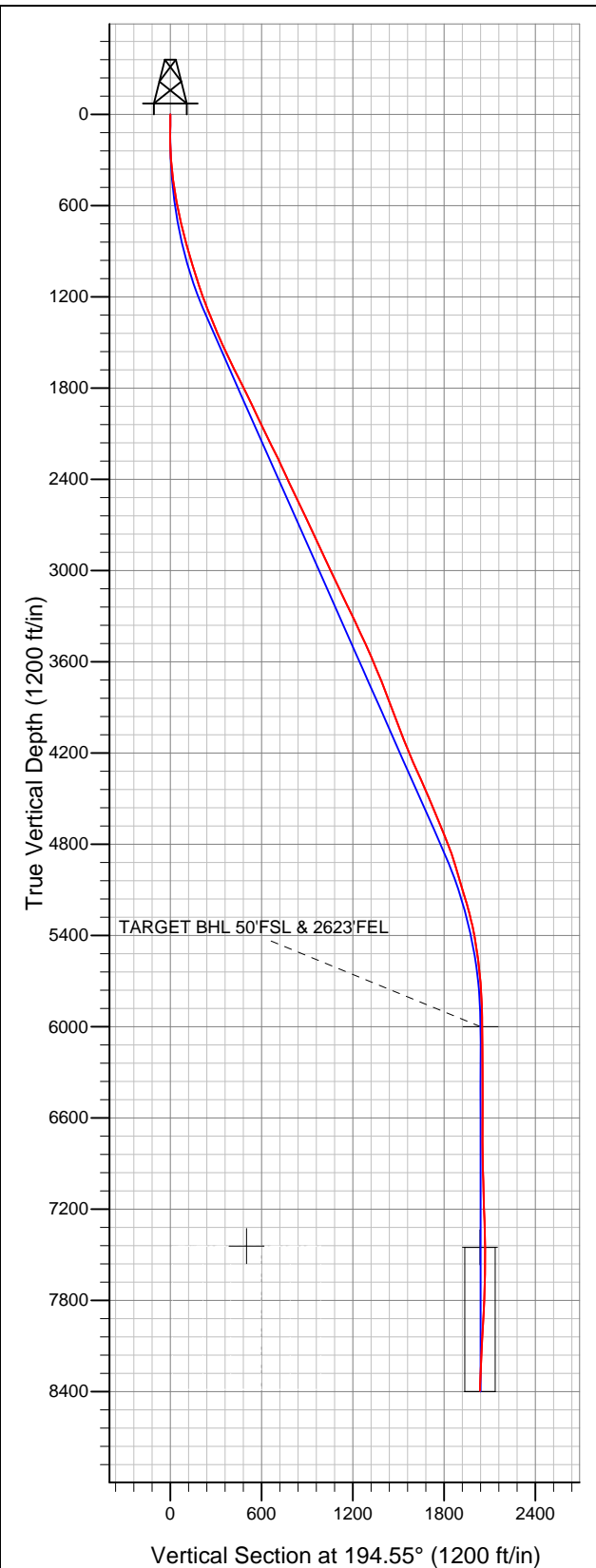


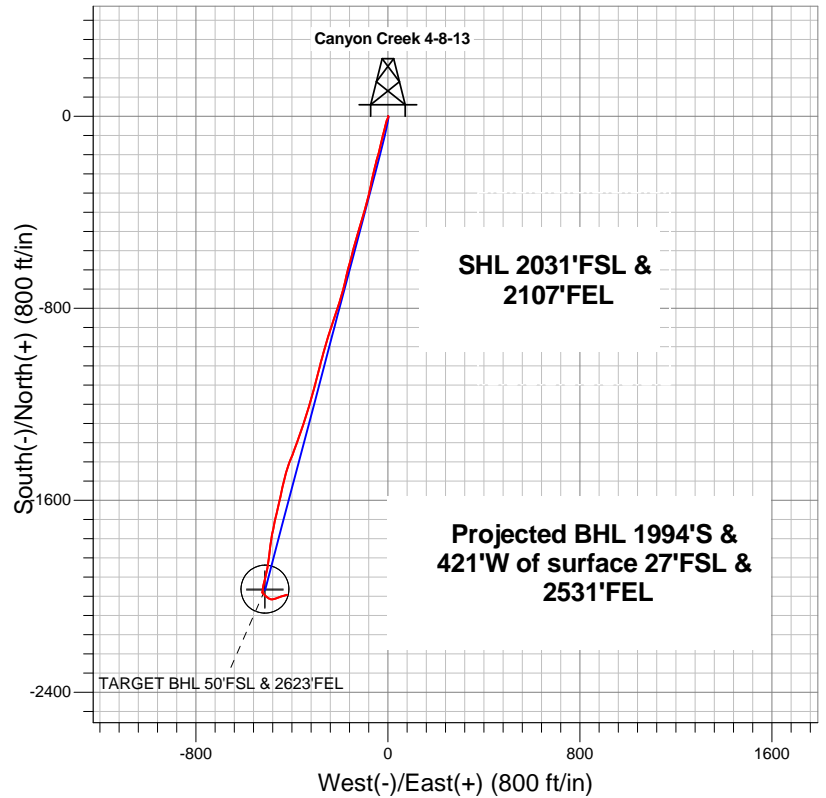
Well Name: Canyon Creek 4-8-13

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

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1261190.77	3122334.91	40.049530	-105.063010	
Original Well Elev			WELL @ 5071.0ft (Original Well Elev)			



EnCana Oil & Gas Boulder County, CO



LEGEND

- Wellbore #1
- Canyon Creek 4-8-13, Wellbore #1, Plan #3 (7-06-12) R V0
- Survey #1

Final Survey Plot

Projected Final Survey -
8802'MD & 8396'TVD @ 2035'VS
4.00 deg Inc 71.80 deg AZ

Project: SEC.13-T1N-R69W
Site: Canyon Creek 4-6-13 Pad Sec.13-T1N-R69W
Well: Canyon Creek 4-8-13
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 4-8-13

Wellbore #1

Survey: Survey #1

Standard Survey Report

18 July, 2012

Company:	EnCana Oil & Gas Boulder County, CO	Local Co-ordinate Reference:	Well Canyon Creek 4-8-13
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 4-8-13	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	Latitude:	40.049630
From:	Lat/Long	Easting:	3,122,273.14 ft	Longitude:	-105.063230
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.28 °

Well	Canyon Creek 4-8-13					
Well Position	+N/-S	0.0 ft	Northing:	1,261,190.77 ft	Latitude:	40.049530
	+E/-W	0.0 ft	Easting:	3,122,334.91 ft	Longitude:	-105.063010
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,058.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/6/2012	8.85	66.68	52,801

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 (°)	
	0.0	0.0	0.0	194.55	

Survey Program		Date	7/18/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
25.0	8,802.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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)
Main Survey	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	25.0	0.11	23.47	25.0	0.0	0.0	0.0	0.44	0.44	0.00
	50.0	0.25	83.50	50.0	0.1	0.1	-0.1	0.87	0.56	240.12
	75.0	0.46	150.94	75.0	0.0	0.2	0.0	1.72	0.84	269.76
	100.0	0.57	105.27	100.0	-0.2	0.3	0.1	1.65	0.44	-182.68
	125.0	1.03	124.70	125.0	-0.3	0.6	0.1	2.11	1.84	77.72
	150.0	1.14	130.42	150.0	-0.6	1.0	0.3	0.62	0.44	22.88
	175.0	1.12	137.48	175.0	-0.9	1.4	0.6	0.56	-0.08	28.24
	198.0	1.36	164.53	198.0	-1.4	1.6	0.9	2.72	1.04	117.61
	227.0	2.00	182.90	227.0	-2.2	1.7	1.7	2.86	2.21	63.34
	319.0	4.70	208.20	318.8	-7.1	-0.2	7.0	3.28	2.93	27.50
	410.0	6.90	201.50	409.3	-15.5	-4.0	16.0	2.53	2.42	-7.36
502.0	8.60	193.60	500.5	-27.3	-7.6	28.4	2.18	1.85	-8.59	

Company:	EnCana Oil & Gas Boulder County, CO	Local Co-ordinate Reference:	Well Canyon Creek 4-8-13
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 4-8-13	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)	
593.0	10.80	194.80	590.2	-42.2	-11.4	43.7	2.43	2.42	1.32	
684.0	13.20	193.10	679.2	-60.6	-15.9	62.6	2.67	2.64	-1.87	
792.0	14.70	194.30	784.0	-85.8	-22.1	88.6	1.41	1.39	1.11	
850.0	15.80	193.00	840.0	-100.7	-25.7	103.9	1.99	1.90	-2.24	
872.0	14.80	193.10	861.2	-106.3	-27.0	109.7	4.55	-4.55	0.45	
960.0	15.70	194.10	946.1	-128.8	-32.4	132.8	1.07	1.02	1.14	
1,047.0	16.70	195.20	1,029.6	-152.3	-38.6	157.1	1.20	1.15	1.26	
1,134.0	18.40	195.40	1,112.6	-177.6	-45.5	183.3	1.96	1.95	0.23	
1,222.0	20.30	193.10	1,195.6	-205.9	-52.7	212.5	2.33	2.16	-2.61	
1,309.0	21.60	193.30	1,276.8	-236.2	-59.8	243.6	1.50	1.49	0.23	
1,396.0	22.40	192.00	1,357.5	-268.0	-66.9	276.2	1.08	0.92	-1.49	
1,483.0	23.40	192.00	1,437.7	-301.1	-73.9	310.0	1.15	1.15	0.00	
1,571.0	24.30	194.30	1,518.1	-335.7	-82.0	345.6	1.47	1.02	2.61	
1,658.0	25.30	194.30	1,597.1	-371.1	-91.1	382.0	1.15	1.15	0.00	
1,745.0	26.50	197.60	1,675.4	-407.6	-101.5	420.0	2.16	1.38	3.79	
1,833.0	27.00	196.20	1,754.0	-445.5	-113.0	459.6	0.91	0.57	-1.59	
1,920.0	26.00	196.90	1,831.8	-482.7	-124.1	498.4	1.20	-1.15	0.80	
2,007.0	25.90	194.80	1,910.1	-519.3	-134.5	536.4	1.06	-0.11	-2.41	
2,095.0	25.20	193.80	1,989.4	-556.1	-143.9	574.4	0.93	-0.80	-1.14	
2,182.0	25.50	195.90	2,068.1	-592.1	-153.4	611.6	1.09	0.34	2.41	
2,269.0	26.60	195.00	2,146.2	-628.9	-163.6	649.8	1.34	1.26	-1.03	
2,356.0	26.10	194.00	2,224.2	-666.3	-173.3	688.4	0.77	-0.57	-1.15	
2,444.0	25.10	193.30	2,303.6	-703.2	-182.2	726.5	1.19	-1.14	-0.80	
2,531.0	24.40	196.40	2,382.6	-738.4	-191.5	762.9	1.69	-0.80	3.56	
2,618.0	26.30	195.90	2,461.2	-774.2	-201.9	800.1	2.20	2.18	-0.57	
2,706.0	25.20	198.50	2,540.4	-810.7	-213.2	838.3	1.79	-1.25	2.95	
2,793.0	25.20	198.90	2,619.2	-845.8	-225.1	875.2	0.20	0.00	0.46	
2,880.0	25.70	198.90	2,697.7	-881.2	-237.2	912.5	0.57	0.57	0.00	
2,968.0	25.90	196.60	2,777.0	-917.7	-248.8	950.7	1.16	0.23	-2.61	
3,055.0	24.70	196.20	2,855.6	-953.3	-259.3	987.9	1.39	-1.38	-0.46	
3,142.0	25.10	196.40	2,934.5	-988.5	-269.6	1,024.5	0.47	0.46	0.23	
3,229.0	24.90	192.70	3,013.4	-1,024.1	-278.9	1,061.3	1.81	-0.23	-4.25	
3,317.0	24.40	195.00	3,093.4	-1,059.7	-287.6	1,098.0	1.23	-0.57	2.61	
3,404.0	25.70	195.50	3,172.2	-1,095.2	-297.3	1,134.8	1.51	1.49	0.57	
3,491.0	26.60	195.70	3,250.3	-1,132.2	-307.6	1,173.1	1.04	1.03	0.23	
3,579.0	25.40	195.50	3,329.4	-1,169.3	-318.0	1,211.7	1.37	-1.36	-0.23	
3,666.0	25.00	194.70	3,408.1	-1,205.1	-327.7	1,248.7	0.60	-0.46	-0.92	
3,753.0	24.60	196.80	3,487.1	-1,240.2	-337.6	1,285.2	1.11	-0.46	2.41	
3,841.0	23.30	198.90	3,567.5	-1,274.2	-348.5	1,320.9	1.77	-1.48	2.39	
3,928.0	23.20	201.30	3,647.4	-1,306.4	-360.3	1,355.1	1.09	-0.11	2.76	
4,015.0	22.20	199.40	3,727.7	-1,337.9	-372.0	1,388.5	1.43	-1.15	-2.18	
4,102.0	19.90	199.60	3,808.9	-1,367.4	-382.4	1,419.6	2.64	-2.64	0.23	
4,190.0	21.20	198.90	3,891.3	-1,396.5	-392.6	1,450.4	1.50	1.48	-0.80	
4,277.0	21.60	201.50	3,972.3	-1,426.3	-403.6	1,481.9	1.18	0.46	2.99	
4,364.0	21.40	200.30	4,053.2	-1,456.1	-414.9	1,513.6	0.56	-0.23	-1.38	
4,452.0	20.80	196.10	4,135.3	-1,486.2	-424.8	1,545.2	1.85	-0.68	-4.77	
4,539.0	22.10	194.10	4,216.3	-1,516.9	-433.1	1,577.0	1.71	1.49	-2.30	
4,626.0	25.40	190.30	4,295.9	-1,551.1	-440.4	1,612.0	4.18	3.79	-4.37	
4,714.0	24.00	193.10	4,375.9	-1,587.1	-447.9	1,648.7	2.07	-1.59	3.18	
4,801.0	23.30	192.90	4,455.6	-1,621.1	-455.7	1,683.6	0.81	-0.80	-0.23	
4,888.0	22.30	193.80	4,535.8	-1,653.9	-463.5	1,717.3	1.22	-1.15	1.03	
4,975.0	22.90	191.80	4,616.1	-1,686.5	-470.9	1,750.7	1.12	0.69	-2.30	
5,063.0	22.00	191.30	4,697.4	-1,719.5	-477.6	1,784.3	1.05	-1.02	-0.57	
5,150.0	22.30	189.60	4,778.0	-1,751.7	-483.6	1,817.0	0.81	0.34	-1.95	

Company:	EnCana Oil & Gas Boulder County, CO	Local Co-ordinate Reference:	Well Canyon Creek 4-8-13
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 4-8-13	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)
5,237.0	19.30	189.40	4,859.3	-1,782.2	-488.7	1,847.8	3.45	-3.45	-0.23
5,325.0	17.10	186.60	4,942.9	-1,809.4	-492.5	1,875.1	2.69	-2.50	-3.18
5,412.0	17.00	187.10	5,026.1	-1,834.7	-495.6	1,900.4	0.20	-0.11	0.57
5,499.0	16.40	187.30	5,109.4	-1,859.5	-498.7	1,925.2	0.69	-0.69	0.23
5,587.0	16.30	190.80	5,193.9	-1,884.0	-502.6	1,949.8	1.13	-0.11	3.98
5,674.0	14.10	192.60	5,277.8	-1,906.3	-507.2	1,972.6	2.59	-2.53	2.07
5,761.0	11.30	194.50	5,362.7	-1,924.9	-511.7	1,991.7	3.25	-3.22	2.18
5,848.0	9.70	193.40	5,448.2	-1,940.3	-515.5	2,007.6	1.85	-1.84	-1.26
5,936.0	7.40	192.20	5,535.2	-1,953.0	-518.4	2,020.6	2.62	-2.61	-1.36
6,023.0	6.70	192.20	5,621.6	-1,963.5	-520.7	2,031.3	0.80	-0.80	0.00
6,110.0	4.70	181.80	5,708.1	-1,972.0	-521.8	2,039.9	2.58	-2.30	-11.95
6,198.0	2.70	185.50	5,796.0	-1,977.7	-522.2	2,045.4	2.29	-2.27	4.20
6,285.0	2.40	186.90	5,882.9	-1,981.5	-522.6	2,049.2	0.35	-0.34	1.61
6,372.0	0.40	219.30	5,969.8	-1,983.6	-523.0	2,051.3	2.38	-2.30	37.24
6,402.1	0.40	218.99	5,999.9	-1,983.7	-523.1	2,051.5	0.01	0.00	-1.03
TARGET BHL 50'FSL & 2623'FEL									
6,547.0	0.40	217.50	6,144.8	-1,984.5	-523.7	2,052.4	0.01	0.00	-1.03
6,721.0	0.20	126.80	6,318.8	-1,985.2	-523.9	2,053.1	0.26	-0.11	-52.13
6,896.0	0.20	139.30	6,493.8	-1,985.6	-523.4	2,053.4	0.02	0.00	7.14
7,071.0	0.40	103.10	6,668.8	-1,986.0	-522.6	2,053.6	0.15	0.11	-20.69
7,245.0	0.90	135.90	6,842.8	-1,987.1	-521.1	2,054.3	0.35	0.29	18.85
7,420.0	2.90	140.90	7,017.7	-1,991.5	-517.3	2,057.6	1.15	1.14	2.86
7,594.0	4.00	132.30	7,191.4	-1,999.0	-510.1	2,063.0	0.70	0.63	-4.94
7,769.0	4.80	126.50	7,365.9	-2,007.5	-499.7	2,068.6	0.52	0.46	-3.31
7,851.9	4.28	114.10	7,448.6	-2,010.8	-494.1	2,070.4	1.33	-0.62	-14.94
TARGET CIRCLE 50'FSL & 2623'FEL									
7,908.5	4.07	104.16	7,505.0	-2,012.2	-490.2	2,070.8	1.33	-0.38	-17.58
TARGET CIRCLE 1325'FSL & 1325'FEL									
7,916.8	4.05	102.62	7,513.3	-2,012.3	-489.6	2,070.8	1.33	-0.25	-18.51
LEGAL BOX 800' X 800', 1323'FSL & 1334'FEL									
7,944.0	4.00	97.50	7,540.4	-2,012.6	-487.7	2,070.6	1.33	-0.17	-18.85
8,118.0	3.40	80.60	7,714.0	-2,012.6	-476.6	2,067.8	0.71	-0.34	-9.71
8,293.0	5.50	64.60	7,888.5	-2,008.1	-463.9	2,060.3	1.38	1.20	-9.14
8,467.0	6.10	76.50	8,061.6	-2,002.4	-447.4	2,050.6	0.77	0.34	6.84
8,642.0	4.50	71.60	8,235.9	-1,998.1	-431.8	2,042.5	0.95	-0.91	-2.80
8,757.0	4.00	71.80	8,350.5	-1,995.4	-423.8	2,037.8	0.43	-0.43	0.17
8,802.0	4.00	71.80	8,395.4	-1,994.4	-420.8	2,036.1	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____