



**Bill Barrett Corporation**

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

Weld Co., CO

Sec.3-T4N-R63W

70 Ranch 4-63-3-32H

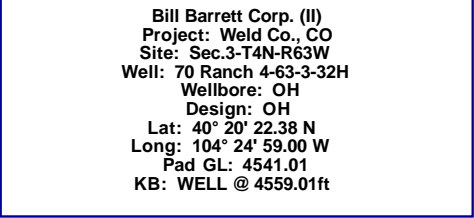
OH

Survey: OH

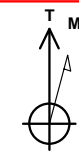
## **Standard Survey Report**

05 November, 2012





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

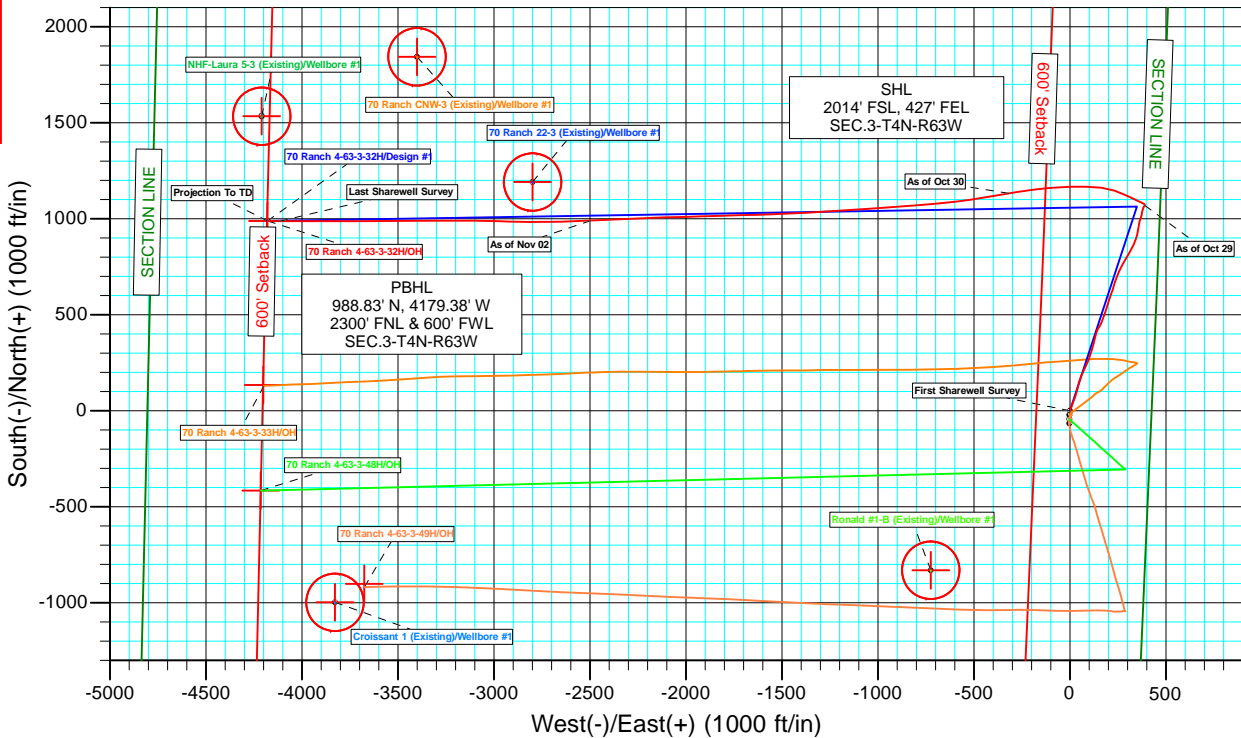
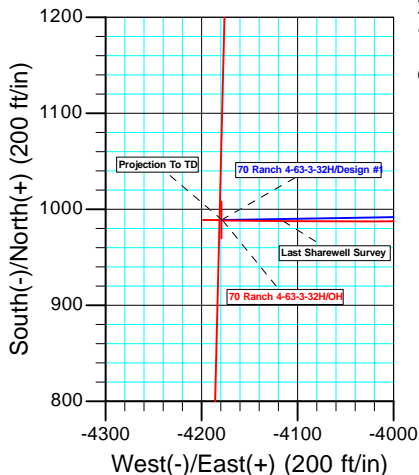
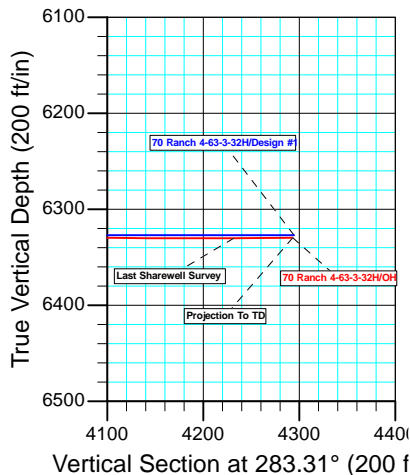


**Azimuths to True North**  
Magnetic North: 8.56°

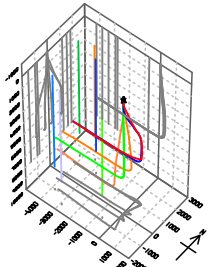
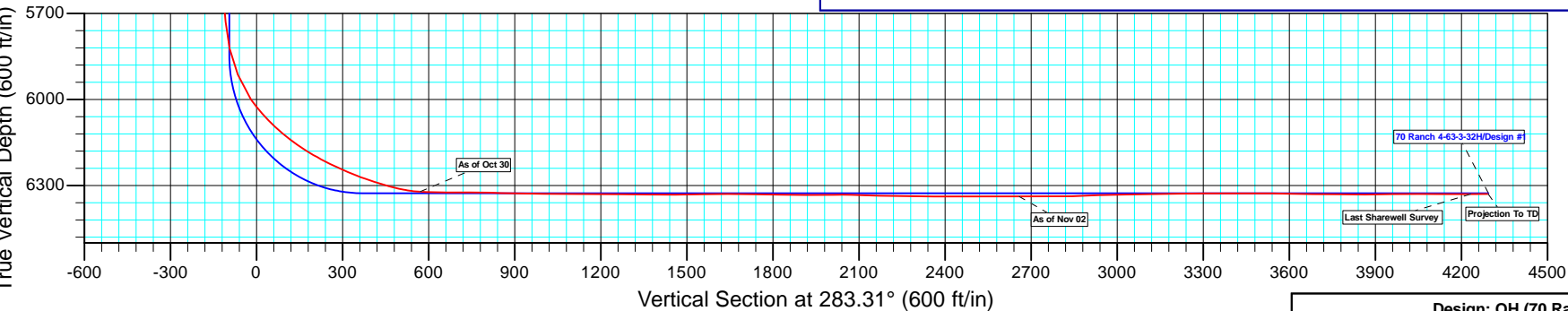
**Magnetic Field**  
Strength: 53050.1nT  
Dip Angle: 67.03°  
Date: 04/18/2012  
Model: IGRF2010

WELL DETAILS: 70 Ranch 4-63-3-32H						
+N/-S	+E/-W	Northing	Ground Level: Easting	4541.01 Latitude	Longitude	Slot
0.00	0.00	1368384.38	3302058.19	40° 20' 22.38 N	104° 24' 59.00 W	

WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
4-63-3-32H PBHL	6327.00	988.83	-4179.39	40° 20' 32.15 N	104° 25' 52.98 W	



ANNOTATIONS									
	TVD	MD	Inc	Azi	+N/-S	+E/-W	VSECT	Departure	Annotation
	140.00	140.00	0.600	3.60	0.73	0.05	0.12	0.73	First Sharewell Survey
	5066.01	5223.00	1.000	18.00	1069.33	390.66	-133.98	1145.08	As of Oct 29
	6321.79	6887.00	87.100	260.20	1132.05	-318.02	570.10	1878.61	As of Oct 30
	6337.77	9072.00	90.000	267.50	990.45	-2496.43	2657.39	4063.39	As of Nov 02
	6330.26	10691.00	90.400	270.60	987.68	-4114.99	4231.84	5682.20	Last Sharewell Survey
	6329.82	10754.00	90.400	270.60	988.34	-4177.99	4293.30	5745.20	Projection To TD



<b>Company:</b>	Bill Barrett Corp. (II)	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 4-63-3-32H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4559.01ft
<b>Site:</b>	Sec.3-T4N-R63W	<b>MD Reference:</b>	WELL @ 4559.01ft
<b>Well:</b>	70 Ranch 4-63-3-32H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<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		

Site		Sec.3-T4N-R63W			
Site Position:		Northing:	1,368,318.79 usft	Latitude:	40° 20' 21.73 N
From:	Lat/Long	Easting:	3,302,056.21 usft	Longitude:	104° 24' 59.04 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	0.70 °

Well	70 Ranch 4-63-3-32H					
Well Position	+N/-S	0.00 ft	Northing:	1,368,384.38 usft	Latitude:	40° 20' 22.38 N
	+E/-W	0.00 ft	Easting:	3,302,058.20 usft	Longitude:	104° 24' 59.00 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,541.01 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	04/18/12	8.56	67.03	53,050

<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>	<b>Direction (°)</b>	
	0.00	0.00	0.00	283.31	

<b>Survey Program</b>	<b>Date</b>	11/05/12			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
140.00	10,754.00	OH (OH)	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
140.00	0.600	3.60	140.00	0.73	0.05	0.12	0.43	0.43	0.00
<b>First Sharewell Survey</b>									
232.00	3.500	22.80	231.93	3.80	1.16	-0.26	3.20	3.15	20.87
324.00	5.500	21.00	323.64	10.51	3.83	-1.31	2.18	2.17	-1.96
417.00	8.200	21.90	415.97	20.82	7.90	-2.90	2.91	2.90	0.97
509.00	11.900	21.20	506.54	35.76	13.78	-5.18	4.02	4.02	-0.76
601.00	13.700	19.30	596.25	54.89	20.82	-7.62	2.01	1.96	-2.07
693.00	15.700	17.60	685.24	77.04	28.18	-9.69	2.22	2.17	-1.85
767.00	16.900	16.00	756.26	96.92	34.17	-10.94	1.73	1.62	-2.16
870.00	18.100	15.00	854.49	126.77	42.44	-12.12	1.20	1.17	-0.97

<b>Company:</b>	Bill Barrett Corp. (II)	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 4-63-3-32H
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<b>Site:</b>	Sec.3-T4N-R63W	<b>MD Reference:</b>	WELL @ 4559.01ft
<b>Well:</b>	70 Ranch 4-63-3-32H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<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)
962.00	16.000	17.50	942.45	152.67	49.95	-13.47	2.42	-2.28	2.72
1,057.00	15.900	17.70	1,033.79	177.55	57.85	-15.42	0.12	-0.11	0.21
1,153.00	14.600	25.80	1,126.42	200.98	67.11	-19.04	2.60	-1.35	8.44
1,248.00	14.300	26.00	1,218.41	222.30	77.47	-24.21	0.32	-0.32	0.21
1,342.00	16.300	26.10	1,309.07	244.58	88.36	-29.68	2.13	2.13	0.11
1,437.00	15.500	17.70	1,400.45	268.65	98.09	-33.60	2.56	-0.84	-8.84
1,532.00	14.400	17.90	1,492.23	291.99	105.58	-35.52	1.16	-1.16	0.21
1,626.00	16.000	19.40	1,582.94	315.33	113.47	-37.83	1.75	1.70	1.60
1,721.00	16.200	15.40	1,674.22	340.46	121.34	-39.70	1.19	0.21	-4.21
1,817.00	14.200	10.00	1,766.86	364.97	126.94	-39.51	2.55	-2.08	-5.63
1,912.00	14.400	15.40	1,858.92	387.83	132.10	-39.27	1.42	0.21	5.68
2,006.00	14.400	20.00	1,949.97	410.08	139.21	-41.06	1.22	0.00	4.89
2,101.00	16.900	30.90	2,041.46	433.04	150.34	-46.61	4.05	2.63	11.47
2,195.00	16.300	25.20	2,131.55	456.70	162.98	-53.46	1.85	-0.64	-6.06
2,290.00	16.500	20.20	2,222.69	481.43	173.31	-57.82	1.50	0.21	-5.26
2,385.00	17.900	18.50	2,313.44	507.94	182.60	-60.76	1.57	1.47	-1.79
2,480.00	17.000	15.40	2,404.07	535.17	190.92	-62.59	1.36	-0.95	-3.26
2,575.00	17.400	17.70	2,494.82	562.09	198.93	-64.18	0.83	0.42	2.42
2,670.00	18.800	20.50	2,585.12	589.97	208.61	-67.18	1.73	1.47	2.95
2,764.00	18.500	18.70	2,674.18	618.28	218.70	-70.48	0.69	-0.32	-1.91
2,859.00	17.900	16.10	2,764.43	646.58	227.58	-72.61	1.06	-0.63	-2.74
2,954.00	17.000	18.30	2,855.06	673.80	235.99	-74.53	1.17	-0.95	2.32
3,048.00	17.300	22.00	2,944.88	699.80	245.54	-77.83	1.20	0.32	3.94
3,143.00	17.700	22.00	3,035.49	726.29	256.24	-82.15	0.42	0.42	0.00
3,237.00	17.800	28.50	3,125.02	752.17	268.45	-88.07	2.11	0.11	6.91
3,331.00	20.000	31.40	3,213.95	778.52	283.68	-96.83	2.54	2.34	3.09
3,426.00	18.600	28.60	3,303.61	805.69	299.40	-105.87	1.77	-1.47	-2.95
3,519.00	18.200	29.50	3,391.86	831.35	313.65	-113.83	0.53	-0.43	0.97
3,614.00	20.400	27.10	3,481.51	859.01	328.50	-121.92	2.46	2.32	-2.53
3,709.00	20.400	19.90	3,570.57	889.32	341.68	-127.76	2.64	0.00	-7.58
3,803.00	17.100	14.10	3,659.58	918.14	350.63	-129.84	4.03	-3.51	-6.17
3,897.00	15.000	8.40	3,749.91	943.58	355.77	-128.99	2.79	-2.23	-6.06
3,992.00	11.700	8.10	3,842.33	965.28	358.93	-127.06	3.47	-3.47	-0.32
4,087.00	10.700	17.30	3,935.53	983.24	362.91	-126.80	2.15	-1.05	9.68
4,182.00	10.100	15.60	4,028.97	999.69	367.77	-127.74	0.71	-0.63	-1.79
4,277.00	9.400	15.80	4,122.60	1,015.17	372.12	-128.41	0.74	-0.74	0.21
4,372.00	7.400	7.00	4,216.58	1,028.71	374.98	-128.08	2.50	-2.11	-9.26
4,466.00	4.200	12.90	4,310.08	1,038.08	376.49	-127.39	3.46	-3.40	6.28
4,561.00	4.800	18.60	4,404.79	1,045.24	378.53	-127.73	0.79	0.63	6.00
4,655.00	5.100	16.90	4,498.44	1,052.96	381.00	-128.35	0.36	0.32	-1.81
4,750.00	2.500	30.90	4,593.22	1,058.78	383.29	-129.24	2.89	-2.74	14.74
4,844.00	2.700	16.60	4,687.13	1,062.66	384.98	-129.99	0.72	0.21	-15.21
4,939.00	1.100	61.40	4,782.08	1,065.24	386.42	-130.80	2.18	-1.68	47.16

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<b>Site:</b>	Sec.3-T4N-R63W	<b>MD Reference:</b>	WELL @ 4559.01ft
<b>Well:</b>	70 Ranch 4-63-3-32H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<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)
5,034.00	1.200	52.50	4,877.06	1,066.29	388.01	-132.10	0.22	0.11	-9.37
5,129.00	1.400	44.10	4,972.03	1,067.73	389.60	-133.33	0.29	0.21	-8.84
5,223.00	1.000	18.00	5,066.01	1,069.33	390.66	-133.98	0.71	-0.43	-27.77
<b>As of Oct 29</b>									
5,318.00	0.900	358.70	5,161.00	1,070.86	390.90	-133.86	0.35	-0.11	-20.32
5,413.00	0.900	0.50	5,255.99	1,072.36	390.89	-133.51	0.03	0.00	1.89
5,506.00	2.100	313.70	5,348.96	1,074.26	389.66	-131.88	1.74	1.29	-50.32
5,601.00	1.500	310.50	5,443.91	1,076.27	387.46	-129.27	0.64	-0.63	-3.37
5,696.00	5.700	297.10	5,538.70	1,079.23	382.31	-123.58	4.48	4.42	-14.11
5,791.00	4.700	294.90	5,633.31	1,083.02	374.58	-115.18	1.07	-1.05	-2.32
5,887.00	4.400	301.20	5,729.01	1,086.58	367.86	-107.83	0.61	-0.31	6.56
5,982.00	13.100	293.30	5,822.82	1,092.74	354.83	-93.73	9.22	9.16	-8.32
6,077.00	22.600	295.90	5,913.14	1,105.00	328.46	-65.25	10.03	10.00	2.74
6,172.00	34.000	294.40	5,996.65	1,124.01	287.72	-21.22	12.02	12.00	-1.58
6,267.00	44.800	289.10	6,069.97	1,146.01	231.72	38.34	11.90	11.37	-5.58
6,361.00	51.700	277.70	6,132.64	1,161.83	163.66	108.21	11.63	7.34	-12.13
6,456.00	59.700	269.60	6,186.19	1,166.56	85.50	185.36	10.97	8.42	-8.53
6,550.00	65.200	269.70	6,229.65	1,166.05	2.19	266.32	5.85	5.85	0.11
6,645.00	69.700	265.00	6,266.09	1,161.94	-85.40	350.60	6.58	4.74	-4.95
6,739.00	74.600	263.30	6,294.90	1,152.80	-174.37	435.09	5.49	5.21	-1.81
6,770.00	75.400	263.70	6,302.92	1,149.41	-204.12	463.26	2.87	2.58	1.29
6,801.00	77.400	262.20	6,310.21	1,145.71	-234.02	491.50	7.98	6.45	-4.84
6,832.00	80.600	260.70	6,316.13	1,141.19	-264.11	519.74	11.36	10.32	-4.84
6,861.00	84.500	260.30	6,319.89	1,136.44	-292.47	546.24	13.52	13.45	-1.38
6,887.00	87.100	260.20	6,321.79	1,132.05	-318.02	570.10	10.01	10.00	-0.38
<b>As of Oct 30</b>									
6,967.00	89.600	259.90	6,324.09	1,118.23	-396.78	643.56	3.15	3.13	-0.38
7,063.00	90.200	261.90	6,324.26	1,103.05	-491.56	732.30	2.18	0.63	2.08
7,159.00	88.200	262.80	6,325.60	1,090.27	-586.69	821.94	2.28	-2.08	0.94
7,254.00	89.200	265.30	6,327.76	1,080.43	-681.15	911.59	2.83	1.05	2.63
7,350.00	89.500	264.50	6,328.85	1,071.90	-776.76	1,002.67	0.89	0.31	-0.83
7,446.00	89.600	266.80	6,329.60	1,064.62	-872.48	1,094.14	2.40	0.10	2.40
7,541.00	89.400	265.90	6,330.43	1,058.57	-967.28	1,185.00	0.97	-0.21	-0.95
7,637.00	89.700	266.00	6,331.18	1,051.79	-1,063.04	1,276.62	0.33	0.31	0.10
7,734.00	89.800	265.50	6,331.61	1,044.60	-1,159.77	1,369.10	0.53	0.10	-0.52
7,829.00	89.900	266.20	6,331.86	1,037.72	-1,254.52	1,459.72	0.74	0.11	0.74
7,924.00	91.300	266.80	6,330.86	1,031.93	-1,349.33	1,550.66	1.60	1.47	0.63
8,020.00	90.000	267.90	6,329.77	1,027.49	-1,445.22	1,642.95	1.77	-1.35	1.15
8,115.00	88.900	268.60	6,330.68	1,024.59	-1,540.17	1,734.68	1.37	-1.16	0.74
8,211.00	89.100	267.90	6,332.36	1,021.66	-1,636.11	1,827.37	0.76	0.21	-0.73
8,306.00	89.900	268.20	6,333.19	1,018.42	-1,731.05	1,919.01	0.90	0.84	0.32
8,402.00	90.900	268.40	6,332.52	1,015.58	-1,827.00	2,011.73	1.06	1.04	0.21
8,498.00	88.400	268.40	6,333.10	1,012.89	-1,922.96	2,104.49	2.60	-2.60	0.00
8,593.00	88.600	268.00	6,335.59	1,009.91	-2,017.88	2,196.18	0.47	0.21	-0.42

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<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	WELL @ 4559.01ft
<b>Site:</b>	Sec.3-T4N-R63W	<b>MD Reference:</b>	WELL @ 4559.01ft
<b>Well:</b>	70 Ranch 4-63-3-32H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<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)
8,689.00	88.800	268.70	6,337.77	1,007.15	-2,113.81	2,288.90	0.76	0.21	0.73
8,785.00	90.200	267.70	6,338.61	1,004.13	-2,209.76	2,381.57	1.79	1.46	-1.04
8,881.00	90.000	266.90	6,338.44	999.61	-2,305.65	2,473.85	0.86	-0.21	-0.83
8,976.00	90.400	267.30	6,338.11	994.80	-2,400.53	2,565.07	0.60	0.42	0.42
9,072.00	90.000	267.50	6,337.77	990.45	-2,496.43	2,657.39	0.47	-0.42	0.21
As of Nov 02									
9,168.00	89.300	267.90	6,338.36	986.60	-2,592.35	2,749.85	0.84	-0.73	0.42
9,263.00	92.000	268.30	6,337.28	983.45	-2,687.28	2,841.51	2.87	2.84	0.42
9,359.00	92.100	271.20	6,333.85	983.03	-2,783.21	2,934.76	3.02	0.10	3.02
9,454.00	90.600	271.30	6,331.61	985.10	-2,878.16	3,027.63	1.58	-1.58	0.11
9,550.00	90.700	271.30	6,330.52	987.28	-2,974.13	3,121.53	0.10	0.10	0.00
9,645.00	91.600	271.40	6,328.61	989.52	-3,069.08	3,214.45	0.95	0.95	0.11
9,741.00	89.600	270.00	6,327.61	990.69	-3,165.06	3,308.12	2.54	-2.08	-1.46
9,836.00	89.800	269.70	6,328.11	990.44	-3,260.06	3,400.51	0.38	0.21	-0.32
9,932.00	90.300	269.60	6,328.02	989.85	-3,356.06	3,493.79	0.53	0.52	-0.10
10,028.00	89.100	269.60	6,328.52	989.18	-3,452.05	3,587.05	1.25	-1.25	0.00
10,123.00	89.100	269.10	6,330.02	988.11	-3,547.03	3,679.24	0.53	0.00	-0.53
10,218.00	89.600	269.70	6,331.09	987.11	-3,642.02	3,771.44	0.82	0.53	0.63
10,313.00	90.200	270.30	6,331.26	987.11	-3,737.02	3,863.89	0.89	0.63	0.63
10,408.00	91.300	270.30	6,330.02	987.61	-3,832.01	3,956.44	1.16	1.16	0.00
10,504.00	89.400	269.80	6,329.43	987.69	-3,928.00	4,049.88	2.05	-1.98	-0.52
10,599.00	89.600	269.80	6,330.26	987.36	-4,023.00	4,142.24	0.21	0.21	0.00
10,691.00	90.400	270.60	6,330.26	987.68	-4,114.99	4,231.84	1.23	0.87	0.87
Last Sharewell Survey									
10,754.00	90.400	270.60	6,329.82	988.34	-4,177.99	4,293.30	0.00	0.00	0.00
Projection To TD									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
140.00	140.00	0.73	0.05	First Sharewell Survey
5,223.00	5,066.01	1,069.33	390.66	As of Oct 29
6,887.00	6,321.79	1,132.05	-318.02	As of Oct 30
9,072.00	6,337.77	990.45	-2,496.43	As of Nov 02
10,691.00	6,330.26	987.68	-4,114.99	Last Sharewell Survey
10,754.00	6,329.82	988.34	-4,177.99	Projection To TD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_