



**Bill Barrett Corporation**

## **Bill Barrett Corp. (II)**

**Weld Co., CO**

**Sec.24-T6N-R62W**

**Dutch Lake 16-24H**

**Wellbore #1**

**Survey: STK1**

## **Standard Survey Report**

**06 September, 2012**





Bill Barrett Corp. (II)  
Project: Weld Co., CO  
Site: Sec.24-T6N-R62W  
Well: Dutch Lake 16-24H  
Wellbore: Wellbore #1  
Design: OH  
Lat: 40° 28' 44.74 N  
Long: 104° 16' 42.10 W  
Pad GL: 4669.01  
KB: WELL @ 4691.01ft



#### WELL DETAILS: Dutch Lake 16-24H

+N/-S	+E/-W	Northing	Ground Level: Easting	4669.01 Latitude	Longitude	Slot
0.00	0.00	1419715.24	3339831.40	40° 28' 44.74 N	104° 16' 42.10 W	

#### WELLBORE TARGET DETAILS (LAT/LONG)

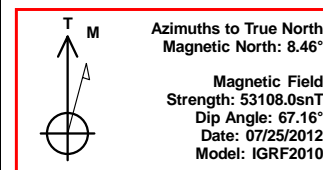
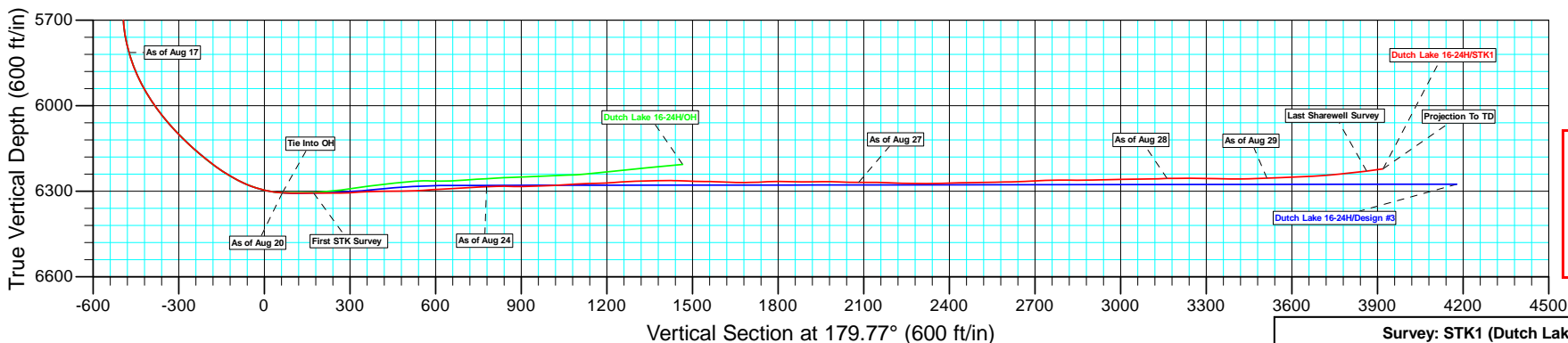
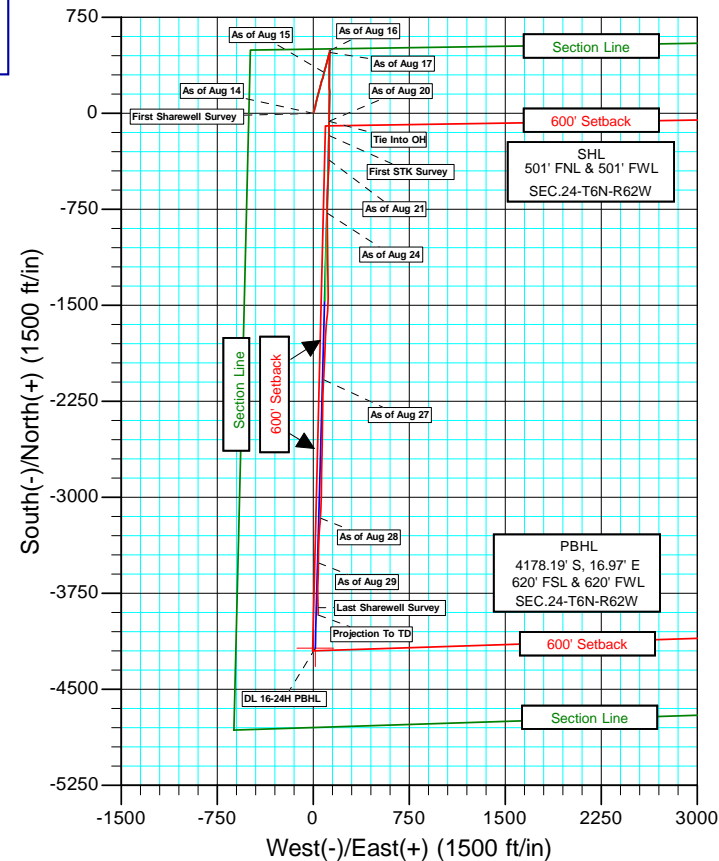
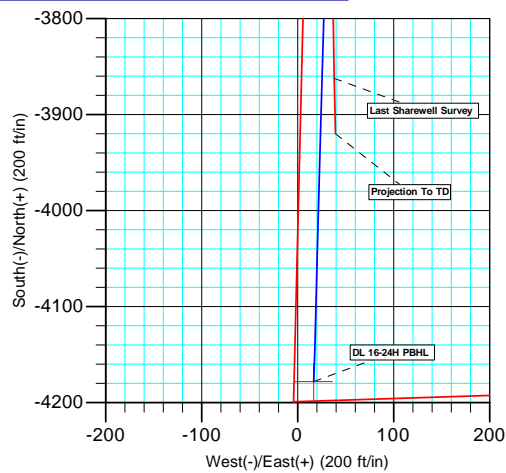
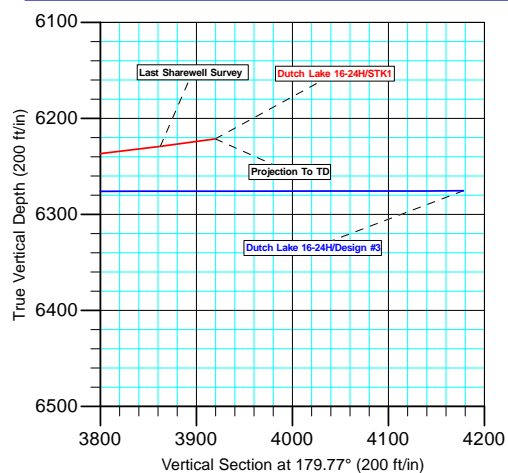
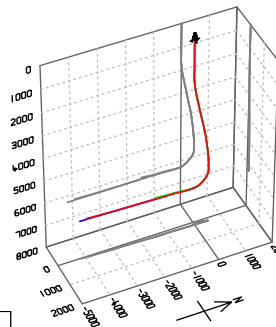
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
DL 16-24H PBHL	6283.01	-4178.20	16.97	40° 28' 3.45 N	104° 16' 41.88 W	

#### ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
965.00	965.00	0.200	97.30	-0.21	1.67	0.22	1.68	First Sharewell Survey
1551.99	1552.00	0.300	12.00	-1.21	3.02	1.22	4.12	As of Aug 14
3723.73	3752.00	12.000	13.20	318.94	86.93	-318.58	335.37	As of Aug 15
5338.52	5378.00	1.300	352.70	489.39	130.52	-488.86	511.95	As of Aug 16
5813.42	5855.00	16.400	183.40	474.06	129.67	-473.53	539.01	As of Aug 17
6305.76	6621.00	86.600	181.10	-62.70	124.42	63.21	1075.87	Tie Into OH
6307.20	6731.00	91.900	179.70	-172.65	123.65	173.15	1185.82	First STK Survey
6284.20	7338.00	92.500	180.60	-778.80	110.24	779.24	1792.22	As of Aug 24
6269.17	8643.00	89.700	182.30	-2081.77	81.89	2082.08	3096.49	As of Aug 25
6255.55	9725.00	91.400	183.20	-3162.98	55.86	3163.18	4178.17	As of Aug 28
6254.61	10075.00	92.300	180.00	-3512.51	40.61	3512.64	4528.12	As of Aug 29
6229.36	10426.00	97.700	178.70	-3862.38	38.20	3862.50	4878.04	Last Sharewell Survey
6221.58	10484.00	97.700	178.70	-3919.84	39.50	3919.97	4935.52	Projection To TD

#### PROJECT DETAILS: Weld Co., CO

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



Azimuths to True North  
Magnetic North: 8.46°  
Magnetic Field  
Strength: 53108.0usnT  
Dip Angle: 67.16°  
Date: 07/25/2012  
Model: IGRF2010

Survey: STK1 (Dutch Lake 16-24H/Wellbore #1)

Created By: Rolando Garza Date: 12:51, September 06 2012

<b>Company:</b>	Bill Barrett Corp. (II)	<b>Local Co-ordinate Reference:</b>	Well Dutch Lake 16-24H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4691.01ft
<b>Site:</b>	Sec.24-T6N-R62W	<b>MD Reference:</b>	WELL @ 4691.01ft
<b>Well:</b>	Dutch Lake 16-24H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	CompassVM

<b>Project</b>	Weld Co., CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	Sec.24-T6N-R62W		
<b>Site Position:</b>		<b>Northing:</b>	1,419,715.25 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,339,831.41 usft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	1.10 ft
		<b>Latitude:</b>	40° 28' 44.74 N
		<b>Longitude:</b>	104° 16' 42.10 W
		<b>Grid Convergence:</b>	0.79 °

<b>Well</b>	Dutch Lake 16-24H		
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b> 1,419,715.25 usft
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b> 3,339,831.41 usft
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	40° 28' 44.74 N
		<b>Longitude:</b>	104° 16' 42.10 W
		<b>Ground Level:</b>	4,669.01 ft

<b>Wellbore</b>	Wellbore #1		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>
	IGRF2010	07/25/12	8.46
			<b>Dip Angle (°)</b>
			67.16
			<b>Field Strength (nT)</b>
			53,108

<b>Design</b>	OH		
<b>Audit Notes:</b>			
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL
		<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>
	0.00	0.00	0.00
			<b>Direction (°)</b>
			179.77

<b>Survey Program</b>	<b>Date</b>	09/06/12		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
965.00	8,029.00	OH (Wellbore #1)	MWD	MWD - Standard

<b>Survey</b>									
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>
0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
965.00	0.200	97.30	965.00	-0.21	1.67	0.22	0.02	0.02	0.00
<b>First Sharewell Survey</b>									
1,057.00	0.200	106.40	1,057.00	-0.28	1.98	0.29	0.03	0.00	9.89
1,149.00	0.200	113.50	1,149.00	-0.39	2.29	0.40	0.03	0.00	7.72
1,241.00	0.200	126.40	1,241.00	-0.55	2.56	0.56	0.05	0.00	14.02
1,423.00	0.300	170.50	1,423.00	-1.21	2.90	1.22	0.12	0.05	24.23
1,552.00	0.300	12.00	1,551.99	-1.21	3.02	1.22	0.46	0.00	-122.87
<b>As of Aug 14</b>									
1,647.00	0.800	0.10	1,646.99	-0.30	3.07	0.32	0.54	0.53	-12.53

<b>Company:</b>	Bill Barrett Corp. (II)	<b>Local Co-ordinate Reference:</b>	Well Dutch Lake 16-24H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4691.01ft
<b>Site:</b>	Sec.24-T6N-R62W	<b>MD Reference:</b>	WELL @ 4691.01ft
<b>Well:</b>	Dutch Lake 16-24H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	CompassVM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,744.00	3.300	11.50	1,743.92	3.11	3.63	-3.10	2.60	2.58	11.75
1,840.00	3.500	11.40	1,839.75	8.69	4.76	-8.67	0.21	0.21	-0.10
1,934.00	5.400	16.90	1,933.47	15.74	6.62	-15.71	2.07	2.02	5.85
2,029.00	7.400	13.90	2,027.87	25.95	9.39	-25.91	2.13	2.11	-3.16
2,124.00	9.800	17.80	2,121.80	39.59	13.33	-39.54	2.60	2.53	4.11
2,220.00	9.900	11.30	2,216.39	55.46	17.44	-55.39	1.16	0.10	-6.77
2,317.00	9.500	10.10	2,312.00	71.52	20.48	-71.44	0.46	-0.41	-1.24
2,412.00	10.500	15.30	2,405.56	87.59	24.14	-87.49	1.42	1.05	5.47
2,509.00	10.200	13.60	2,500.97	104.46	28.49	-104.35	0.44	-0.31	-1.75
2,604.00	10.100	12.00	2,594.49	120.79	32.20	-120.65	0.31	-0.11	-1.68
2,700.00	11.100	16.20	2,688.85	137.89	36.53	-137.74	1.32	1.04	4.38
2,796.00	10.800	16.00	2,783.10	155.41	41.59	-155.24	0.31	-0.31	-0.21
2,891.00	10.800	13.80	2,876.42	172.61	46.16	-172.42	0.43	0.00	-2.32
2,986.00	9.500	14.80	2,969.93	188.84	50.29	-188.63	1.38	-1.37	1.05
3,083.00	9.400	14.70	3,065.61	204.24	54.34	-204.02	0.10	-0.10	-0.10
3,179.00	8.700	14.10	3,160.42	218.86	58.10	-218.63	0.74	-0.73	-0.63
3,275.00	8.800	13.60	3,255.30	233.04	61.60	-232.79	0.13	0.10	-0.52
3,369.00	9.800	17.70	3,348.06	247.65	65.72	-247.38	1.28	1.06	4.36
3,464.00	10.200	18.10	3,441.62	263.35	70.79	-263.06	0.43	0.42	0.42
3,560.00	11.600	17.60	3,535.89	280.63	76.35	-280.32	1.46	1.46	-0.52
3,656.00	12.100	15.50	3,629.84	299.53	81.96	-299.19	0.69	0.52	-2.19
3,752.00	12.000	13.20	3,723.73	318.94	86.93	-318.58	0.51	-0.10	-2.40
As of Aug 15									
3,847.00	10.900	10.50	3,816.84	337.39	90.82	-337.01	1.29	-1.16	-2.84
3,942.00	9.700	17.20	3,910.31	353.86	94.82	-353.48	1.78	-1.26	7.05
4,038.00	8.400	16.00	4,005.11	368.33	99.15	-367.93	1.37	-1.35	-1.25
4,133.00	7.200	15.20	4,099.23	380.75	102.62	-380.33	1.27	-1.26	-0.84
4,229.00	6.900	17.27	4,194.50	392.06	105.91	-391.63	0.41	-0.31	2.16
4,325.00	6.600	15.10	4,289.84	402.89	109.06	-402.45	0.41	-0.31	-2.26
4,420.00	6.800	14.40	4,384.19	413.61	111.88	-413.15	0.23	0.21	-0.74
4,516.00	6.400	14.20	4,479.55	424.30	114.61	-423.83	0.42	-0.42	-0.21
4,611.00	6.200	14.60	4,573.98	434.40	117.20	-433.92	0.22	-0.21	0.42
4,707.00	6.100	12.60	4,669.43	444.39	119.62	-443.91	0.25	-0.10	-2.08
4,804.00	5.800	19.20	4,765.90	454.05	122.35	-453.55	0.77	-0.31	6.80
4,900.00	5.200	24.10	4,861.46	462.61	125.72	-462.09	0.79	-0.63	5.10
4,996.00	4.800	16.80	4,957.10	470.42	128.66	-469.90	0.78	-0.42	-7.60
5,091.00	4.200	7.80	5,051.81	477.67	130.28	-477.14	0.97	-0.63	-9.47
5,187.00	2.900	0.90	5,147.62	483.58	130.80	-483.05	1.42	-1.35	-7.19
5,282.00	1.400	355.70	5,242.55	487.15	130.75	-486.61	1.59	-1.58	-5.47
5,378.00	1.300	352.70	5,338.52	489.39	130.52	-488.86	0.13	-0.10	-3.13
As of Aug 16									
5,473.00	0.900	8.40	5,433.51	491.20	130.49	-490.67	0.52	-0.42	16.53
5,569.00	1.000	359.70	5,529.49	492.79	130.60	-492.25	0.18	0.10	-9.06
5,665.00	1.000	341.10	5,625.48	494.42	130.32	-493.88	0.34	0.00	-19.38

<b>Company:</b>	Bill Barrett Corp. (II)	<b>Local Co-ordinate Reference:</b>	Well Dutch Lake 16-24H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4691.01ft
<b>Site:</b>	Sec.24-T6N-R62W	<b>MD Reference:</b>	WELL @ 4691.01ft
<b>Well:</b>	Dutch Lake 16-24H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	CompassVM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,696.00	1.000	341.80	5,656.47	494.93	130.15	-494.40	0.04	0.00	2.26
5,728.00	1.800	186.00	5,688.47	494.69	130.01	-494.16	8.57	2.50	-486.88
5,760.00	5.700	179.60	5,720.40	492.60	129.97	-492.07	12.24	12.19	-20.00
5,792.00	9.500	178.60	5,752.11	488.37	130.05	-487.84	11.88	11.88	-3.13
5,824.00	13.400	181.40	5,783.47	482.02	130.02	-481.49	12.31	12.19	8.75
5,855.00	16.400	183.40	5,813.42	474.06	129.67	-473.53	9.82	9.68	6.45
<b>As of Aug 17</b>									
5,888.00	18.700	182.70	5,844.88	464.13	129.15	-463.60	7.00	6.97	-2.12
5,920.00	21.700	181.30	5,874.91	453.09	128.77	-452.56	9.50	9.38	-4.38
5,952.00	25.300	180.50	5,904.25	440.33	128.58	-439.80	11.29	11.25	-2.50
5,984.00	28.200	180.70	5,932.82	425.93	128.43	-425.40	9.07	9.06	0.63
6,015.00	31.000	181.00	5,959.78	410.62	128.20	-410.10	9.04	9.03	0.97
6,047.00	33.900	180.90	5,986.78	393.45	127.91	-392.93	9.06	9.06	-0.31
6,079.00	36.700	181.00	6,012.89	374.97	127.61	-374.45	8.75	8.75	0.31
6,111.00	38.800	181.00	6,038.19	355.38	127.26	-354.86	6.56	6.56	0.00
6,143.00	41.200	181.30	6,062.70	334.82	126.85	-334.30	7.52	7.50	0.94
6,175.00	43.600	180.60	6,086.33	313.24	126.50	-312.73	7.64	7.50	-2.19
6,207.00	44.400	180.80	6,109.35	291.02	126.22	-290.50	2.54	2.50	0.63
6,239.00	45.800	180.20	6,131.94	268.35	126.03	-267.84	4.57	4.38	-1.88
6,270.00	48.300	179.30	6,153.06	245.66	126.13	-245.15	8.34	8.06	-2.90
6,302.00	50.600	178.80	6,173.86	221.35	126.53	-220.84	7.28	7.19	-1.56
6,334.00	50.900	178.30	6,194.11	196.58	127.16	-196.06	1.53	0.94	-1.56
6,366.00	53.500	178.80	6,213.72	171.31	127.80	-170.79	8.22	8.13	1.56
6,398.00	57.600	180.00	6,231.82	144.93	128.07	-144.41	13.18	12.81	3.75
6,430.00	60.300	180.60	6,248.32	117.51	127.92	-116.99	8.59	8.44	1.88
6,462.00	62.900	180.90	6,263.54	89.37	127.55	-88.85	8.17	8.13	0.94
6,493.00	67.200	181.30	6,276.61	61.28	127.01	-60.76	13.92	13.87	1.29
6,526.00	72.000	181.40	6,288.11	30.36	126.28	-29.85	14.55	14.55	0.30
6,558.00	76.800	181.00	6,296.72	-0.44	125.64	0.95	15.05	15.00	-1.25
6,589.00	81.700	181.20	6,302.50	-30.88	125.06	31.39	15.82	15.81	0.65
6,621.00	86.600	181.10	6,305.76	-62.70	124.42	63.21	15.32	15.31	-0.31
<b>Tie Into OH</b>									
6,731.00	91.900	179.70	6,307.20	-172.65	123.65	173.15	4.98	4.82	-1.27
<b>First STK Survey</b>									
6,746.00	90.300	179.60	6,306.91	-187.64	123.74	188.14	10.69	-10.67	-0.67
6,763.00	89.800	179.70	6,306.89	-204.64	123.85	205.14	3.00	-2.94	0.59
6,794.00	89.700	180.10	6,307.03	-235.64	123.90	236.14	1.33	-0.32	1.29
6,826.00	91.000	180.20	6,306.83	-267.64	123.82	268.14	4.07	4.06	0.31
6,858.00	93.600	180.20	6,305.55	-299.61	123.70	300.11	8.13	8.13	0.00
6,890.00	94.100	180.00	6,303.40	-331.54	123.65	332.04	1.68	1.56	-0.63
6,922.00	92.700	180.30	6,301.50	-363.48	123.56	363.98	4.47	-4.38	0.94
6,954.00	90.500	181.60	6,300.61	-395.46	123.03	395.96	7.98	-6.88	4.06
6,985.00	90.500	182.20	6,300.34	-426.44	122.01	426.94	1.94	0.00	1.94

<b>Company:</b>	Bill Barrett Corp. (II)	<b>Local Co-ordinate Reference:</b>	Well Dutch Lake 16-24H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4691.01ft
<b>Site:</b>	Sec.24-T6N-R62W	<b>MD Reference:</b>	WELL @ 4691.01ft
<b>Well:</b>	Dutch Lake 16-24H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	CompassVM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,018.00	90.700	182.50	6,299.99	-459.42	120.65	459.90	1.09	0.61	0.91
7,050.00	90.900	182.60	6,299.55	-491.38	119.23	491.86	0.70	0.63	0.31
7,082.00	92.300	182.20	6,298.65	-523.34	117.89	523.81	4.55	4.38	-1.25
7,114.00	93.300	182.20	6,297.09	-555.28	116.66	555.75	3.13	3.13	0.00
7,146.00	93.600	182.60	6,295.16	-587.19	115.33	587.65	1.56	0.94	1.25
7,178.00	93.300	182.00	6,293.24	-619.11	114.04	619.56	2.09	-0.94	-1.88
7,211.00	93.100	181.60	6,291.40	-652.04	113.01	652.49	1.35	-0.61	-1.21
7,242.00	93.400	182.10	6,289.64	-682.97	112.01	683.42	1.88	0.97	1.61
7,275.00	93.400	180.70	6,287.68	-715.90	111.20	716.35	4.23	0.00	-4.24
7,306.00	93.400	181.10	6,285.84	-746.85	110.72	747.29	1.29	0.00	1.29
7,338.00	92.500	180.60	6,284.20	-778.80	110.24	779.24	3.22	-2.81	-1.56
As of Aug 24									
7,369.00	91.000	180.30	6,283.25	-809.78	110.00	810.22	4.93	-4.84	-0.97
7,400.00	89.400	180.00	6,283.14	-840.78	109.92	841.22	5.25	-5.16	-0.97
7,432.00	89.800	180.10	6,283.36	-872.78	109.89	873.22	1.29	1.25	0.31
7,464.00	90.400	179.60	6,283.31	-904.78	109.98	905.22	2.44	1.88	-1.56
7,496.00	91.300	179.70	6,282.83	-936.78	110.17	937.22	2.83	2.81	0.31
7,528.00	92.000	179.50	6,281.91	-968.76	110.39	969.20	2.27	2.19	-0.63
7,560.00	93.000	179.30	6,280.52	-1,000.73	110.73	1,001.17	3.19	3.13	-0.63
7,591.00	93.800	178.70	6,278.68	-1,031.67	111.27	1,032.11	3.22	2.58	-1.94
7,624.00	93.300	178.50	6,276.63	-1,064.60	112.07	1,065.04	1.63	-1.52	-0.61
7,656.00	92.900	178.20	6,274.90	-1,096.54	112.99	1,096.99	1.56	-1.25	-0.94
7,688.00	91.800	179.00	6,273.59	-1,128.50	113.78	1,128.95	4.25	-3.44	2.50
7,720.00	91.800	179.10	6,272.59	-1,160.48	114.31	1,160.93	0.31	0.00	0.31
7,752.00	92.800	178.50	6,271.30	-1,192.45	114.98	1,192.90	3.64	3.13	-1.88
7,784.00	93.900	178.70	6,269.43	-1,224.38	115.76	1,224.84	3.49	3.44	0.63
7,816.00	93.700	178.10	6,267.31	-1,256.30	116.65	1,256.76	1.97	-0.63	-1.88
7,848.00	92.300	179.90	6,265.64	-1,288.25	117.20	1,288.71	7.12	-4.38	5.63
7,879.00	91.100	180.10	6,264.72	-1,319.23	117.20	1,319.70	3.92	-3.87	0.65
7,911.00	91.600	179.30	6,263.96	-1,351.22	117.37	1,351.69	2.95	1.56	-2.50
7,943.00	91.300	179.10	6,263.15	-1,383.21	117.82	1,383.68	1.13	-0.94	-0.63
7,974.00	90.200	180.30	6,262.75	-1,414.21	117.98	1,414.67	5.25	-3.55	3.87
8,006.00	88.300	181.40	6,263.17	-1,446.20	117.51	1,446.66	6.86	-5.94	3.44
8,038.00	87.900	182.60	6,264.23	-1,478.16	116.39	1,478.62	3.95	-1.25	3.75
8,070.00	88.600	182.30	6,265.21	-1,510.11	115.02	1,510.57	2.38	2.19	-0.94
8,102.00	89.100	183.40	6,265.85	-1,542.07	113.43	1,542.52	3.78	1.56	3.44
8,133.00	87.800	185.50	6,266.69	-1,572.96	111.03	1,573.40	7.96	-4.19	6.77
8,166.00	87.600	186.50	6,268.01	-1,605.75	107.58	1,606.18	3.09	-0.61	3.03
8,197.00	88.500	186.90	6,269.07	-1,636.52	103.97	1,636.93	3.18	2.90	1.29
8,229.00	89.500	185.00	6,269.62	-1,668.34	100.65	1,668.74	6.71	3.13	-5.94
8,260.00	91.400	183.40	6,269.38	-1,699.26	98.38	1,699.64	8.01	6.13	-5.16
8,292.00	92.700	181.40	6,268.24	-1,731.21	97.04	1,731.59	7.45	4.06	-6.25
8,324.00	92.300	181.20	6,266.84	-1,763.17	96.32	1,763.54	1.40	-1.25	-0.63
8,356.00	90.400	181.50	6,266.09	-1,795.15	95.56	1,795.52	6.01	-5.94	0.94

<b>Company:</b>	Bill Barrett Corp. (II)	<b>Local Co-ordinate Reference:</b>	Well Dutch Lake 16-24H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4691.01ft
<b>Site:</b>	Sec.24-T6N-R62W	<b>MD Reference:</b>	WELL @ 4691.01ft
<b>Well:</b>	Dutch Lake 16-24H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	CompassVM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,388.00	88.700	182.80	6,266.34	-1,827.12	94.36	1,827.49	6.69	-5.31	4.06
8,420.00	88.700	183.50	6,267.06	-1,859.07	92.60	1,859.43	2.19	0.00	2.19
8,451.00	89.600	183.60	6,267.52	-1,890.00	90.68	1,890.36	2.92	2.90	0.32
8,483.00	90.800	182.70	6,267.41	-1,921.95	88.93	1,922.30	4.69	3.75	-2.81
8,515.00	90.800	182.70	6,266.96	-1,953.92	87.42	1,954.25	0.00	0.00	0.00
8,547.00	89.100	182.60	6,266.99	-1,985.88	85.94	1,986.21	5.32	-5.31	-0.31
8,579.00	88.100	182.30	6,267.77	-2,017.84	84.57	2,018.17	3.26	-3.13	-0.94
8,611.00	88.600	182.50	6,268.70	-2,049.80	83.23	2,050.12	1.68	1.56	0.63
8,643.00	89.700	182.30	6,269.17	-2,081.77	81.89	2,082.08	3.49	3.44	-0.63
As of Aug 27									
8,675.00	90.200	182.30	6,269.20	-2,113.74	80.61	2,114.05	1.56	1.56	0.00
8,708.00	89.100	182.40	6,269.40	-2,146.71	79.26	2,147.02	3.35	-3.33	0.30
8,740.00	88.100	182.90	6,270.18	-2,178.67	77.78	2,178.97	3.49	-3.13	1.56
8,772.00	87.900	182.20	6,271.30	-2,210.62	76.35	2,210.91	2.27	-0.63	-2.19
8,803.00	88.300	182.00	6,272.33	-2,241.58	75.22	2,241.87	1.44	1.29	-0.65
8,836.00	89.100	180.80	6,273.08	-2,274.56	74.41	2,274.84	4.37	2.42	-3.64
8,868.00	89.700	180.40	6,273.41	-2,306.56	74.08	2,306.84	2.25	1.88	-1.25
8,899.00	90.500	180.20	6,273.36	-2,337.56	73.92	2,337.84	2.66	2.58	-0.65
8,931.00	91.600	180.00	6,272.77	-2,369.55	73.86	2,369.83	3.49	3.44	-0.63
8,963.00	92.000	180.40	6,271.76	-2,401.53	73.75	2,401.81	1.77	1.25	1.25
8,995.00	91.500	180.70	6,270.79	-2,433.52	73.44	2,433.79	1.82	-1.56	0.94
9,027.00	90.900	181.40	6,270.12	-2,465.50	72.85	2,465.78	2.88	-1.88	2.19
9,059.00	91.200	180.80	6,269.53	-2,497.49	72.24	2,497.77	2.10	0.94	-1.88
9,090.00	90.800	180.90	6,268.99	-2,528.48	71.78	2,528.75	1.33	-1.29	0.32
9,122.00	90.500	181.20	6,268.63	-2,560.48	71.19	2,560.74	1.33	-0.94	0.94
9,154.00	91.100	180.80	6,268.18	-2,592.47	70.64	2,592.73	2.25	1.88	-1.25
9,186.00	91.900	180.70	6,267.34	-2,624.45	70.22	2,624.72	2.52	2.50	-0.31
9,218.00	92.700	181.20	6,266.06	-2,656.42	69.69	2,656.69	2.95	2.50	1.56
9,250.00	92.400	181.40	6,264.63	-2,688.38	68.96	2,688.64	1.13	-0.94	0.63
9,281.00	92.700	181.50	6,263.26	-2,719.34	68.18	2,719.60	1.02	0.97	0.32
9,313.00	91.700	181.20	6,262.03	-2,751.31	67.42	2,751.56	3.26	-3.13	-0.94
9,345.00	90.300	181.30	6,261.47	-2,783.30	66.73	2,783.55	4.39	-4.38	0.31
9,377.00	89.400	180.40	6,261.55	-2,815.29	66.25	2,815.54	3.98	-2.81	-2.81
9,409.00	89.900	180.00	6,261.75	-2,847.29	66.14	2,847.54	2.00	1.56	-1.25
9,440.00	90.900	180.70	6,261.53	-2,878.29	65.95	2,878.53	3.94	3.23	2.26
9,472.00	91.600	180.90	6,260.83	-2,910.28	65.50	2,910.52	2.27	2.19	0.63
9,504.00	91.400	180.70	6,260.00	-2,942.26	65.06	2,942.50	0.88	-0.63	-0.63
9,536.00	91.400	180.50	6,259.21	-2,974.25	64.72	2,974.49	0.62	0.00	-0.63
9,566.00	91.200	181.70	6,258.53	-3,004.24	64.15	3,004.48	4.05	-0.67	4.00
9,598.00	90.700	182.20	6,258.00	-3,036.22	63.06	3,036.45	2.21	-1.56	1.56
9,630.00	90.400	183.60	6,257.70	-3,068.17	61.44	3,068.40	4.47	-0.94	4.38
9,662.00	91.200	183.10	6,257.25	-3,100.12	59.57	3,100.33	2.95	2.50	-1.56
9,694.00	91.800	183.60	6,256.41	-3,132.05	57.70	3,132.26	2.44	1.88	1.56

<b>Company:</b>	Bill Barrett Corp. (II)	<b>Local Co-ordinate Reference:</b>	Well Dutch Lake 16-24H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4691.01ft
<b>Site:</b>	Sec.24-T6N-R62W	<b>MD Reference:</b>	WELL @ 4691.01ft
<b>Well:</b>	Dutch Lake 16-24H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	CompassVM

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,725.00	91.400	183.20	6,255.55	-3,162.98	55.86	3,163.18	1.82	-1.29	-1.29	
As of Aug 28										
9,757.00	90.500	183.00	6,255.01	-3,194.93	54.13	3,195.12	2.88	-2.81	-0.63	
9,789.00	89.800	184.00	6,254.93	-3,226.87	52.18	3,227.06	3.81	-2.19	3.13	
9,820.00	89.300	184.30	6,255.17	-3,257.79	49.94	3,257.96	1.88	-1.61	0.97	
9,852.00	89.800	184.10	6,255.43	-3,289.70	47.59	3,289.87	1.68	1.56	-0.63	
9,884.00	88.700	182.50	6,255.84	-3,321.64	45.75	3,321.80	6.07	-3.44	-5.00	
9,916.00	88.800	182.60	6,256.54	-3,353.60	44.33	3,353.76	0.44	0.31	0.31	
9,947.00	89.700	182.40	6,256.95	-3,384.57	42.97	3,384.72	2.97	2.90	-0.65	
9,980.00	90.400	181.70	6,256.92	-3,417.55	41.79	3,417.69	3.00	2.12	-2.12	
10,011.00	91.000	180.60	6,256.54	-3,448.54	41.17	3,448.68	4.04	1.94	-3.55	
10,043.00	91.800	180.70	6,255.76	-3,480.53	40.81	3,480.67	2.52	2.50	0.31	
10,075.00	92.300	180.00	6,254.61	-3,512.51	40.61	3,512.64	2.69	1.56	-2.19	
As of Aug 29										
10,107.00	93.000	181.20	6,253.13	-3,544.47	40.28	3,544.61	4.34	2.19	3.75	
10,139.00	92.100	181.10	6,251.71	-3,576.43	39.64	3,576.56	2.83	-2.81	-0.31	
10,171.00	92.000	180.70	6,250.57	-3,608.41	39.13	3,608.54	1.29	-0.31	-1.25	
10,203.00	92.600	181.00	6,249.28	-3,640.38	38.66	3,640.51	2.10	1.88	0.94	
10,235.00	93.200	181.40	6,247.66	-3,672.33	37.99	3,672.45	2.25	1.88	1.25	
10,266.00	94.000	181.00	6,245.72	-3,703.26	37.34	3,703.38	2.88	2.58	-1.29	
10,298.00	94.800	180.70	6,243.26	-3,735.16	36.87	3,735.28	2.67	2.50	-0.94	
10,330.00	95.500	179.60	6,240.39	-3,767.03	36.79	3,767.15	4.06	2.19	-3.44	
10,426.00	97.700	178.70	6,229.36	-3,862.38	38.20	3,862.50	2.47	2.29	-0.94	
Last Sharewell Survey										
10,484.00	97.700	178.70	6,221.58	-3,919.84	39.50	3,919.97	0.00	0.00	0.00	
Projection To TD										

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
965.00	965.00	-0.21	1.67	First Sharewell Survey	
1,552.00	1,551.99	-1.21	3.02	As of Aug 14	
3,752.00	3,723.73	318.94	86.93	As of Aug 15	
5,378.00	5,338.52	489.39	130.52	As of Aug 16	
5,855.00	5,813.42	474.06	129.67	As of Aug 17	
6,621.00	6,305.76	-62.70	124.42	Tie Into OH	
6,731.00	6,307.20	-172.65	123.65	First STK Survey	
7,338.00	6,284.20	-778.80	110.24	As of Aug 24	
8,643.00	6,269.17	-2,081.77	81.89	As of Aug 27	
9,725.00	6,255.55	-3,162.98	55.86	As of Aug 28	
10,075.00	6,254.61	-3,512.51	40.61	As of Aug 29	
10,426.00	6,229.36	-3,862.38	38.20	Last Sharewell Survey	
10,484.00	6,221.58	-3,919.84	39.50	Projection To TD	

Checked By: _____	Approved By: _____	Date: _____
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