

WELL		Federal 35-16H		FIELD		CO, Garfield County		STRUCTURE		1-08S-97W (ON1 Pad)	
Magnetic Parameters				Surface Location		NAD83 UTM Zone 13N, US Feet				Miscellaneous	
Model: BOGM 2010		Dip: 65.655°	Date: October 14, 2010	Lat: N 39 22 56.795		Northing: 14317604.14 NUS		Grid Conv: -2.01283949°		Stat: Federal 35-16H	
Mag Dec: 10.509°		FS: 52224.7mT		Lon: W 108 10 13.433		Easting: 744507.23 NUS		Scale Fact: 1.00051823		Plan: R1 mib 27-Oct-10	
								TVD Ref: RKB(5414ft above MSL)			
								Srvy Date: October 14, 2010			

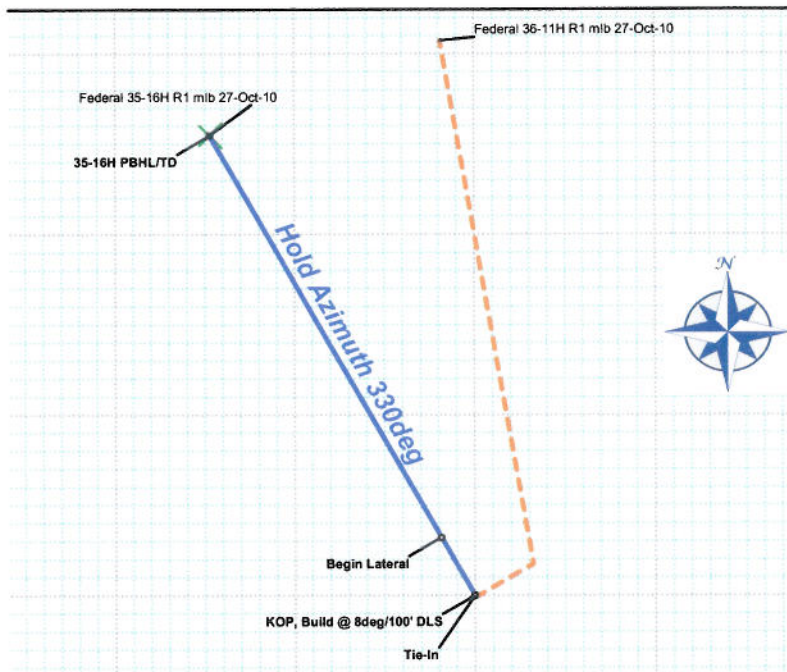
**Proposal**



Grid North  
Tot Corr (M-G 12.5214°)  
Mag Dec (10.509°)  
Grid Conv (-2.01283949°)

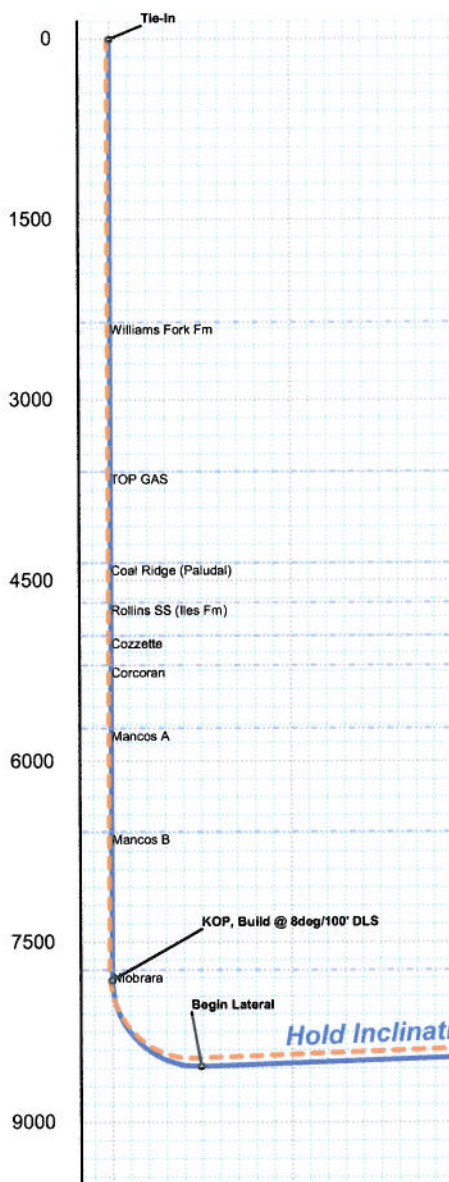
Quality Control  
Date Drawn: October 27, 2010  
11:02:27 AM  
Drawn by: Mike Bond  
Checked by:  
Client OK:

<<< W Scale = 1(in):2000(ft) E >>>  
-4000 -2000 0 2000



<<< S Scale = 1(in):2000(ft) N >>>

TVD Scale = 1(in):1500(ft)



Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
Tie-In	0.00	0.00	330.00	0.00	0.00	0.00	0.00	0.00
Williams Fork Fm	2354.00	0.00	330.00	2354.00	0.00	0.00	0.00	0.00
TOP GAS	3598.00	0.00	330.00	3598.00	0.00	0.00	0.00	0.00
Coal Ridge (Paludal)	4354.00	0.00	330.00	4354.00	0.00	0.00	0.00	0.00
Rollins SS (Res Fm)	4686.00	0.00	330.00	4686.00	0.00	0.00	0.00	0.00
Cozzette	4962.00	0.00	330.00	4962.00	0.00	0.00	0.00	0.00
Corcoran	5205.00	0.00	330.00	5205.00	0.00	0.00	0.00	0.00
Mancos A	5729.00	0.00	330.00	5729.00	0.00	0.00	0.00	0.00
Mancos B	6587.00	0.00	330.00	6587.00	0.00	0.00	0.00	0.00
Niobrara	7736.00	0.00	330.00	7736.00	0.00	0.00	0.00	0.00
KOP, Build @ 8deg/100' DLS	7818.24	0.00	330.00	7818.24	0.00	0.00	0.00	0.00
Begin Lateral	8968.24	92.00	330.00	8534.00	741.19	641.89	-370.60	8.00
35-16H PBHL/TD	14113.05	92.00	330.00	8354.45	5882.86	5094.71	-2941.43	0.00

Vertical Section (ft) Azim = 330°, Scale = 1(in): 1500(ft) Origin = 0 N/-S, 0 E/-W

## Federal 35-16H R1 mlb 27-Oct-10 Proposal Report

(Non-Def Plan)

**Report Date:** October 27, 2010 - 09:35 AM  
**Client:** EnCana Oil & Gas (USA) Inc.  
**Field:** CO, Garfield County (NAD 83 UTM 13) EnCana 2010  
**Structure / Slot:** Encana 1-08S-97W (ON1 Pad) / Federal 35-16H  
**Well:** Federal 35-16H  
**Borehole:** Original Hole  
**UWI / API#:** Unknown / Unknown  
**Survey Name:** Federal 35-16H R1 mlb 27-Oct-10  
**Survey Date:** October 14, 2010  
**Tort / AHD / DDI / ERD Ratio:** 92.000 \* / 5882.864 ft / 5.952 / 0.689  
**Grid Coordinate System:** NAD83 UTM Zone 13N, US Feet  
**Location Lat / Long:** N 39° 22' 56.79479", W 108° 10' 13.43279"  
**Location Grid N/E Y/X:** N 14317604.140 ftUS, E 744507.230 ftUS  
**Grid Convergence Angle:** -2.01283949 °  
**Grid Scale Factor:** 1.00051823

**Survey / DLS Computation:** Minimum Curvature / Lubinski  
**Vertical Section Azimuth:** 330.000 ° (Grid North)  
**Vertical Section Origin:** 0.000 ft, 0.000 ft  
**TVD Reference Datum:** RKB  
**TVD Reference Elevation:** 5414.000 ft above MSL  
**Seabed / Ground Elevation:** 5392.000 ft above MSL  
**Magnetic Declination:** 10.509 °  
**Total Field Strength:** 52224.653 nT  
**Magnetic Dip Angle:** 65.655 °  
**Declination Date:** October 14, 2010  
**Magnetic Declination Model:** BGGM 2010  
**North Reference:** Grid North  
**Grid Correction:** -2.013 °  
**Total Corr Mag North->Grid North:** 12.521 °  
**Local Coord Referenced To:** Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie-In	0.00	0.00	330.00	0.00	0.00	0.00	0.00	N/A	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	100.00	0.00	330.00	100.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	200.00	0.00	330.00	200.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	300.00	0.00	330.00	300.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	400.00	0.00	330.00	400.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	500.00	0.00	330.00	500.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	600.00	0.00	330.00	600.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	700.00	0.00	330.00	700.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	800.00	0.00	330.00	800.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	900.00	0.00	330.00	900.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1000.00	0.00	330.00	1000.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1100.00	0.00	330.00	1100.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1200.00	0.00	330.00	1200.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1300.00	0.00	330.00	1300.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1400.00	0.00	330.00	1400.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1500.00	0.00	330.00	1500.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1600.00	0.00	330.00	1600.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1700.00	0.00	330.00	1700.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1800.00	0.00	330.00	1800.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	1900.00	0.00	330.00	1900.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2000.00	0.00	330.00	2000.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2100.00	0.00	330.00	2100.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2200.00	0.00	330.00	2200.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2300.00	0.00	330.00	2300.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
Williams Fork Fm	2354.00	0.00	330.00	2354.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2400.00	0.00	330.00	2400.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2500.00	0.00	330.00	2500.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2600.00	0.00	330.00	2600.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2700.00	0.00	330.00	2700.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2800.00	0.00	330.00	2800.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	2900.00	0.00	330.00	2900.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3000.00	0.00	330.00	3000.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3100.00	0.00	330.00	3100.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3200.00	0.00	330.00	3200.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3300.00	0.00	330.00	3300.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3400.00	0.00	330.00	3400.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3500.00	0.00	330.00	3500.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
TOP GAS	3598.00	0.00	330.00	3598.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3600.00	0.00	330.00	3600.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3700.00	0.00	330.00	3700.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3800.00	0.00	330.00	3800.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	3900.00	0.00	330.00	3900.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4000.00	0.00	330.00	4000.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4100.00	0.00	330.00	4100.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4200.00	0.00	330.00	4200.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4300.00	0.00	330.00	4300.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
Coal Ridge (Paludal)	4354.00	0.00	330.00	4354.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4400.00	0.00	330.00	4400.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4500.00	0.00	330.00	4500.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4600.00	0.00	330.00	4600.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4686.00	0.00	330.00	4686.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
Rollins SS (lies Fm)	4700.00	0.00	330.00	4700.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4800.00	0.00	330.00	4800.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	4900.00	0.00	330.00	4900.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
Cozzette	4962.00	0.00	330.00	4962.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	5000.00	0.00	330.00	5000.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	5100.00	0.00	330.00	5100.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	5200.00	0.00	330.00	5200.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
Corcoran	5205.00	0.00	330.00	5205.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	5300.00	0.00	330.00	5300.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	5400.00	0.00	330.00	5400.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	5500.00	0.00	330.00	5500.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	5600.00	0.00	330.00	5600.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
	5700.00	0.00	330.00	5700.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43
Mancos A	5729.00	0.00	330.00	5729.00	0.00	0.00	0.00	0.00	14317604.14	744507.23	N 39 22 56.79	W 108 10 13.43



Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
35-16H PBHL/TD	14113.05	92.00	330.00	8354.45	5882.86	5094.71	-2941.43	0.00	14322701.48	741564.28	N 39 23 46.09	W 108 10 53.16

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 \*\*\* 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

MD From (ft)	MD To (ft)	EOU Freq (ft)	Survey Tool Type	Borehole / Survey
0.000	22.000	1/100.000	SLB_MWD-STD-Depth Only	Original Hole / Federal 35-16H R1 mlb 27-Oct-10
22.000	14113.046	1/100.000	SLB_MWD-STD	Original Hole / Federal 35-16H R1 mlb 27-Oct-10