

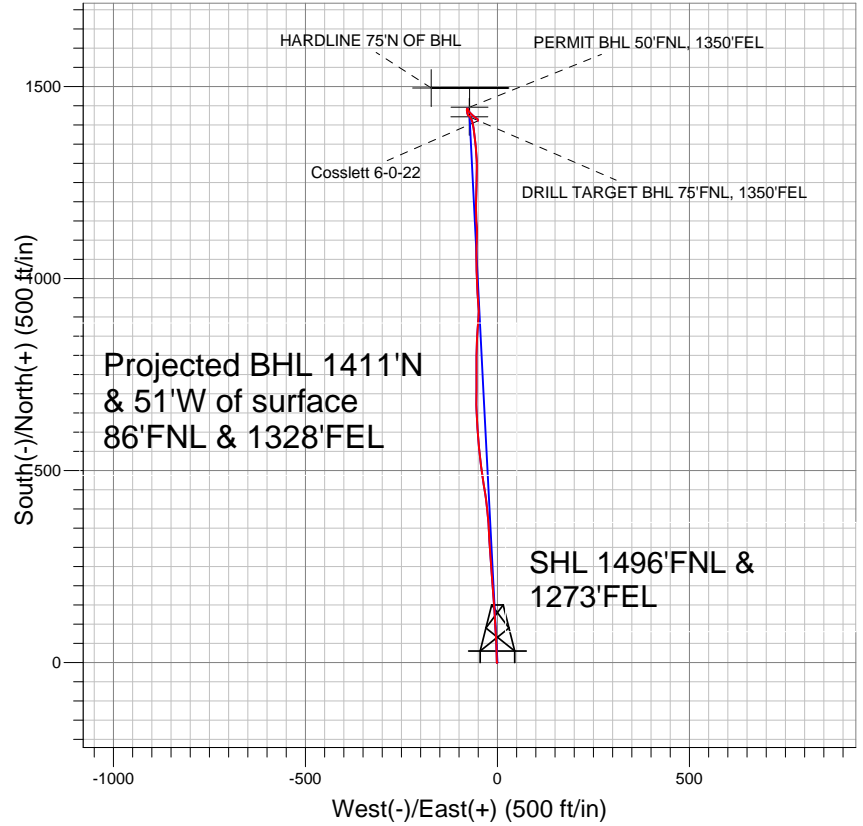
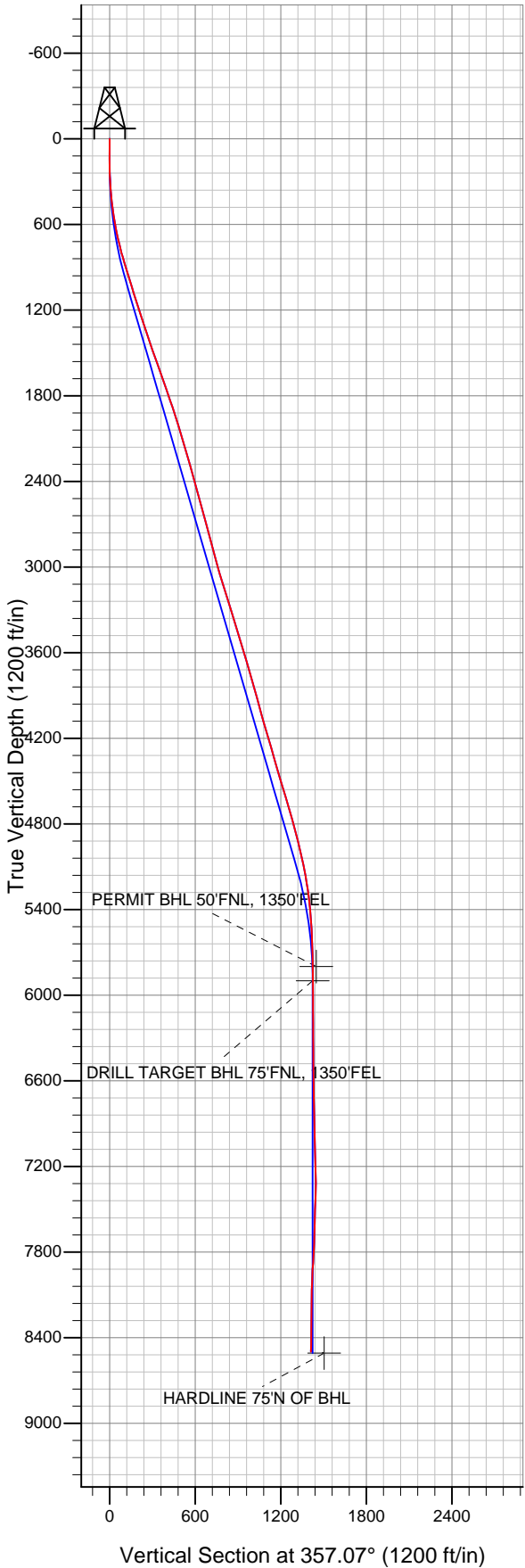
Well Name: **Cosslett 6-0-22**

Surface Location: Cosslett 4-0-22 Pad Sec.22-T1N-R68W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 5185.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1257775.25	3144306.02	40.039830	-104.984600	
		Original Well Elev WELL @ 5198.0ft (Original Well Elev)				

EnCana Oil & Gas Weld County CO



LEGEND

- + Cosslett 6-0-22, Wellbore #1, Plan #1 (11-25-11) R V0
- + Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
 8700'MD & 8499'TVD @ 1411'VS
 0.8 deg Inc 195.9 deg AZ

Project: SEC.22-T1N-R68W
 Site: Cosslett 4-0-22 Pad Sec.22-T1N-R68W
 Well: Cosslett 6-0-22
 Plan: Wellbore #1



Directional

EnCana Oil & Gas Weld County CO

SEC.22-T1N-R68W

Cosslett 4-0-22 Pad Sec.22-T1N-R68W

Cosslett 6-0-22

Wellbore #1

Survey: Survey #1

Standard Survey Report

30 November, 2011

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Cosslett 6-0-22
Project:	SEC.22-T1N-R68W	TVD Reference:	WELL @ 5198.0ft (Original Well Elev)
Site:	Cosslett 4-0-22 Pad Sec.22-T1N-R68W	MD Reference:	WELL @ 5198.0ft (Original Well Elev)
Well:	Cosslett 6-0-22	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.22-T1N-R68W, Weld 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	Cosslett 4-0-22 Pad Sec.22-T1N-R68W				
Site Position:		Northing:	1,257,775.21 ft	Latitude:	40.039830
From:	Lat/Long	Easting:	3,144,297.62 ft	Longitude:	-104.984630
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.33 °

Well	Cosslett 6-0-22					
Well Position	+N/-S	0.0 ft	Northing:	1,257,775.25 ft	Latitude:	40.039830
	+E/-W	0.0 ft	Easting:	3,144,306.02 ft	Longitude:	-104.984600
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,185.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/11/2011	8.91	66.71	52,881

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	357.07

Survey Program	Date	11/30/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
138.0	8,700.0	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	
138.0	1.00	225.10	138.0	-0.9	-0.9	-0.8	0.72	0.72	0.00	
229.0	1.20	356.10	229.0	-0.5	-1.5	-0.4	2.20	0.22	143.96	
320.0	3.90	357.50	319.9	3.6	-1.7	3.7	2.97	2.97	1.54	
411.0	6.00	2.60	410.5	11.4	-1.6	11.5	2.36	2.31	5.60	
503.0	7.70	358.00	501.9	22.4	-1.6	22.4	1.94	1.85	-5.00	
594.0	10.00	358.20	591.8	36.4	-2.1	36.4	2.53	2.53	0.22	
685.0	12.20	356.80	681.1	53.9	-2.8	54.0	2.44	2.42	-1.54	
777.0	14.40	356.40	770.6	75.0	-4.1	75.1	2.39	2.39	-0.43	
871.0	17.00	356.60	861.1	100.4	-5.7	100.6	2.77	2.77	0.21	
960.0	17.30	355.70	946.1	126.6	-7.4	126.8	0.45	0.34	-1.01	
1,057.0	16.90	356.20	1,038.9	155.0	-9.4	155.3	0.44	-0.41	0.52	
1,151.0	18.20	356.10	1,128.5	183.3	-11.3	183.6	1.38	1.38	-0.11	

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Cosslett 6-0-22
Project:	SEC.22-T1N-R68W	TVD Reference:	WELL @ 5198.0ft (Original Well Elev)
Site:	Cosslett 4-0-22 Pad Sec.22-T1N-R68W	MD Reference:	WELL @ 5198.0ft (Original Well Elev)
Well:	Cosslett 6-0-22	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)	
1,244.0	17.90	355.50	1,216.9	212.0	-13.4	212.5	0.38	-0.32	-0.65	
1,338.0	17.90	355.90	1,306.3	240.9	-15.6	241.3	0.13	0.00	0.43	
1,431.0	18.60	356.40	1,394.7	269.9	-17.6	270.5	0.77	0.75	0.54	
1,525.0	19.30	357.30	1,483.6	300.4	-19.2	301.0	0.81	0.74	0.96	
1,618.0	19.70	356.40	1,571.2	331.4	-20.9	332.0	0.54	0.43	-0.97	
1,712.0	19.60	355.40	1,659.8	362.9	-23.2	363.6	0.37	-0.11	-1.06	
1,805.0	19.20	354.10	1,747.5	393.7	-26.0	394.5	0.63	-0.43	-1.40	
1,899.0	18.80	352.90	1,836.4	424.1	-29.5	425.0	0.59	-0.43	-1.28	
1,992.0	17.80	351.70	1,924.7	453.0	-33.4	454.1	1.15	-1.08	-1.29	
2,086.0	17.40	349.90	2,014.3	481.1	-37.9	482.4	0.72	-0.43	-1.91	
2,180.0	16.90	352.00	2,104.1	508.4	-42.3	509.9	0.85	-0.53	2.23	
2,273.0	16.40	354.00	2,193.2	534.9	-45.6	536.5	0.82	-0.54	2.15	
2,367.0	15.90	354.70	2,283.5	560.9	-48.1	562.6	0.57	-0.53	0.74	
2,460.0	15.30	356.60	2,373.0	585.8	-50.0	587.6	0.85	-0.65	2.04	
2,553.0	15.40	356.60	2,462.7	610.4	-51.5	612.2	0.11	0.11	0.00	
2,647.0	15.30	356.80	2,553.4	635.3	-52.9	637.1	0.12	-0.11	0.21	
2,740.0	14.90	356.20	2,643.2	659.4	-54.4	661.4	0.46	-0.43	-0.65	
2,834.0	15.10	1.50	2,734.0	683.7	-54.9	685.6	1.47	0.21	5.64	
2,927.0	15.10	0.80	2,823.8	708.0	-54.4	709.8	0.20	0.00	-0.75	
3,021.0	14.80	358.50	2,914.6	732.2	-54.5	734.0	0.71	-0.32	-2.45	
3,114.0	16.00	0.60	3,004.2	756.9	-54.7	758.7	1.42	1.29	2.26	
3,208.0	17.40	359.60	3,094.3	783.9	-54.7	785.7	1.52	1.49	-1.06	
3,303.0	17.10	2.60	3,185.0	812.1	-54.1	813.8	0.99	-0.32	3.16	
3,397.0	17.20	1.30	3,274.8	839.8	-53.2	841.4	0.42	0.11	-1.38	
3,490.0	17.80	4.70	3,363.5	867.7	-51.7	869.2	1.27	0.65	3.66	
3,584.0	17.00	4.70	3,453.2	895.7	-49.4	897.0	0.85	-0.85	0.00	
3,677.0	17.40	356.90	3,542.1	923.1	-49.1	924.4	2.52	0.43	-8.39	
3,771.0	15.80	356.10	3,632.1	949.9	-50.7	951.3	1.72	-1.70	-0.85	
3,864.0	15.50	355.90	3,721.7	975.0	-52.4	976.4	0.33	-0.32	-0.22	
3,959.0	16.10	358.40	3,813.1	1,000.8	-53.7	1,002.2	0.96	0.63	2.63	
4,054.0	15.90	358.20	3,904.4	1,027.0	-54.5	1,028.4	0.22	-0.21	-0.21	
4,148.0	15.10	0.50	3,995.0	1,052.1	-54.8	1,053.5	1.07	-0.85	2.45	
4,242.0	16.40	1.50	4,085.5	1,077.6	-54.3	1,079.0	1.41	1.38	1.06	
4,335.0	16.30	2.00	4,174.7	1,103.8	-53.5	1,105.0	0.19	-0.11	0.54	
4,428.0	16.20	359.10	4,264.0	1,129.8	-53.3	1,131.0	0.88	-0.11	-3.12	
4,522.0	15.70	354.70	4,354.4	1,155.5	-54.7	1,156.8	1.39	-0.53	-4.68	
4,615.0	16.30	359.40	4,443.8	1,181.1	-56.0	1,182.4	1.53	0.65	5.05	
4,709.0	17.10	2.40	4,533.8	1,208.1	-55.5	1,209.4	1.25	0.85	3.19	
4,802.0	17.30	1.70	4,622.7	1,235.6	-54.5	1,236.8	0.31	0.22	-0.75	
4,896.0	15.80	1.50	4,712.8	1,262.4	-53.8	1,263.5	1.60	-1.60	-0.21	
4,989.0	15.00	359.80	4,802.4	1,287.1	-53.5	1,288.1	0.99	-0.86	-1.83	
5,083.0	14.20	357.10	4,893.4	1,310.7	-54.1	1,311.8	1.12	-0.85	-2.87	
5,177.0	14.00	355.50	4,984.6	1,333.6	-55.6	1,334.7	0.47	-0.21	-1.70	
5,270.0	12.00	353.80	5,075.2	1,354.4	-57.5	1,355.6	2.19	-2.15	-1.83	
5,363.0	10.00	353.30	5,166.5	1,372.1	-59.5	1,373.3	2.15	-2.15	-0.54	
5,457.0	8.10	352.20	5,259.3	1,386.7	-61.4	1,388.0	2.03	-2.02	-1.17	
5,551.0	6.20	348.70	5,352.6	1,398.3	-63.3	1,399.7	2.07	-2.02	-3.72	
5,644.0	5.20	345.90	5,445.1	1,407.3	-65.3	1,408.8	1.12	-1.08	-3.01	
5,738.0	3.50	332.00	5,538.8	1,413.9	-67.7	1,415.6	2.12	-1.81	-14.79	
5,831.0	2.10	329.50	5,631.7	1,417.9	-69.9	1,419.6	1.51	-1.51	-2.69	
5,925.0	1.10	356.20	5,725.7	1,420.3	-70.8	1,422.1	1.30	-1.06	28.40	
5,999.8	1.10	351.29	5,800.5	1,421.7	-70.9	1,423.5	0.13	0.00	-6.56	
PERMIT BHL 50'FNL, 1350'FEL										
6,018.0	1.10	350.10	5,818.7	1,422.1	-71.0	1,423.8	0.13	0.01	-6.55	

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Well:	Cosslett 6-0-22	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)	
6,099.3	0.62	274.12	5,900.0	1,422.9	-71.6	1,424.7	1.38	-0.58	-93.40	
DRILL TARGET BHL 75'FNL, 1350'FEL										
6,112.0	0.70	260.40	5,912.6	1,422.9	-71.7	1,424.7	1.38	0.60	-108.42	
6,205.0	0.80	290.10	6,005.6	1,423.0	-72.9	1,424.9	0.43	0.11	31.94	
6,299.0	0.60	304.00	6,099.6	1,423.5	-73.9	1,425.4	0.28	-0.21	14.79	
6,393.0	0.90	300.30	6,193.6	1,424.1	-75.0	1,426.1	0.32	0.32	-3.94	
6,486.0	0.80	323.90	6,286.6	1,425.0	-76.0	1,427.1	0.39	-0.11	25.38	
6,580.0	0.50	271.30	6,380.6	1,425.6	-76.8	1,427.6	0.68	-0.32	-55.96	
6,674.0	0.20	10.70	6,474.6	1,425.7	-77.2	1,427.8	0.60	-0.32	105.74	
6,768.0	0.70	10.10	6,568.6	1,426.5	-77.0	1,428.5	0.53	0.53	-0.64	
6,861.0	1.10	343.40	6,661.6	1,427.9	-77.2	1,430.0	0.61	0.43	-28.71	
6,955.0	1.30	337.60	6,755.6	1,429.7	-77.8	1,431.8	0.25	0.21	-6.17	
7,048.0	1.40	351.70	6,848.5	1,431.8	-78.4	1,434.0	0.37	0.11	15.16	
7,142.0	1.10	347.80	6,942.5	1,433.9	-78.8	1,436.0	0.33	-0.32	-4.15	
7,235.0	1.10	343.60	7,035.5	1,435.6	-79.2	1,437.8	0.09	0.00	-4.52	
7,329.0	1.80	355.50	7,129.5	1,437.9	-79.6	1,440.1	0.81	0.74	12.66	
7,422.0	2.70	14.30	7,222.4	1,441.5	-79.1	1,443.7	1.24	0.97	20.22	
7,515.0	1.00	121.80	7,315.4	1,443.2	-77.9	1,445.3	3.39	-1.83	115.59	
7,609.0	2.00	171.50	7,409.3	1,441.1	-77.0	1,443.2	1.65	1.06	52.87	
7,703.0	2.10	143.90	7,503.3	1,438.1	-75.7	1,440.1	1.05	0.11	-29.36	
7,797.0	1.70	148.50	7,597.2	1,435.5	-74.0	1,437.4	0.46	-0.43	4.89	
7,890.0	2.00	144.30	7,690.2	1,433.1	-72.3	1,434.9	0.35	0.32	-4.52	
7,984.0	3.00	138.50	7,784.1	1,429.9	-69.7	1,431.6	1.10	1.06	-6.17	
8,077.0	4.90	129.80	7,876.9	1,425.5	-65.1	1,427.0	2.14	2.04	-9.35	
8,171.0	5.50	130.20	7,970.5	1,420.0	-58.5	1,421.2	0.64	0.64	0.43	
8,264.0	1.90	116.70	8,063.3	1,416.5	-53.7	1,417.4	3.96	-3.87	-14.52	
8,358.0	1.10	129.30	8,157.2	1,415.2	-51.7	1,416.0	0.92	-0.85	13.40	
8,452.0	0.80	158.00	8,251.2	1,414.0	-50.7	1,414.8	0.59	-0.32	30.53	
8,545.0	0.80	180.30	8,344.2	1,412.8	-50.5	1,413.5	0.33	0.00	23.98	
8,654.0	0.80	195.90	8,453.2	1,411.3	-50.7	1,412.0	0.20	0.00	14.31	
8,700.0	0.80	195.90	8,499.2	1,410.6	-50.9	1,411.4	0.00	0.00	0.00	
HARDLINE 75'N OF BHL										

Checked By: _____ Approved By: _____ Date: _____