400.00	1,393.09	1,397.47	1,397.13	3.44	2.98	1.29	-19.23	23.85	81.10	75.28	5.81	13.948		
1,500.00	1,491.96	1,497.00	1,496.49	3.79	3.23	0.96	-24.26	26.77	90.70	84.43	6.28	14.445		
1,600.00	1,590.83	1,596.54	1,595.86	4.14	3.47	0.70	-29.28	29.69	100.31	93.57	6.75	14.868		
1,700.00	1,689.70	1,696.08	1,695.23	4.49	3.72	0.48	-34.31	32.60	109.93	102.71	7.22	15.232		
1,800.00	1,788.57	1,795.61	1,794.59	4.85	3.96	0.30	-39.33	35.52	119.54	111.85	7.69	15.547		
1,900.00	1,887.45	1,895.15	1,893.96	5.20	4.21	0.14	-44.36	38.44	129.15	120.99	8.16	15.824		
2,000.00	1,986.32	1,994.69	1,993.33	5.56	4.46	0.01	-49.38	41.36	138.77	130.13	8.64	16.068		
2,100.00	2,085.19	2,094.22	2,092.69	5.92	4.70	-0.11	-54.41	44.27	148.38	139.27	9.11	16.284		
2,200.00	2,184.06	2,193.76	2,192.06	6.28	4.95	-0.21	-59.43	47.19	158.00	148.41	9.59	16.478		
2,300.00	2,282.94	2,293.30	2,291.43	6.64	5.20	-0.30	-64.46	50.11	167.61	157.55	10.07	16.652		
2,400.00	2,381.81	2,392.83	2,390.79	7.01	5.45	-0.38	-69.48	53.02	177.23	166.68	10.54	16.810		
2,500.00	2,480.68	2,492.37	2,490.16	7.37	5.70	-0.45	-74.51	55.94	186.84	175.82	11.02	16.952		
2,600.00	2,579.55	2,591.90	2,589.53	7.73	5.95	-0.52	-79.53	58.86	196.46	184.96	11.50	17.083		
2,700.00	2,678.42	2,691.44	2,688.89	8.09	6.20	-0.58	-84.56	61.78	206.08	194.10	11.98	17.202		
2,800.00	2,777.30	2,790.98	2,788.26	8.46	6.45	-0.63	-89.59	64.69	215.70	203.24	12.46	17.311		
2,900.00	2,876.17	2,890.51	2,887.63	8.82	6.70	-0.68	-94.61	67.61	225.31	212.37	12.94	17.412		
3,000.00	2,975.04	2,990.05	2,986.99	9.19	6.95	-0.72	-99.64	70.53	234.93	221.51	13.42	17.505		
3,100.00	3,073.91	3,089.59	3,086.36	9.55	7.20	-0.77	-104.66	73.45	244.55	230.65	13.90	17.592		
3,200.00	3,172.78	3,189.12	3,185.73	9.92	7.45	-0.80	-109.69	76.36	254.17	239.78	14.38	17.672		
3,300.00	3,271.66	3,288.66	3,285.09	10.28	7.70	-0.84	-114.71	79.28	263.78	248.92	14.86	17.747		
3,400.00	3,370.53	3,388.19	3,384.46	10.65	7.95	-0.87	-119.74	82.20	273.40	258.06	15.34	17.817		
3,500.00	3,469.40	3,487.73	3,483.83	11.01	8.20	-0.90	-124.76	85.11	283.02	267.19	15.83	17.883		
3,600.00	3,568.27	3,587.27	3,583.19	11.38	8.45	-0.93	-129.79	88.03	292.64	276.33	16.31	17.944		
3,700.00	3,667.15	3,686.80	3,682.56	11.74	8.71	-0.96	-134.81	90.95	302.26	285.47	16.79	18.002		
3,800.00	3,766.02	3,786.34	3,781.92	12.11	8.96	-0.99	-139.84	93.87	311.87	294.60	17.27	18.056		
3,900.00	3,864.89	3,885.88	3,881.29	12.48	9.21	-1.01	-144.86	96.78	321.49	303.74	17.75	18.107		
4,000.00	3,963.76	3,985.41	3,980.66	12.84	9.46	-1.03	-149.89	99.70	331.11	312.87	18.24	18.156		
4,108.41	4,070.95	4,093.32	4,088.38	13.24	9.73	-1.05	-155.34	102.86	341.54	322.78	18.76	18.205		
4,200.00	4,161.71	4,184.61	4,179.51	13.51	9.96	-1.03	-159.95	105.54	348.92	329.72	19.20	18.172		
4,300.00	4,261.20	4,284.48	4,279.22	13.72	10.21	-0.89	-164.99	108.47	353.71	334.07	19.64	18.010		
4,400.00	4,360.97	4,380.04	4,374.63	13.91	10.44	-0.68	-169.56	111.12	355.36	335.33	20.03	17.739		
4,500.00	4,460.92	4,470.28	4,464.83	14.06	10.62	-0.58	-171.77	112.41	355.93	335.57	20.36	17.482		
4,539.08	4,500.00	4,506.45	4,501.00	14.11	10.68	-0.57	-171.97	112.52	355.98	331.72	24.26	14.675		
4,559.73	4,520.65	4,526.10	4,520.65	14.14	10.72	-0.57	-171.97	112.52	355.98	331.65	24.32	14.635		
4,600.00	4,560.92	4,566.37	4,560.92	14.20	10.79	-0.57	-171.97	112.52	355.98	331.52	24.46	14.556		
4,700.00	4,660.92	4,666.37	4,660.92	14.32	10.97	-0.57	-171.97	112.52	355.98	331.22	24.76	14.379		
4,800.00	4,760.92	4,766.37	4,760.92	14.45	11.13	-0.57	-171.97	112.52	355.98	330.92	25.05	14.208		

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 Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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.32-T5N-R63W - Siebring 5-63-32-32H - Wellbore #1 - Design #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						
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	Warning
4,900.00	4,860.92	4,866.37	4,860.92	14.57	11.30	-0.57	-171.97	112.52	355.98	330.62	25.36	14.039	
5,000.00	4,960.92	4,966.37	4,960.92	14.70	11.47	-0.57	-171.97	112.52	355.98	330.31	25.66	13.871	
5,100.00	5,060.92	5,066.37	5,060.92	14.84	11.65	-0.57	-171.97	112.52	355.98	330.00	25.97	13.705	
5,200.00	5,160.92	5,166.37	5,160.92	14.97	11.82	-0.57	-171.97	112.52	355.98	329.69	26.29	13.542	
5,300.00	5,260.92	5,266.37	5,260.92	15.11	12.00	-0.57	-171.97	112.52	355.98	329.37	26.61	13.380	
5,400.00	5,360.92	5,366.37	5,360.92	15.25	12.18	-0.57	-171.97	112.52	355.98	329.05	26.93	13.220	
5,500.00	5,460.92	5,466.37	5,460.92	15.39	12.35	-0.57	-171.97	112.52	355.98	328.72	27.25	13.062	
5,600.00	5,560.92	5,566.37	5,560.92	15.53	12.54	-0.57	-171.97	112.52	355.98	328.39	27.58	12.906	
5,700.00	5,660.92	5,666.37	5,660.92	15.68	12.72	-0.57	-171.97	112.52	355.98	328.06	27.91	12.753	
5,800.00	5,760.92	5,766.37	5,760.92	15.82	12.90	-0.57	-171.97	112.52	355.98	327.73	28.25	12.602	
5,900.00	5,860.92	5,866.37	5,860.92	15.97	13.09	-0.57	-171.97	112.52	355.98	327.39	28.59	12.453	
5,927.62	5,888.54	5,893.99	5,888.54	16.01	13.14	-0.57	-171.97	112.52	355.98	327.30	28.68	12.412	
5,950.00	5,910.91	5,916.38	5,910.92	16.05	13.18	-0.57	-171.98	112.00	356.02	330.33	25.69	13.858	
5,975.00	5,935.84	5,941.39	5,935.86	16.09	13.22	-0.57	-172.00	110.17	356.19	330.41	25.78	13.816	
6,000.00	5,960.64	5,966.40	5,960.67	16.12	13.26	-0.58	-172.03	107.04	356.47	330.60	25.86	13.782	
6,025.00	5,985.25	5,991.41	5,985.28	16.16	13.30	-0.58	-172.08	102.62	356.86	330.92	25.94	13.757	
6,050.00	6,009.58	6,016.41	6,009.62	16.20	13.34	-0.58	-172.14	96.91	357.38	331.37	26.01	13.740	
6,075.00	6,033.59	6,041.41	6,033.62	16.23	13.37	-0.59	-172.21	89.94	358.00	331.93	26.08	13.729	
6,100.00	6,057.20	6,066.40	6,057.23	16.26	13.40	-0.59	-172.30	81.73	358.74	332.60	26.14	13.724	
6,125.00	6,080.35	6,091.39	6,080.36	16.30	13.44	-0.60	-172.40	72.30	359.59	333.38	26.20	13.723	
6,150.00	6,102.97	6,116.37	6,102.97	16.33	13.47	-0.61	-172.51	61.67	360.54	334.27	26.27	13.724	
6,175.00	6,125.00	6,141.35	6,124.98	16.37	13.50	-0.61	-172.64	49.87	361.60	335.26	26.34	13.727	
6,200.00	6,146.38	6,166.32	6,146.34	16.40	13.52	-0.62	-172.77	36.95	362.76	336.34	26.43	13.727	
6,225.00	6,167.06	6,191.28	6,166.99	16.44	13.55	-0.62	-172.92	22.93	364.03	337.50	26.52	13.724	
6,250.00	6,186.98	6,216.24	6,186.87	16.48	13.58	-0.63	-173.08	7.85	365.38	338.74	26.64	13.714	
6,275.00	6,206.07	6,241.18	6,205.93	16.52	13.61	-0.63	-173.25	-8.24	366.83	340.05	26.78	13.696	
6,300.00	6,224.30	6,266.12	6,224.12	16.56	13.64	-0.63	-173.43	-25.30	368.37	341.41	26.95	13.667	
6,325.00	6,241.61	6,291.06	6,241.40	16.61	13.67	-0.64	-173.62	-43.28	369.99	342.83	27.15	13.625	
6,350.00	6,257.94	6,315.98	6,257.70	16.66	13.70	-0.64	-173.82	-62.13	371.68	344.29	27.39	13.568	
6,375.00	6,273.27	6,340.90	6,272.99	16.71	13.74	-0.64	-174.03	-81.79	373.46	345.78	27.68	13.494	
6,400.00	6,287.54	6,365.82	6,287.24	16.77	13.84	-0.64	-174.24	-102.23	375.30	347.30	28.00	13.402	
6,425.00	6,300.72	6,390.73	6,300.39	16.85	14.01	-0.64	-174.47	-123.38	377.21	348.83	28.38	13.292	
6,450.00	6,312.77	6,415.63	6,312.43	16.93	14.21	-0.63	-174.70	-145.17	379.17	350.37	28.81	13.163	
6,475.00	6,323.65	6,440.53	6,323.30	17.03	14.45	-0.63	-174.94	-167.57	381.20	351.91	29.28	13.018	
6,500.00	6,333.35	6,465.42	6,333.00	17.15	14.70	-0.63	-175.18	-190.49	383.26	353.45	29.81	12.856	
6,525.00	6,341.82	6,490.31	6,341.49	17.30	14.99	-0.62	-175.43	-213.89	385.38	354.98	30.39	12.679	
6,550.00	6,349.05	6,515.20	6,348.74	17.47	15.30	-0.62	-175.68	-237.69	387.52	356.50	31.02	12.491	
6,575.00	6,355.02	6,540.09	6,354.74	17.68	15.64	-0.62	-175.93	-261.84	389.70	358.00	31.70	12.293	
6,600.00	6,359.71	6,564.98	6,359.48	17.91	16.00	-0.61	-176.19	-286.27	391.91	359.48	32.42	12.087	
6,625.00	6,363.11	6,589.87	6,362.94	18.19	16.37	-0.61	-176.45	-310.92	394.13	360.95	33.19	11.877	
6,650.00	6,365.21	6,614.76	6,365.11	18.50	16.77	-0.61	-176.72	-335.71	396.37	362.39	33.98	11.664	
6,675.00	6,366.00	6,639.66	6,365.99	18.83	17.19	-0.61	-176.98	-360.59	398.61	363.80	34.81	11.452	
6,677.62	6,366.00	6,642.27	6,366.00	18.87	17.23	-0.61	-177.01	-363.20	398.85	363.95	34.90	11.430	
6,700.00	6,366.00	6,664.56	6,366.00	19.20	17.63	-0.61	-177.24	-385.48	400.86	365.18	35.68	11.234	
6,800.00	6,366.00	6,764.16	6,366.00	20.87	19.52	-0.61	-178.30	-485.07	409.84	370.38	39.46	10.387	
6,900.00	6,366.00	6,863.75	6,366.00	22.81	21.59	-0.61	-179.35	-584.66	418.81	375.22	43.60	9.606	
7,000.00	6,366.00	6,963.35	6,366.00	24.93	23.80	-0.61	-180.40	-684.25	427.79	379.76	48.03	8.907	
7,100.00	6,366.00	7,062.94	6,366.00	27.17	26.13	-0.61	-181.46	-783.85	436.77	384.10	52.68	8.292	
7,200.00	6,366.00	7,162.54	6,366.00	29.51	28.54	-0.61	-182.51	-883.44	445.75	388.27	57.48	7.754	
7,300.00	6,366.00	7,262.14	6,366.00	31.93	31.02	-0.61	-183.57	-983.03	454.73	392.31	62.42	7.285	
7,400.00	6,366.00	7,361.73	6,366.00	34.40	33.54	-0.61	-184.62	-1,082.62	463.71	396.26	67.45	6.875	
7,500.00	6,366.00	7,461.33	6,366.00	36.91	36.11	-0.61	-185.67	-1,182.21	472.69	400.13	72.56	6.514	

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

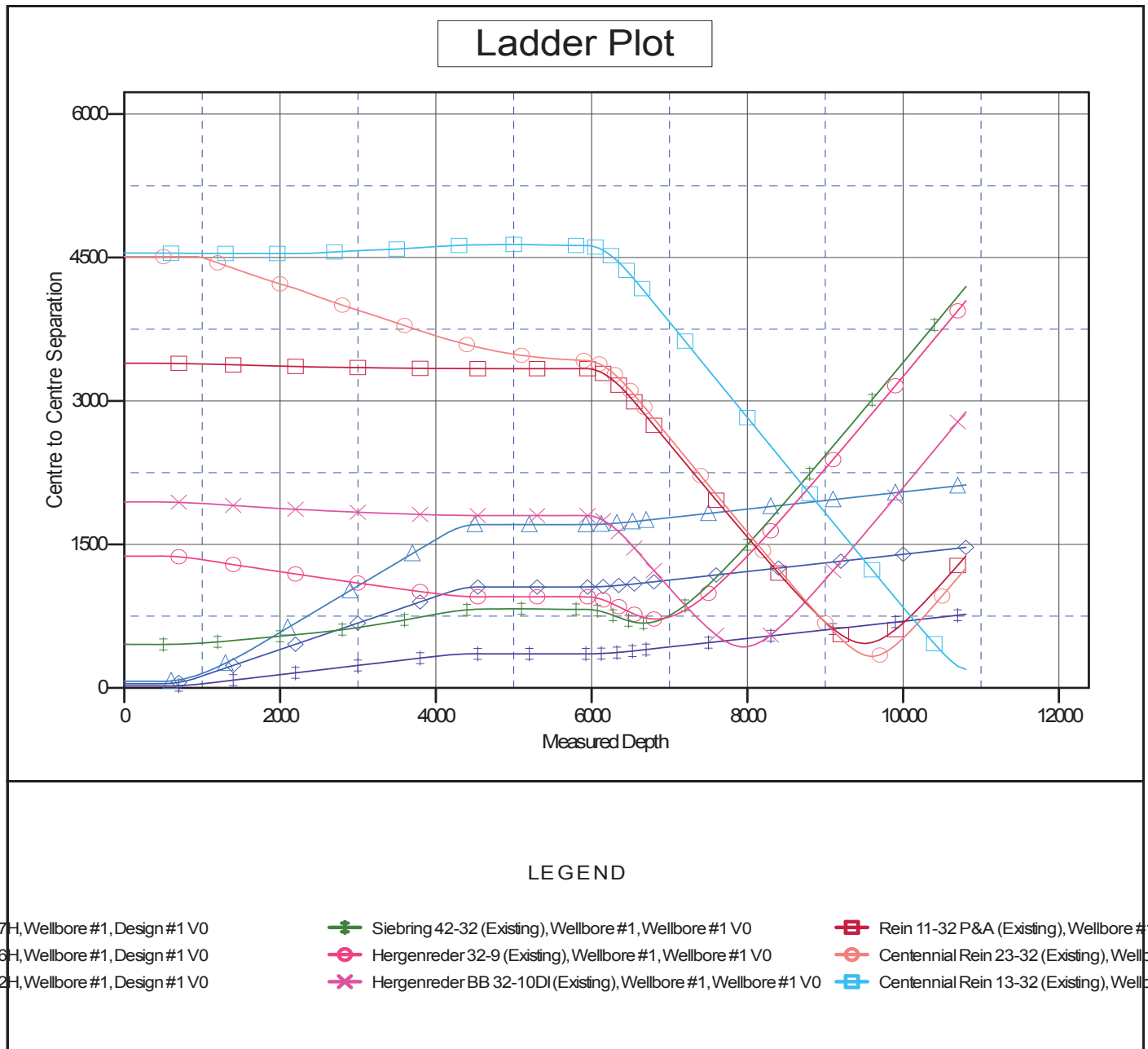
<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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.32-T5N-R63W - Siebring 5-63-32-32H - Wellbore #1 - Design #1												<b>Offset Site Error:</b>	0.00 usft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
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	Warning
7,600.00	6,366.00	7,560.92	6,366.00	39.46	38.70	-0.61	-186.73	-1,281.80	481.67	403.94	77.73	6.197	
7,700.00	6,366.00	7,660.52	6,366.00	42.04	41.33	-0.61	-187.78	-1,381.39	490.65	407.69	82.95	5.915	
7,800.00	6,366.00	7,760.12	6,366.00	44.65	43.97	-0.61	-188.83	-1,480.98	499.63	411.41	88.22	5.664	
7,900.00	6,366.00	7,859.71	6,366.00	47.27	46.63	-0.61	-189.89	-1,580.57	508.61	415.09	93.51	5.439	
8,000.00	6,366.00	7,959.31	6,366.00	49.91	49.31	-0.61	-190.94	-1,680.16	517.58	418.74	98.84	5.236	
8,100.00	6,366.00	8,058.90	6,366.00	52.57	51.99	-0.61	-192.00	-1,779.75	526.56	422.37	104.19	5.054	
8,200.00	6,366.00	8,158.50	6,366.00	55.23	54.69	-0.61	-193.05	-1,879.34	535.54	425.98	109.57	4.888	
8,300.00	6,366.00	8,258.10	6,366.00	57.91	57.40	-0.61	-194.10	-1,978.93	544.52	429.57	114.96	4.737	
8,400.00	6,366.00	8,357.69	6,366.00	60.60	60.12	-0.61	-195.16	-2,078.52	553.50	433.14	120.36	4.599	
8,500.00	6,366.00	8,457.29	6,366.00	63.29	62.84	-0.61	-196.21	-2,178.11	562.48	436.70	125.78	4.472	
8,600.00	6,366.00	8,556.88	6,366.00	66.00	65.57	-0.61	-197.27	-2,277.70	571.46	440.25	131.21	4.355	
8,700.00	6,366.00	8,656.48	6,366.00	68.70	68.30	-0.61	-198.32	-2,377.29	580.44	443.79	136.65	4.248	
8,800.00	6,366.00	8,756.08	6,366.00	71.42	71.04	-0.61	-199.37	-2,476.88	589.42	447.31	142.10	4.148	
8,900.00	6,366.00	8,855.67	6,366.00	74.13	73.78	-0.61	-200.43	-2,576.47	598.40	450.83	147.56	4.055	
9,000.00	6,366.00	8,955.27	6,366.00	76.86	76.53	-0.61	-201.48	-2,676.06	607.38	454.35	153.03	3.969	
9,100.00	6,366.00	9,054.86	6,366.00	79.58	79.28	-0.61	-202.54	-2,775.66	616.35	457.85	158.50	3.889	
9,200.00	6,366.00	9,154.46	6,366.00	82.31	82.03	-0.61	-203.59	-2,875.25	625.33	461.35	163.98	3.813	
9,300.00	6,366.00	9,254.06	6,366.00	85.05	84.79	-0.61	-204.64	-2,974.84	634.31	464.85	169.46	3.743	
9,400.00	6,366.00	9,353.65	6,366.00	87.78	87.55	-0.61	-205.70	-3,074.43	643.29	468.34	174.95	3.677	
9,500.00	6,366.00	9,453.25	6,366.00	90.52	90.31	-0.61	-206.75	-3,174.02	652.27	471.82	180.45	3.615	
9,600.00	6,366.00	9,552.84	6,366.00	93.26	93.07	-0.61	-207.80	-3,273.61	661.25	475.31	185.94	3.556	
9,700.00	6,366.00	9,652.44	6,366.00	96.00	95.83	-0.61	-208.86	-3,373.20	670.23	478.78	191.45	3.501	
9,800.00	6,366.00	9,752.04	6,366.00	98.75	98.60	-0.61	-209.91	-3,472.79	679.21	482.26	196.95	3.449	
9,900.00	6,366.00	9,851.63	6,366.00	101.49	101.36	-0.61	-210.97	-3,572.38	688.19	485.73	202.46	3.399	
10,000.00	6,366.00	9,951.23	6,366.00	104.24	104.13	-0.61	-212.02	-3,671.97	697.17	489.20	207.97	3.352	
10,100.00	6,366.00	10,050.83	6,366.00	106.99	106.90	-0.61	-213.07	-3,771.56	706.15	492.66	213.48	3.308	
10,200.00	6,366.00	10,150.42	6,366.00	109.74	109.67	-0.61	-214.13	-3,871.15	715.12	496.13	219.00	3.265	
10,300.00	6,366.00	10,250.02	6,366.00	112.50	112.45	-0.61	-215.18	-3,970.74	724.10	499.59	224.51	3.225	
10,400.00	6,366.00	10,349.61	6,366.00	115.25	115.22	-0.61	-216.24	-4,070.33	733.08	503.05	230.03	3.187	
10,500.00	6,366.00	10,449.21	6,366.00	118.00	117.99	-0.61	-217.29	-4,169.92	742.06	506.51	235.55	3.150	
10,600.00	6,366.00	10,548.81	6,366.00	120.76	120.77	-0.61	-218.34	-4,269.51	751.04	509.96	241.08	3.115	
10,700.00	6,366.00	10,648.40	6,366.00	123.52	123.54	-0.61	-219.40	-4,369.10	760.02	513.42	246.60	3.082	
10,806.11	6,366.00	10,754.09	6,366.00	126.44	126.49	-0.61	-220.52	-4,474.78	769.55	517.08	252.47	3.048 SF	

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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 @ 4588.00usft  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Siebring 5-63-32-48H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.68°

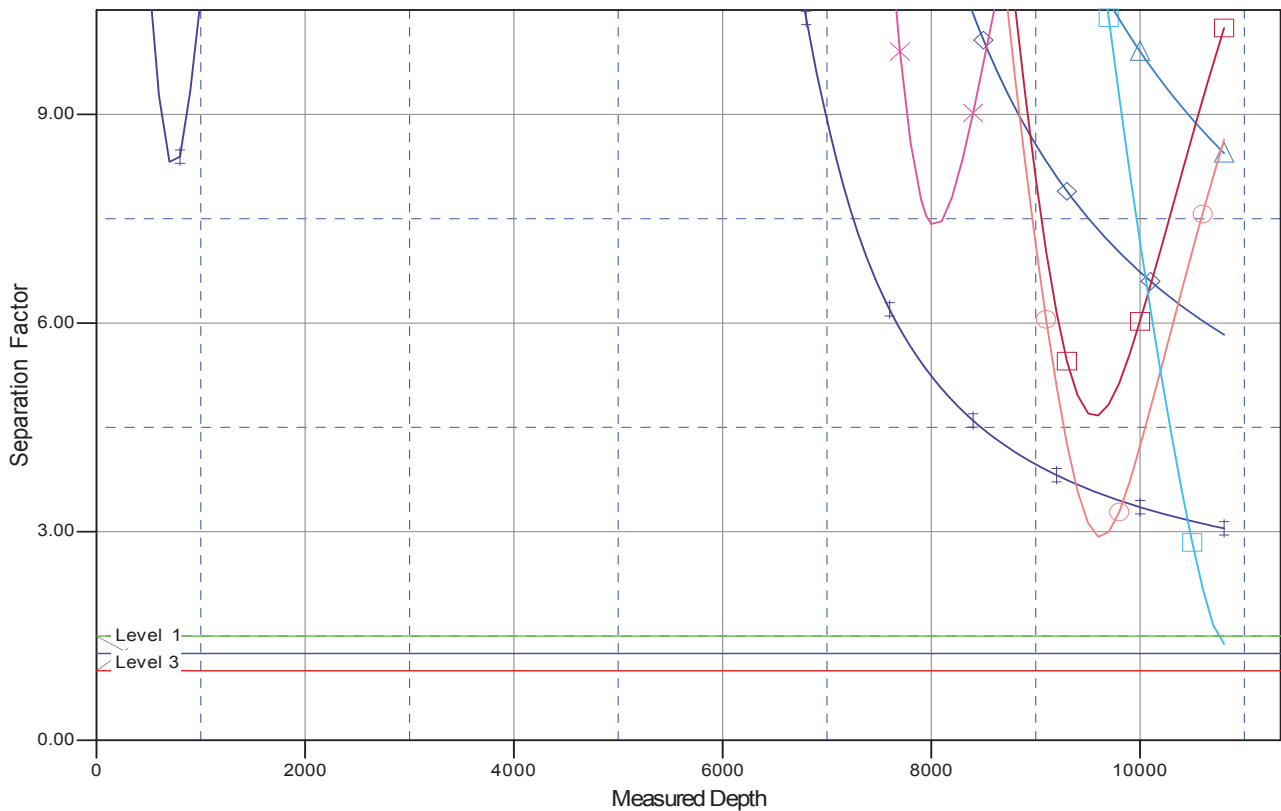


<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-48H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Reference Site:</b>	Sec.32-T5N-R63W	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Siebring 5-63-32-48H	<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 @ 4588.00usft  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Siebring 5-63-32-48H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.68°

## Separation Factor Plot



### LEGEND

17H, Wellbore #1, Design #1 V0  
16H, Wellbore #1, Design #1 V0  
32H, Wellbore #1, Design #1 V0

Siebring 42-32 (Existing), Wellbore #1, Wellbore #1 V0  
 Hergenreder 32-9 (Existing), Wellbore #1, Wellbore #1 V0  
 Hergenreder BB 32-10DI (Existing), Wellbore #1, Wellbore #1 V0

Rein 11-32 P&A (Existing), Wellbore #1,  
 Centennial Rein 23-32 (Existing), Wellbo  
 Centennial Rein 13-32 (Existing), Wellbo