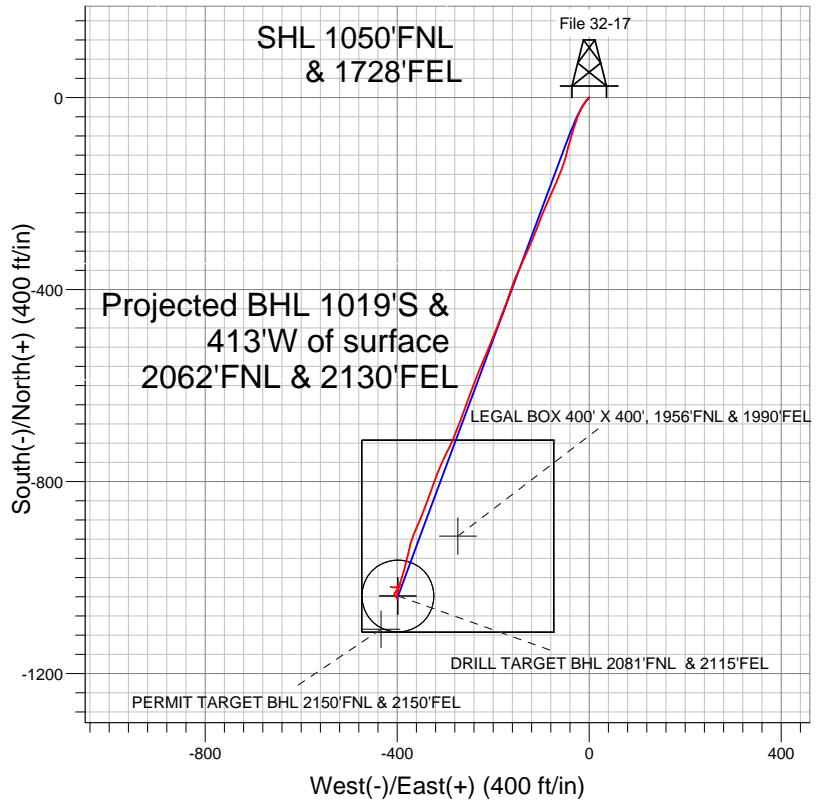


EnCana Oil & Gas Weld County CO



LEGEND

- File 32-17, Wellbore #1, Plan #1 (3-16-12) R V0
- Wellbore #1

Final Survey Plot

Projected Final Survey -
8162'MD & 8017'TVD @ 1099'VS
3.1 deg Inc 277.0 deg AZ

Project: SEC.17-T2N-R68W
Site: File 31-17 Pad Sec.17-T2N-R68W
Well: File 32-17
Plan: Wellbore #1



EnCana Oil & Gas Weld County CO

SEC.17-T2N-R68W

File 31-17 Pad Sec.17-T2N-R68W

File 32-17

Wellbore #1

Design: Wellbore #1

Standard Survey Report

26 March, 2012

Survey	Wellbore Data									
	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)
Survey Data	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	79.0	0.00	81.60	79.0	0.0	0.0	0.0	0.00	0.00	0.00
	171.0	0.10	139.60	171.0	-0.1	0.1	0.0	0.11	0.11	0.00
	261.0	0.10	64.90	261.0	-0.1	0.2	0.0	0.13	0.00	-83.00
	352.0	0.50	228.50	352.0	-0.3	-0.1	0.3	0.66	0.44	179.78
	443.0	2.00	232.90	443.0	-1.5	-1.6	2.0	1.65	1.65	4.84
	535.0	4.00	222.50	534.8	-4.9	-5.1	6.4	2.24	2.17	-11.30
	627.0	6.30	213.70	626.5	-11.4	-10.0	14.3	2.64	2.50	-9.57
	719.0	9.50	207.80	717.6	-22.4	-16.4	26.7	3.58	3.48	-6.41
	812.0	11.80	201.80	809.0	-38.0	-23.5	43.9	2.74	2.47	-6.45
	905.0	14.00	196.40	899.6	-57.6	-30.2	64.6	2.70	2.37	-5.81
	1,003.0	15.00	196.20	994.5	-81.2	-37.1	89.1	1.02	1.02	-0.20
	1,045.0	15.20	197.00	1,035.1	-91.6	-40.2	100.0	0.69	0.48	1.90

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well File 32-17
Project:	SEC.17-T2N-R68W	TVD Reference:	WELL @ 4896.0ft (Original Well Elev)
Site:	File 31-17 Pad Sec.17-T2N-R68W	MD Reference:	WELL @ 4896.0ft (Original Well Elev)
Well:	File 32-17	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)	
1,089.0	14.20	194.40	1,077.6	-102.4	-43.2	111.1	2.72	-2.27	-5.91	
1,182.0	14.10	195.90	1,167.8	-124.3	-49.2	133.7	0.41	-0.11	1.61	
1,275.0	14.10	199.60	1,258.0	-145.9	-56.1	156.3	0.97	0.00	3.98	
1,368.0	15.00	203.70	1,348.0	-167.6	-64.7	179.6	1.47	0.97	4.41	
1,461.0	16.30	204.50	1,437.6	-190.5	-75.0	204.7	1.42	1.40	0.86	
1,555.0	16.40	202.30	1,527.8	-214.8	-85.5	231.1	0.67	0.11	-2.34	
1,648.0	16.10	203.00	1,617.0	-238.8	-95.5	257.1	0.39	-0.32	0.75	
1,741.0	15.60	201.90	1,706.5	-262.3	-105.2	282.5	0.63	-0.54	-1.18	
1,834.0	15.80	200.70	1,796.0	-285.7	-114.3	307.7	0.41	0.22	-1.29	
1,927.0	16.80	204.50	1,885.3	-309.8	-124.4	333.8	1.57	1.08	4.09	
2,020.0	15.30	204.00	1,974.7	-333.2	-135.0	359.4	1.62	-1.61	-0.54	
2,112.0	16.30	204.00	2,063.2	-356.1	-145.1	384.5	1.09	1.09	0.00	
2,205.0	16.40	201.50	2,152.4	-380.2	-155.3	410.6	0.76	0.11	-2.69	
2,298.0	15.80	199.30	2,241.8	-404.4	-164.3	436.4	0.92	-0.65	-2.37	
2,391.0	15.90	199.90	2,331.3	-428.3	-172.8	461.8	0.21	0.11	0.65	
2,484.0	15.80	200.80	2,420.7	-452.1	-181.6	487.2	0.29	-0.11	0.97	
2,577.0	15.80	201.40	2,510.2	-475.8	-190.7	512.5	0.18	0.00	0.65	
2,670.0	15.60	202.00	2,599.7	-499.1	-200.0	537.7	0.28	-0.22	0.65	
2,763.0	15.30	202.50	2,689.4	-522.1	-209.4	562.4	0.35	-0.32	0.54	
2,856.0	16.50	204.00	2,778.8	-545.5	-219.5	587.9	1.36	1.29	1.61	
2,949.0	16.20	201.00	2,868.1	-569.7	-229.5	614.1	0.96	-0.32	-3.23	
3,042.0	16.30	201.60	2,957.3	-593.9	-239.0	640.1	0.21	0.11	0.65	
3,135.0	14.70	200.00	3,047.0	-617.1	-247.8	664.9	1.78	-1.72	-1.72	
3,228.0	15.40	200.30	3,136.8	-639.8	-256.1	689.1	0.76	0.75	0.32	
3,321.0	15.90	200.10	3,226.3	-663.3	-264.8	714.2	0.54	0.54	-0.22	
3,414.0	14.90	200.40	3,316.0	-686.5	-273.3	738.9	1.08	-1.08	0.32	
3,506.0	14.90	203.10	3,404.9	-708.5	-282.1	762.5	0.75	0.00	2.93	
3,599.0	16.50	205.70	3,494.4	-731.4	-292.5	787.6	1.88	1.72	2.80	
3,692.0	16.30	205.60	3,583.6	-755.1	-303.9	813.8	0.22	-0.22	-0.11	
3,785.0	16.20	202.80	3,672.9	-778.8	-314.5	839.8	0.85	-0.11	-3.01	
3,878.0	16.20	200.10	3,762.2	-802.9	-324.0	865.7	0.81	0.00	-2.90	
3,971.0	15.70	198.70	3,851.6	-827.0	-332.5	891.3	0.68	-0.54	-1.51	
4,064.0	16.50	199.40	3,941.0	-851.4	-340.9	917.0	0.89	0.86	0.75	
4,157.0	15.80	203.80	4,030.3	-875.4	-350.4	942.9	1.52	-0.75	4.73	
4,250.0	14.20	203.80	4,120.2	-897.5	-360.1	966.9	1.72	-1.72	0.00	
4,343.0	13.30	199.80	4,210.5	-918.0	-368.4	989.0	1.41	-0.97	-4.30	
4,436.0	12.90	193.00	4,301.1	-938.1	-374.3	1,010.0	1.71	-0.43	-7.31	
4,529.0	12.40	192.70	4,391.8	-958.0	-378.9	1,030.1	0.54	-0.54	-0.32	
4,622.0	10.80	194.50	4,482.9	-976.2	-383.2	1,048.7	1.76	-1.72	1.94	
4,715.0	9.60	196.70	4,574.5	-992.0	-387.6	1,065.1	1.36	-1.29	2.37	
4,808.0	8.70	198.80	4,666.3	-1,006.1	-392.1	1,079.8	1.03	-0.97	2.26	
4,901.0	7.70	194.10	4,758.3	-1,018.8	-395.9	1,093.1	1.29	-1.08	-5.05	
4,994.0	6.20	197.90	4,850.6	-1,029.7	-399.0	1,104.3	1.69	-1.61	4.09	
5,087.0	4.20	188.20	4,943.2	-1,037.8	-401.0	1,112.6	2.34	-2.15	-10.43	
5,180.0	2.30	159.20	5,036.1	-1,042.9	-400.8	1,117.3	2.64	-2.04	-31.18	
5,273.0	0.90	85.00	5,129.1	-1,044.6	-399.5	1,118.4	2.40	-1.51	-79.79	
5,342.9	1.02	12.97	5,199.0	-1,043.9	-398.8	1,117.5	1.62	0.18	-103.04	
PERMIT TARGET BHL 2150'FNL & 2150'FEL										
5,344.1	1.04	12.19	5,200.1	-1,043.9	-398.8	1,117.5	1.62	1.07	-67.80	
DRILL TARGET BHL 2081'FNL & 2115'FEL										
5,366.0	1.30	0.40	5,222.1	-1,043.5	-398.7	1,117.1	1.62	1.21	-53.72	
5,459.0	0.30	288.50	5,315.0	-1,042.4	-398.9	1,116.1	1.33	-1.08	-77.31	
5,552.0	0.40	315.00	5,408.0	-1,042.0	-399.4	1,116.0	0.20	0.11	28.49	
5,645.0	0.60	333.10	5,501.0	-1,041.4	-399.9	1,115.5	0.27	0.22	19.46	

Company: EnCana Oil & Gas Weld County CO
Project: SEC.17-T2N-R68W
Site: File 31-17 Pad Sec.17-T2N-R68W
Well: File 32-17
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well File 32-17
TVD Reference: WELL @ 4896.0ft (Original Well Elev)
MD Reference: WELL @ 4896.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Landmark

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)
5,738.0	1.00	346.80	5,594.0	-1,040.2	-400.3	1,114.5	0.47	0.43	14.73
5,800.0	0.40	290.40	5,656.0	-1,039.6	-400.6	1,114.1	1.37	-0.97	-90.97
5,893.0	0.70	261.30	5,749.0	-1,039.5	-401.4	1,114.4	0.43	0.32	-31.29
5,986.0	0.50	286.80	5,842.0	-1,039.5	-402.4	1,114.7	0.35	-0.22	27.42
6,079.0	0.80	305.20	5,935.0	-1,039.0	-403.3	1,114.5	0.39	0.32	19.78
6,172.0	0.80	308.20	6,028.0	-1,038.2	-404.4	1,114.2	0.05	0.00	3.23
6,265.0	0.60	294.90	6,121.0	-1,037.6	-405.3	1,114.0	0.28	-0.22	-14.30
6,358.0	0.70	333.80	6,214.0	-1,036.9	-406.0	1,113.5	0.48	0.11	41.83
6,451.0	0.70	348.10	6,307.0	-1,035.8	-406.4	1,112.7	0.19	0.00	15.38
6,544.0	0.70	11.40	6,400.0	-1,034.7	-406.4	1,111.6	0.30	0.00	25.05
6,637.0	0.80	24.30	6,493.0	-1,033.6	-406.0	1,110.4	0.21	0.11	13.87
6,730.0	1.00	31.70	6,586.0	-1,032.3	-405.3	1,109.0	0.25	0.22	7.96
6,823.0	1.10	38.50	6,678.9	-1,030.9	-404.3	1,107.3	0.17	0.11	7.31
6,916.0	1.40	34.80	6,771.9	-1,029.3	-403.1	1,105.4	0.33	0.32	-3.98
7,009.0	1.70	36.10	6,864.9	-1,027.2	-401.7	1,102.9	0.32	0.32	1.40
7,102.0	1.90	32.90	6,957.8	-1,024.8	-400.0	1,100.1	0.24	0.22	-3.44
7,195.0	2.10	27.90	7,050.8	-1,022.0	-398.4	1,096.9	0.29	0.22	-5.38
7,288.0	1.60	28.00	7,143.7	-1,019.4	-397.0	1,093.9	0.54	-0.54	0.11
7,304.8	1.56	29.71	7,160.5	-1,019.0	-396.7	1,093.5	0.37	-0.24	10.17
TARGET CIRCLE 2081'FNL & 2115'FEL									
7,309.3	1.55	30.18	7,165.1	-1,018.9	-396.7	1,093.3	0.37	-0.23	10.50
LEGAL BOX 400' X 400', 1956'FNL & 1990'FEL									
7,381.0	1.40	38.60	7,236.7	-1,017.3	-395.6	1,091.6	0.37	-0.21	11.74
7,474.0	1.10	4.60	7,329.7	-1,015.6	-394.9	1,089.6	0.84	-0.32	-36.56
7,567.0	0.80	233.90	7,422.7	-1,015.1	-395.3	1,089.3	1.86	-0.32	-140.54
7,660.0	1.60	223.20	7,515.7	-1,016.4	-396.7	1,091.0	0.89	0.86	-11.51
7,753.0	1.80	222.60	7,608.6	-1,018.4	-398.6	1,093.6	0.22	0.22	-0.65
7,846.0	1.80	257.00	7,701.6	-1,019.8	-401.0	1,095.8	1.14	0.00	36.99
7,939.0	2.00	264.60	7,794.5	-1,020.3	-404.1	1,097.3	0.35	0.22	8.17
8,062.0	2.20	275.90	7,917.4	-1,020.2	-408.5	1,098.9	0.37	0.16	9.19
8,120.0	3.10	276.40	7,975.4	-1,020.0	-411.2	1,099.6	1.55	1.55	0.86
8,162.0	3.10	277.00	8,017.3	-1,019.7	-413.5	1,100.1	0.08	0.00	1.43

Checked By: _____ Approved By: _____ Date: _____