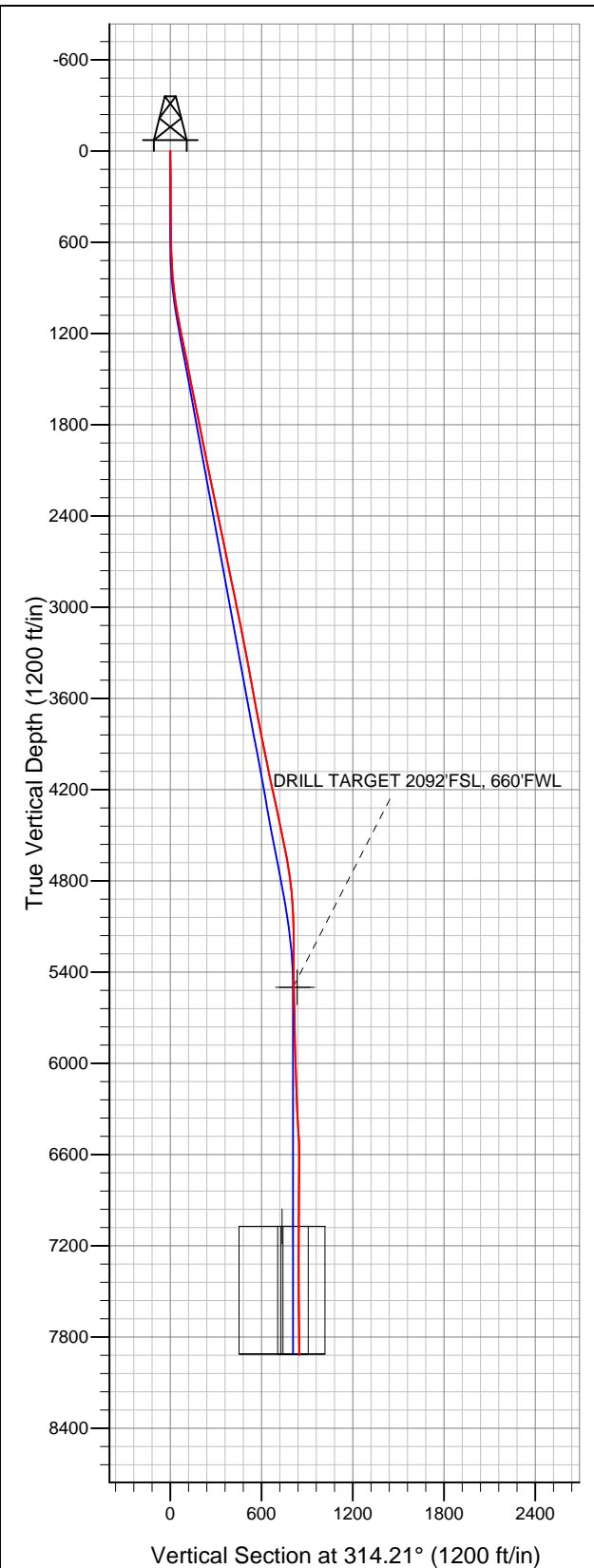


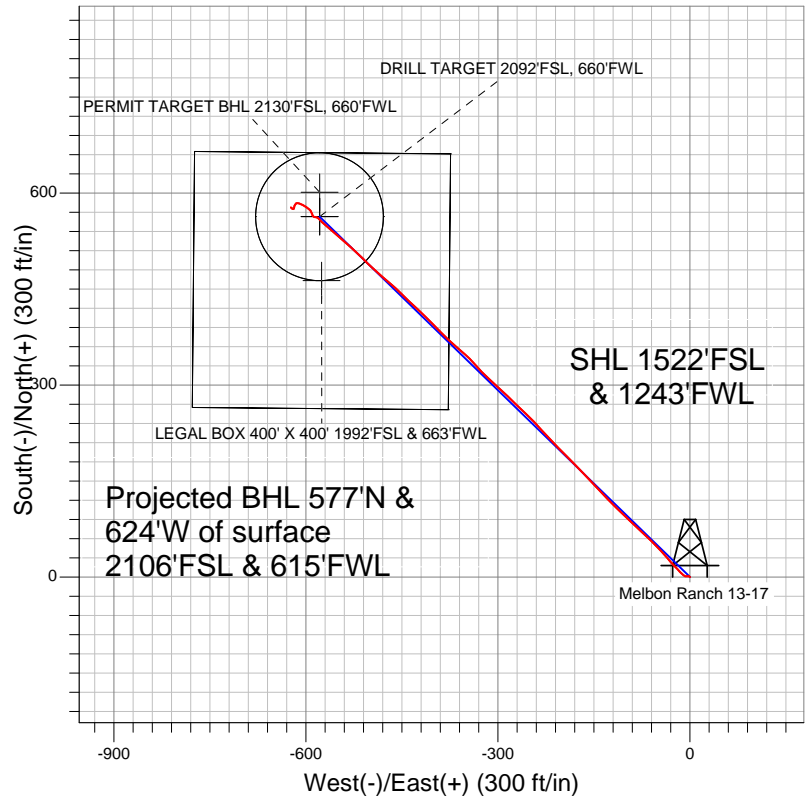
**Well Name: Melbon Ranch 13-17**

Surface Location: Melbon Ranch 2-4-17 Pad Sec.17-T2N-R65W  
North American Datum 1983 US State Plane 1983 Colorado Northern Zone  
Ground Elevation: 4940.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1293265.98	3225650.90	40.135590	-104.692930	
Original Well Elev			WELL @ 4952.0ft (Original Well Elev)			



**EnCana Oil & Gas Weld County CO**



- LEGEND**
- Wellbore #1
  - Melbon Ranch 13-17, Wellbore #1, Plan #1 (4-20-12) R V0
  - Survey #1

**Final Survey Plot**

Projected Final Survey -  
7995'MD & 7917'TVD @ 850'VS  
0.70 deg Inc 311.60 deg AZ

Project: SEC.17-T2N-R65W  
Site: Melbon Ranch 2-4-17 Pad Sec.17-T2N-R65W  
Well: Melbon Ranch 13-17  
Plan: Wellbore #1



# **EnCana Oil & Gas Weld County CO**

**SEC.17-T2N-R65W**

**Melbon Ranch 2-4-17 Pad Sec.17-T2N-R65W**

**Melbon Ranch 13-17**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**01 May, 2012**

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
89.0	1.10	302.40	89.0	0.5	-0.7	0.8	1.24	1.24	0.00
181.0	0.70	318.90	181.0	1.4	-1.8	2.3	0.51	-0.43	17.93
272.0	0.60	249.30	272.0	1.6	-2.6	3.0	0.82	-0.11	-76.48
364.0	0.40	246.20	364.0	1.3	-3.4	3.3	0.22	-0.22	-3.37
455.0	0.60	273.10	455.0	1.2	-4.2	3.8	0.33	0.22	29.56
547.0	1.10	258.80	547.0	1.1	-5.5	4.7	0.59	0.54	-15.54
639.0	1.50	289.40	638.9	1.3	-7.5	6.3	0.86	0.43	33.26
732.0	3.10	309.10	731.9	3.3	-10.6	9.9	1.89	1.72	21.18
836.0	5.30	316.50	835.6	8.5	-16.1	17.5	2.17	2.12	7.12
891.0	6.10	316.30	890.3	12.5	-19.9	22.9	1.45	1.45	-0.36
985.0	7.70	318.00	983.6	20.8	-27.5	34.2	1.72	1.70	1.81
1,079.0	9.70	320.00	1,076.5	31.5	-36.8	48.4	2.15	2.13	2.13

<b>Company:</b>	EnCana Oil & Gas Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Melbon Ranch 13-17
<b>Project:</b>	SEC.17-T2N-R65W	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site:</b>	Melbon Ranch 2-4-17 Pad Sec.17-T2N-R65W	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Well:</b>	Melbon Ranch 13-17	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)
1,172.0	11.70	315.40	1,167.9	44.2	-48.5	65.6	2.34	2.15	-4.95
1,266.0	11.50	313.80	1,260.0	57.5	-61.9	84.5	0.40	-0.21	-1.70
1,360.0	11.10	313.80	1,352.2	70.3	-75.2	102.9	0.43	-0.43	0.00
1,453.0	10.90	313.50	1,443.5	82.5	-88.1	120.7	0.22	-0.22	-0.32
1,547.0	11.30	314.00	1,535.7	95.0	-101.2	138.8	0.44	0.43	0.53
1,641.0	11.40	312.80	1,627.9	107.7	-114.6	157.3	0.27	0.11	-1.28
1,734.0	11.50	316.80	1,719.0	120.7	-127.7	175.7	0.86	0.11	4.30
1,828.0	11.60	316.70	1,811.1	134.5	-140.6	194.5	0.11	0.11	-0.11
1,922.0	11.10	316.30	1,903.3	147.9	-153.3	213.0	0.54	-0.53	-0.43
2,015.0	11.30	316.50	1,994.5	161.0	-165.8	231.1	0.22	0.22	0.22
2,109.0	11.70	316.30	2,086.6	174.5	-178.7	249.8	0.43	0.43	-0.21
2,203.0	11.70	314.50	2,178.7	188.1	-192.1	268.8	0.39	0.00	-1.91
2,296.0	11.80	316.50	2,269.7	201.6	-205.3	287.8	0.45	0.11	2.15
2,390.0	11.70	315.40	2,361.7	215.4	-218.7	306.9	0.26	-0.11	-1.17
2,484.0	11.50	319.10	2,453.8	229.2	-231.5	325.8	0.82	-0.21	3.94
2,577.0	11.80	315.40	2,544.9	243.0	-244.2	344.5	0.87	0.32	-3.98
2,671.0	11.40	313.30	2,637.0	256.2	-257.7	363.4	0.62	-0.43	-2.23
2,765.0	12.00	315.30	2,729.0	269.5	-271.4	382.5	0.77	0.64	2.13
2,858.0	11.40	312.60	2,820.1	282.6	-284.9	401.3	0.87	-0.65	-2.90
2,952.0	11.20	312.60	2,912.3	295.1	-298.5	419.7	0.21	-0.21	0.00
3,046.0	11.70	313.30	3,004.4	307.8	-312.2	438.4	0.55	0.53	0.74
3,139.0	11.30	316.00	3,095.5	320.8	-325.3	456.9	0.72	-0.43	2.90
3,233.0	11.30	318.10	3,187.7	334.3	-337.9	475.3	0.44	0.00	2.23
3,326.0	11.70	311.40	3,278.9	347.3	-351.1	493.8	1.50	0.43	-7.20
3,420.0	10.30	311.20	3,371.1	359.2	-364.5	511.7	1.49	-1.49	-0.21
3,514.0	10.30	313.10	3,463.6	370.5	-377.0	528.5	0.36	0.00	2.02
3,607.0	9.90	314.90	3,555.2	381.8	-388.7	544.8	0.55	-0.43	1.94
3,701.0	10.60	317.00	3,647.7	393.8	-400.3	561.6	0.84	0.74	2.23
3,795.0	11.10	313.20	3,740.0	406.3	-412.8	579.2	0.93	0.53	-4.04
3,888.0	11.40	313.00	3,831.2	418.7	-426.1	597.4	0.33	0.32	-0.22
3,982.0	11.80	313.80	3,923.3	431.7	-439.8	616.3	0.46	0.43	0.85
4,076.0	10.90	315.00	4,015.5	444.6	-453.0	634.8	0.99	-0.96	1.28
4,169.0	11.30	310.00	4,106.7	456.7	-466.2	652.7	1.12	0.43	-5.38
4,263.0	12.70	310.90	4,198.7	469.4	-481.1	672.2	1.50	1.49	0.96
4,357.0	12.60	313.00	4,290.4	483.2	-496.4	692.7	0.50	-0.11	2.23
4,450.0	11.60	316.10	4,381.3	496.8	-510.3	712.2	1.28	-1.08	3.33
4,544.0	12.00	311.60	4,473.3	510.1	-524.2	731.4	1.07	0.43	-4.79
4,638.0	11.30	310.50	4,565.4	522.6	-538.5	750.4	0.78	-0.74	-1.17
4,731.0	10.50	311.70	4,656.7	534.1	-551.7	767.9	0.89	-0.86	1.29
4,825.0	8.20	312.60	4,749.5	544.4	-563.1	783.2	2.45	-2.45	0.96
4,919.0	6.20	309.30	4,842.7	552.1	-571.9	794.9	2.17	-2.13	-3.51
5,012.0	4.30	317.00	4,935.3	557.9	-578.2	803.4	2.17	-2.04	8.28
5,106.0	2.30	303.80	5,029.2	561.5	-582.2	808.8	2.26	-2.13	-14.04
5,200.0	0.60	252.90	5,123.1	562.4	-584.2	810.9	2.10	-1.81	-54.15
5,293.0	0.60	270.80	5,216.1	562.3	-585.2	811.5	0.20	0.00	19.25
5,387.0	0.60	283.80	5,310.1	562.4	-586.1	812.3	0.14	0.00	13.83
5,481.0	0.50	289.10	5,404.1	562.6	-587.0	813.1	0.12	-0.11	5.64
5,574.0	0.70	310.20	5,497.1	563.1	-587.8	814.0	0.32	0.22	22.69
5,576.8	0.71	310.61	5,499.9	563.2	-587.8	814.0	0.27	0.20	14.70
DRILL TARGET 2092'FSL, 660'FWL									
5,577.2	0.71	310.67	5,500.3	563.2	-587.8	814.0	0.27	0.20	14.57
PERMIT TARGET BHL 2130'FSL, 660'FWL									
5,668.0	0.90	321.10	5,591.1	564.1	-588.7	815.3	0.27	0.21	11.49
5,762.0	1.00	324.70	5,685.1	565.3	-589.6	816.8	0.12	0.11	3.83

**Company:** EnCana Oil & Gas Weld County CO  
**Project:** SEC.17-T2N-R65W  
**Site:** Melbon Ranch 2-4-17 Pad Sec.17-T2N-R65W  
**Well:** Melbon Ranch 13-17  
**Wellbore:** Wellbore #1  
**Design:** Wellbore #1

**Local Co-ordinate Reference:** Well Melbon Ranch 13-17  
**TVD Reference:** WELL @ 4952.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4952.0ft (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)
5,855.0	1.50	342.70	5,778.1	567.1	-590.5	818.7	0.68	0.54	19.35
5,949.0	1.80	337.20	5,872.0	569.7	-591.4	821.2	0.36	0.32	-5.85
6,043.0	1.80	325.30	5,966.0	572.3	-592.8	824.0	0.40	0.00	-12.66
6,136.0	1.40	312.10	6,058.9	574.2	-594.5	826.5	0.58	-0.43	-14.19
6,230.0	1.60	306.10	6,152.9	575.8	-596.4	829.0	0.27	0.21	-6.38
6,324.0	2.20	305.40	6,246.9	577.6	-598.9	832.1	0.64	0.64	-0.74
6,417.0	3.30	298.70	6,339.7	579.9	-602.8	836.4	1.23	1.18	-7.20
6,512.0	4.60	294.50	6,434.5	582.8	-608.6	842.6	1.40	1.37	-4.42
6,606.0	2.00	263.40	6,528.4	584.2	-613.7	847.2	3.26	-2.77	-33.09
6,700.0	1.70	221.20	6,622.3	582.9	-616.2	848.2	1.45	-0.32	-44.89
6,794.0	1.00	203.60	6,716.3	581.1	-617.5	847.8	0.86	-0.74	-18.72
6,889.0	0.90	182.20	6,811.3	579.6	-617.8	847.0	0.39	-0.11	-22.53
6,983.0	0.90	201.00	6,905.3	578.2	-618.1	846.2	0.31	0.00	20.00
7,077.0	0.70	191.00	6,999.3	576.9	-618.5	845.6	0.26	-0.21	-10.64
7,149.7	0.54	206.52	7,072.0	576.2	-618.7	845.3	0.32	-0.22	21.33
<b>TARGET CIRCLE 2092'FSL &amp; 660'FWL</b>									
7,150.7	0.54	206.78	7,072.9	576.2	-618.7	845.3	0.32	-0.19	27.49
<b>LEGAL BOX 400' X 400' 1992'FSL &amp; 663'FWL</b>									
7,172.0	0.50	213.10	7,094.3	576.0	-618.8	845.2	0.32	-0.17	29.66
7,266.0	0.40	206.40	7,188.3	575.4	-619.2	845.1	0.12	-0.11	-7.13
7,360.0	0.30	198.00	7,282.2	574.9	-619.4	844.8	0.12	-0.11	-8.94
7,454.0	0.20	299.30	7,376.2	574.7	-619.6	844.9	0.42	-0.11	107.77
7,549.0	0.40	307.00	7,471.2	575.0	-620.1	845.4	0.21	0.21	8.11
7,643.0	0.50	271.80	7,565.2	575.2	-620.7	846.0	0.31	0.11	-37.45
7,737.0	0.60	303.80	7,659.2	575.5	-621.5	846.8	0.34	0.11	34.04
7,832.0	0.60	325.80	7,754.2	576.2	-622.2	847.8	0.24	0.00	23.16
7,926.0	0.70	297.30	7,848.2	576.8	-623.0	848.8	0.36	0.11	-30.32
7,950.0	0.70	311.60	7,872.2	577.0	-623.3	849.1	0.73	0.00	59.58
7,995.0	0.70	311.60	7,917.2	577.4	-623.7	849.6	0.00	0.00	0.00

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