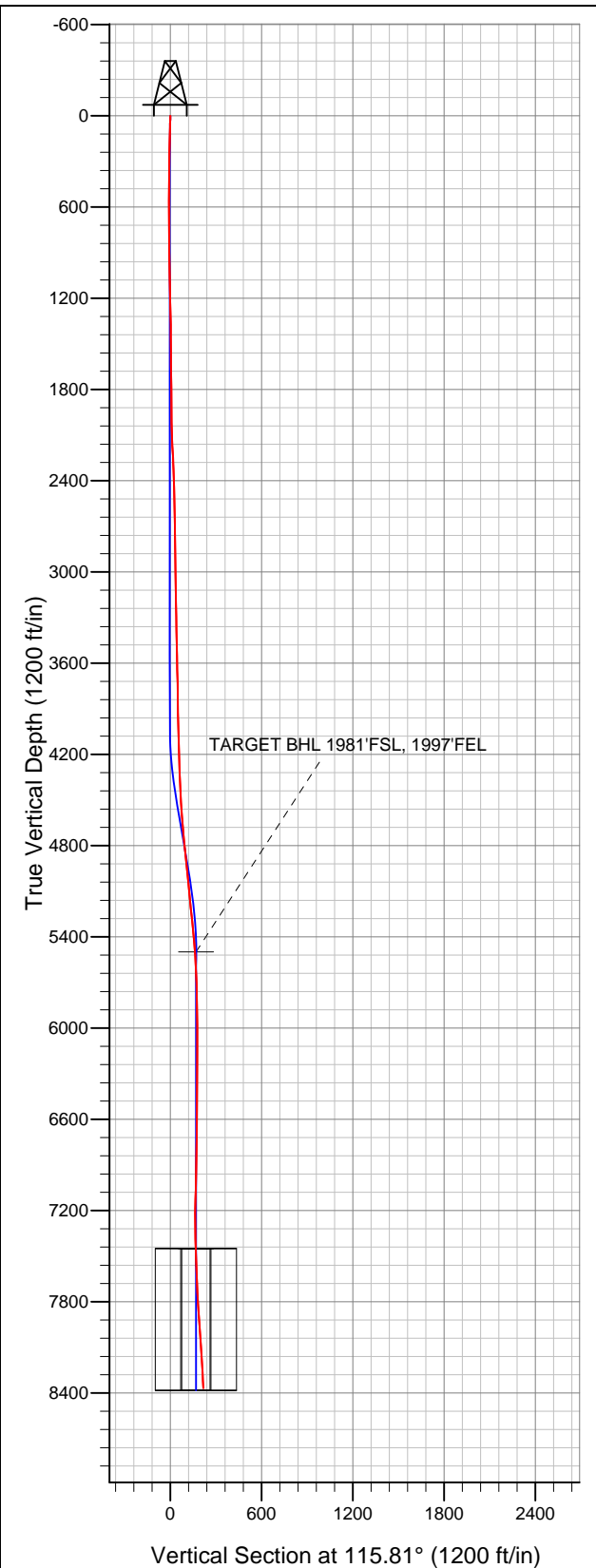


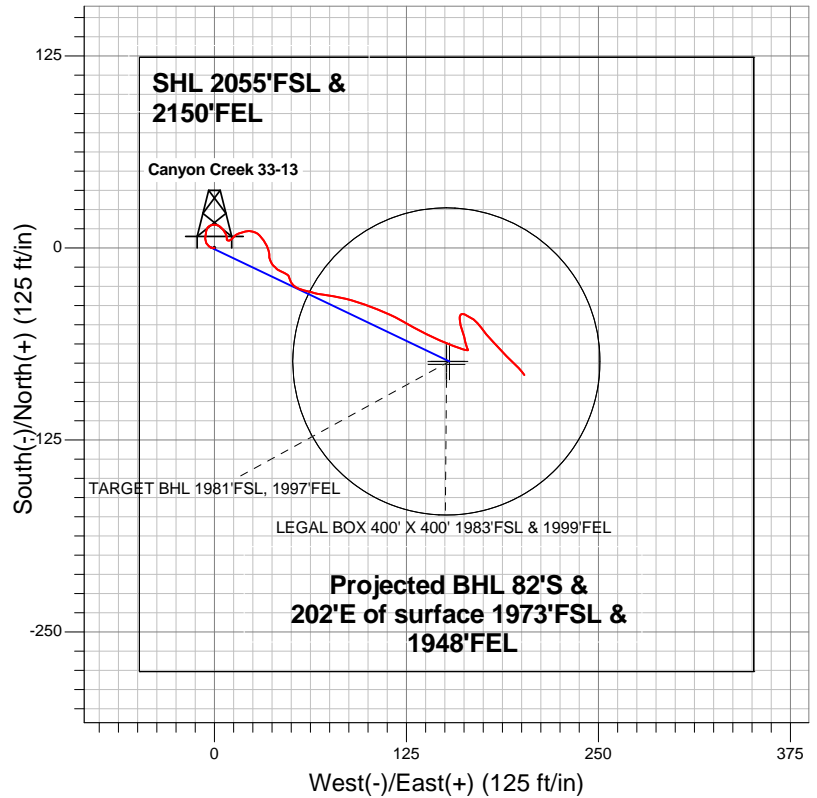
Well Name: Canyon Creek 33-13

Surface Location: Canyon Creek 4-6-13 Pad Sec.13-T1N-R69W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone
Ground Elevation: 5058.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1261216.07	3122292.79	40.049600	-105.063160	
Original Well Elev		WELL @ 5071.0ft (Original Well Elev)				



EnCana Oil & Gas Boulder County, CO



- LEGEND**
- Wellbore #1
 - Canyon Creek 33-13, Wellbore #1, Plan #2 (6-14-12) R V0
 - Survey #1

Final Survey Plot

Projected Final Survey -
8377'MD & 8368'TVD @ 218'VS
3.10 deg Inc 144.80 deg AZ

Project: SEC.13-T1N-R69W
Site: Canyon Creek 4-6-13 Pad Sec.13-T1N-R69W
Well: Canyon Creek 33-13
Plan: Wellbore #1



EnCana Oil & Gas Boulder County, CO

SEC.13-T1N-R69W

Canyon Creek 4-6-13 Pad Sec.13-T1N-R69W

Canyon Creek 33-13

Wellbore #1

Survey: Survey #1

Standard Survey Report

21 June, 2012

Company:	EnCana Oil & Gas Boulder County, CO	Local Co-ordinate Reference:	Well Canyon Creek 33-13
Project:	SEC.13-T1N-R69W	TVD Reference:	WELL @ 5071.0ft (Original Well Elev)
Site:	Canyon Creek 4-6-13 Pad Sec.13-T1N-R69W	MD Reference:	WELL @ 5071.0ft (Original Well Elev)
Well:	Canyon Creek 33-13	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.13-T1N-R69W, Boulder County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Canyon Creek 4-6-13 Pad Sec.13-T1N-R69W		
Site Position:		Northing:	1,261,226.92 ft
From:	Lat/Long	Easting:	3,122,273.14 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.049630
		Longitude:	-105.063230
		Grid Convergence:	0.28 °

Well	Canyon Creek 33-13		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty		0.0 ft	Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/14/2012	8.86	66.68	52,807

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	5,500.0	0.0	0.0	115.81	

Survey Program	Date	6/21/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
25.0	8,377.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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	
25.0	0.71	270.15	25.0	0.0	-0.2	-0.1	2.83	2.83	0.00	
50.0	0.95	274.32	50.0	0.0	-0.5	-0.5	0.99	0.96	16.68	
75.0	0.84	268.00	75.0	0.0	-0.9	-0.8	0.59	-0.44	-25.26	
100.0	1.14	264.48	100.0	0.0	-1.3	-1.2	1.21	1.19	-14.08	
125.0	1.49	293.67	125.0	0.1	-1.9	-1.7	2.98	1.42	116.76	
150.0	1.34	294.96	150.0	0.4	-2.4	-2.4	0.61	-0.59	5.14	
175.0	1.51	290.80	175.0	0.6	-3.0	-3.0	0.79	0.68	-16.62	
184.0	0.46	302.49	184.0	0.7	-3.2	-3.1	11.84	-11.69	129.81	
223.0	1.60	305.40	223.0	1.1	-3.7	-3.8	2.92	2.92	7.47	
314.0	1.80	336.00	313.9	3.1	-5.4	-6.2	1.01	0.22	33.63	
406.0	2.10	357.80	405.9	6.1	-6.0	-8.1	0.86	0.33	23.70	
497.0	2.00	12.90	496.8	9.3	-5.7	-9.2	0.60	-0.11	16.59	

Company:	EnCana Oil & Gas Boulder County, CO	Local Co-ordinate Reference:	Well Canyon Creek 33-13
Project:	SEC.13-T1N-R69W	TVD Reference:	WELL @ 5071.0ft (Original Well Elev)
Site:	Canyon Creek 4-6-13 Pad Sec.13-T1N-R69W	MD Reference:	WELL @ 5071.0ft (Original Well Elev)
Well:	Canyon Creek 33-13	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)	
589.0	1.40	14.70	588.8	12.0	-5.1	-9.8	0.65	-0.65	1.96	
680.0	1.10	48.80	679.8	13.6	-4.1	-9.7	0.86	-0.33	37.47	
771.0	1.40	70.20	770.7	14.6	-2.4	-8.5	0.60	0.33	23.52	
786.0	1.30	72.00	785.7	14.7	-2.1	-8.3	0.72	-0.67	12.00	
850.0	1.20	75.00	849.7	15.1	-0.8	-7.2	0.19	-0.16	4.69	
938.0	1.30	109.60	937.7	15.0	1.1	-5.6	0.85	0.11	39.32	
1,025.0	1.00	108.20	1,024.7	14.4	2.7	-3.8	0.35	-0.34	-1.61	
1,112.0	1.70	137.50	1,111.6	13.2	4.3	-1.9	1.11	0.80	33.68	
1,200.0	1.40	144.60	1,199.6	11.4	5.8	0.3	0.40	-0.34	8.07	
1,287.0	1.20	148.60	1,286.6	9.8	6.9	2.0	0.25	-0.23	4.60	
1,374.0	1.10	162.70	1,373.6	8.2	7.6	3.3	0.34	-0.11	16.21	
1,461.0	1.00	175.70	1,460.6	6.6	7.9	4.3	0.30	-0.11	14.94	
1,549.0	0.50	190.30	1,548.6	5.5	7.9	4.8	0.60	-0.57	16.59	
1,636.0	0.70	111.20	1,635.6	4.9	8.4	5.4	0.90	0.23	-90.92	
1,723.0	0.40	101.50	1,722.5	4.7	9.2	6.2	0.36	-0.34	-11.15	
1,811.0	0.30	59.70	1,810.5	4.7	9.7	6.6	0.30	-0.11	-47.50	
1,898.0	1.60	58.80	1,897.5	5.5	10.9	7.4	1.49	1.49	-1.03	
1,985.0	1.80	35.90	1,984.5	7.2	12.7	8.3	0.81	0.23	-26.32	
2,073.0	3.00	65.80	2,072.4	9.3	15.6	10.0	1.93	1.36	33.98	
2,160.0	3.30	77.80	2,159.3	10.7	20.2	13.5	0.83	0.34	13.79	
2,247.0	3.00	106.20	2,246.2	10.6	24.8	17.7	1.81	-0.34	32.64	
2,334.0	1.80	127.00	2,333.1	9.2	28.1	21.3	1.68	-1.38	23.91	
2,422.0	2.10	140.30	2,421.0	7.1	30.2	24.1	0.61	0.34	15.11	
2,509.0	1.80	145.10	2,508.0	4.7	32.0	26.8	0.39	-0.34	5.52	
2,596.0	1.40	150.70	2,595.0	2.7	33.3	28.8	0.49	-0.46	6.44	
2,684.0	1.30	161.10	2,682.9	0.8	34.2	30.4	0.30	-0.11	11.82	
2,771.0	1.20	155.50	2,769.9	-1.0	34.9	31.8	0.18	-0.11	-6.44	
2,858.0	1.20	163.20	2,856.9	-2.7	35.5	33.1	0.19	0.00	8.85	
2,946.0	1.10	181.10	2,944.9	-4.4	35.7	34.1	0.42	-0.11	20.34	
3,033.0	1.40	179.40	3,031.8	-6.3	35.7	34.9	0.35	0.34	-1.95	
3,120.0	1.40	147.90	3,118.8	-8.2	36.3	36.3	0.87	0.00	-36.21	
3,207.0	1.10	163.10	3,205.8	-9.9	37.1	37.8	0.51	-0.34	17.47	
3,295.0	1.30	132.30	3,293.8	-11.4	38.1	39.3	0.76	0.23	-35.00	
3,382.0	1.00	133.30	3,380.8	-12.6	39.4	41.0	0.35	-0.34	1.15	
3,469.0	1.00	144.40	3,467.8	-13.7	40.4	42.3	0.22	0.00	12.76	
3,557.0	1.40	108.40	3,555.7	-14.7	41.9	44.1	0.95	0.45	-40.91	
3,644.0	1.10	116.40	3,642.7	-15.4	43.6	46.0	0.40	-0.34	9.20	
3,731.0	1.10	116.80	3,729.7	-16.2	45.1	47.6	0.01	0.00	0.46	
3,819.0	1.00	120.10	3,817.7	-16.9	46.5	49.3	0.13	-0.11	3.75	
3,906.0	0.80	124.90	3,904.7	-17.7	47.7	50.6	0.25	-0.23	5.52	
3,993.0	1.70	164.80	3,991.7	-19.3	48.5	52.1	1.38	1.03	45.86	
4,080.0	1.60	152.60	4,078.6	-21.6	49.4	53.9	0.42	-0.11	-14.02	
4,168.0	1.80	143.00	4,166.6	-23.8	50.8	56.1	0.39	0.23	-10.91	
4,255.0	2.50	118.90	4,253.5	-25.8	53.3	59.2	1.30	0.80	-27.70	
4,342.0	2.50	108.70	4,340.4	-27.3	56.7	63.0	0.51	0.00	-11.72	
4,430.0	3.00	101.00	4,428.3	-28.4	60.8	67.1	0.71	0.57	-8.75	
4,517.0	2.60	107.50	4,515.2	-29.4	64.9	71.3	0.59	-0.46	7.47	
4,604.0	4.50	98.30	4,602.1	-30.5	70.2	76.5	2.27	2.18	-10.57	
4,692.0	5.10	98.50	4,689.8	-31.5	77.5	83.5	0.68	0.68	0.23	
4,779.0	5.80	103.30	4,776.4	-33.1	85.6	91.5	0.96	0.80	5.52	
4,866.0	6.60	109.60	4,862.8	-35.8	94.6	100.7	1.21	0.92	7.24	
4,953.0	5.40	111.30	4,949.4	-39.0	103.1	109.8	1.39	-1.38	1.95	
5,041.0	5.20	112.20	5,037.0	-42.0	110.7	117.9	0.25	-0.23	1.02	
5,128.0	5.00	117.50	5,123.7	-45.2	117.7	125.6	0.59	-0.23	6.09	

Company: EnCana Oil & Gas Boulder County, CO
Project: SEC.13-T1N-R69W
Site: Canyon Creek 4-6-13 Pad Sec.13-T1N-R69W
Well: Canyon Creek 33-13
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Canyon Creek 33-13
TVD Reference: WELL @ 5071.0ft (Original Well Elev)
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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)
5,215.0	6.90	119.80	5,210.2	-49.6	125.6	134.6	2.20	2.18	2.64
5,303.0	6.10	116.10	5,297.6	-54.3	134.4	144.6	1.03	-0.91	-4.20
5,390.0	5.10	116.30	5,384.2	-58.0	142.0	153.1	1.15	-1.15	0.23
5,477.0	4.00	112.20	5,470.9	-60.9	148.2	160.0	1.32	-1.26	-4.71
5,506.6	3.80	112.35	5,500.5	-61.6	150.1	162.0	0.68	-0.68	0.51
TARGET BHL 1981'FSL, 1997'FEL									
5,565.0	3.40	112.70	5,558.7	-63.0	153.5	165.6	0.68	-0.68	0.60
5,652.0	3.00	110.00	5,645.6	-64.8	158.0	170.5	0.49	-0.46	-3.10
5,739.0	1.40	106.20	5,732.5	-65.9	161.2	173.8	1.85	-1.84	-4.37
5,826.0	1.20	104.00	5,819.5	-66.4	163.1	175.7	0.24	-0.23	-2.53
6,001.0	0.20	48.60	5,994.5	-66.6	165.1	177.6	0.63	-0.57	-31.66
6,176.0	0.30	314.90	6,169.5	-66.1	165.0	177.3	0.21	0.06	-53.54
6,350.0	0.40	339.70	6,343.5	-65.2	164.5	176.5	0.10	0.06	14.25
6,525.0	0.60	345.80	6,518.5	-63.8	164.0	175.4	0.12	0.11	3.49
6,699.0	1.00	340.40	6,692.5	-61.5	163.3	173.8	0.23	0.23	-3.10
6,874.0	1.40	352.70	6,867.4	-57.9	162.5	171.5	0.27	0.23	7.03
7,049.0	1.80	334.80	7,042.4	-53.3	161.1	168.2	0.36	0.23	-10.23
7,223.0	2.90	356.90	7,216.2	-46.4	159.7	163.9	0.81	0.63	12.70
7,398.0	2.40	111.00	7,391.1	-43.3	162.8	165.5	2.55	-0.29	65.20
7,457.9	2.27	116.61	7,451.0	-44.3	165.1	167.9	0.44	-0.21	9.37
TARGET CIRCLE 1981'FSL & 1997'FEL									
7,458.1	2.27	116.63	7,451.1	-44.3	165.1	167.9	0.44	-0.19	9.88
LEGAL BOX 400' X 400' 1983'FSL & 1999'FEL									
7,572.0	2.10	128.90	7,565.0	-46.6	168.7	172.2	0.44	-0.15	10.77
7,747.0	2.90	144.60	7,739.8	-52.2	173.8	179.2	0.60	0.46	8.97
7,922.0	4.70	137.00	7,914.4	-61.1	181.2	189.8	1.07	1.03	-4.34
8,096.0	3.90	136.00	8,087.9	-70.6	190.2	202.0	0.46	-0.46	-0.57
8,271.0	3.30	132.80	8,262.6	-78.3	198.0	212.4	0.36	-0.34	-1.83
8,327.0	3.10	144.80	8,318.5	-80.6	200.1	215.2	1.25	-0.36	21.43
8,377.0	3.10	144.80	8,368.4	-82.8	201.7	217.6	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____