

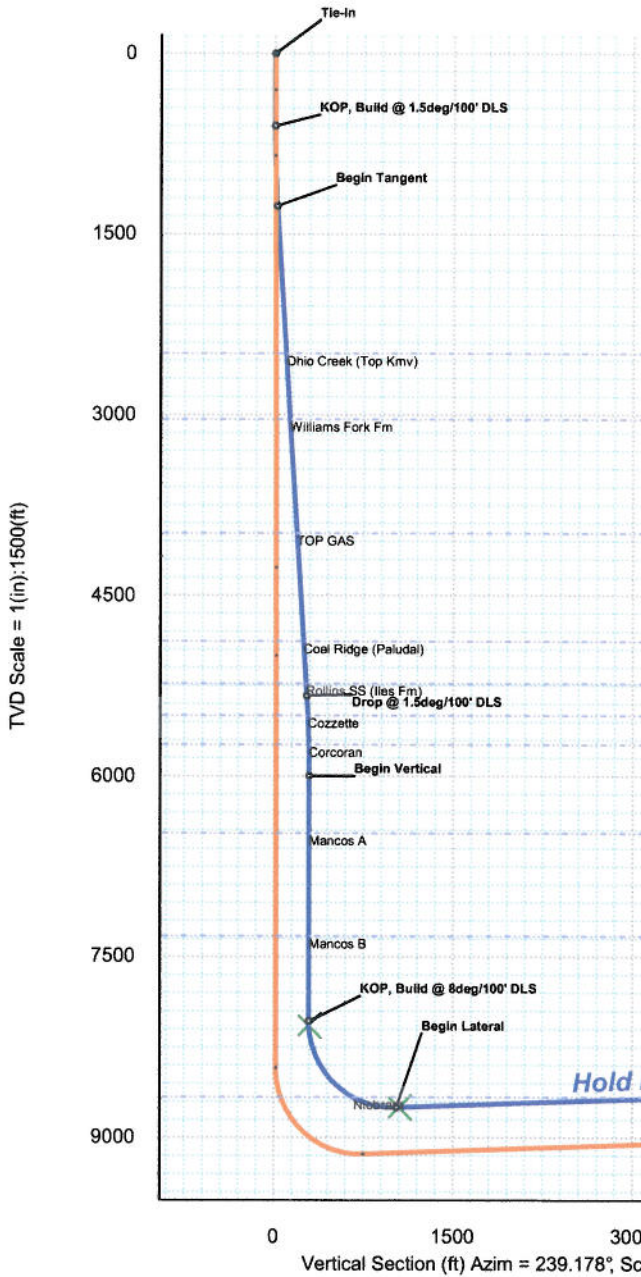
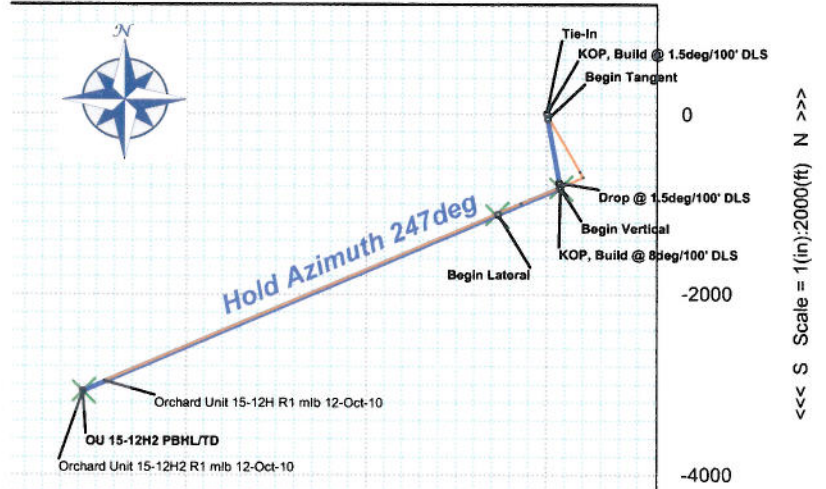
WELL Orchard Unit 15-12H2	FIELD CO, Mesa County	STRUCTURE 14-08S-96W (D14OU Pad)
Magnetic Parameters Model: BOGM 2010 Dip: 65.650° Mag Dec: 10.466°	Date: October 11, 2010 FS: 52217.9mT	Surface Location Lat: N 39 21 20.520 Lon: W 108 5 3.120
NAD83 UTM Zone 13N US Feet Northing: 14307019.64 RUS Easting: 768537.36 RUS Grid Conv: -1.95693614° Scale Fact: 1.00048963		Miscellaneous Sht: Orchard Unit 15-12H2 Plan: R1 mib 12-Oct-10 TVD Ref: RKB(5965ft above MSL) Srv Date: October 11, 2010

Proposal

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

Grid North
Tot Corr (M->G 12.4229°)
Mag Dec (10.466°)
Grid Conv (-1.95693614°)

Quality Control
Date Drawn: October 12, 2010
01:28:51 PM
Drawn by: Mike Bond
Checked by:
Client OK:



Target Description		Major Axis		N(+)/S(-)	Grid Coord		TVD	YSec	Local Coord	
Target Name	Shape				E(+)/W(-)				N(+)/S(-)	E(+)/W(-)
OU 15-12H2 PBHLTD	Point	0.00		14303945.20	763384.47	8575.80	5997.57		-3073.00	-5150.48
OU 15-12H2 KOP	Point	0.00		14306195.99	768687.00	8072.00	293.38		-823.27	149.57
OU 15-12H2 Landing Point	Point	0.00		14305897.66	767984.19	8750.30	1049.42		-1121.46	-552.91

Critical Point		MD	INCL	AZIM	TVD	YSEC	N(+)/S(-)	E(+)/W(-)	DLS
Tie-In		0.00	0.00	169.70	0.00	0.00	0.00	0.00	
KOP, Build @ 1.5deg/100' DLS		600.00	0.00	169.70	600.00	0.00	0.00	0.00	0.00
Begin Tangent		1268.87	10.03	169.70	1265.46	20.48	-57.47	10.44	1.50
Ohio Creek (Top Kmv)		2515.48	10.03	169.70	2493.00	96.63	-271.16	49.26	0.00
Williams Fork Fm		3073.00	10.03	169.70	3042.00	130.68	-366.72	66.63	0.00
TOP GAS		4031.66	10.03	169.70	3986.00	189.24	-531.05	96.48	0.00
Coal Ridge (Paludal)		4943.61	10.03	169.70	4884.00	244.95	-687.36	124.88	0.00
Rollins SS (lss Fm)		5299.05	10.03	169.70	5234.00	266.66	-748.29	135.95	0.00
Drop @ 1.5deg/100' DLS		5401.15	10.03	169.70	5334.54	272.89	-765.79	139.13	0.00
Cozzette		5570.60	7.49	169.70	5502.00	281.94	-791.19	143.74	1.50
Corcoran		5810.82	3.89	169.70	5741.00	290.29	-814.62	148.00	1.50
Begin Vertical		6070.02	0.00	169.70	6000.00	293.38	-823.27	149.57	1.50
Mancos A		6547.02	0.00	169.70	6477.00	293.38	-823.27	149.57	0.00
Mancos B		7402.02	0.00	169.70	7332.00	293.38	-823.27	149.57	0.00
KOP, Build @ 8deg/100' DLS		8105.24	0.00	169.70	8035.22	293.38	-823.27	149.57	0.00
Niobrara		8879.00	61.90	247.00	8667.00	668.71	-971.30	-199.17	8.00
Begin Lateral		9255.24	92.00	247.00	8750.98	1027.67	-1112.87	-532.70	8.00
Niobrara		11661.66	92.00	247.00	8667.00	3410.24	-2052.56	-2746.47	0.00
OU 15-12H2 PBHLTD		14274.87	92.00	247.00	8575.80	5997.57	-3073.00	-5150.48	0.00

Vertical Section (ft) Azim = 239.178°, Scale = 1 (in):1500(ft) Origin = 0 N/-S, 0 E/-W

Orchard Unit 15-12H2 R1 mib 12-Oct-10 Proposal Report
(Non-Def Plan)

Report Date: October 12, 2010 - 01:27 PM
Client: EnCana Oil & Gas (USA) Inc.
Field: CO, Mesa County (NAD 83 UTM 13) EnCana 2010
Structure / Slot: Encana 14-08S-96W (D14OU Pad) / Orchard Unit 15-12H2
Well: Orchard Unit 15-12H2
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Orchard Unit 15-12H2 R1 mib 12-Oct-10
Survey Date: October 11, 2010
Tort / AHD / DDI / ERD Ratio: 112.066 ° / 6594.507 ft / 6.081 / 0.754
Grid Coordinate System: NAD83 UTM Zone 13N, US Feet
Location Lat / Long: N 39° 21' 20.52004", W 108° 5' 3.11995"
Location Grid N/E Y/X: N 14307019.840 RUS, E 768537.360 rUS
Grid Convergence Angle: -1.95693614 °
Grid Scale Factor: 1.00046963

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 239.178 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 5985.000 ft above MSL
Seabed / Ground Elevation: 5963.000 ft above MSL
Magnetic Declination: 10.466 °
Total Field Strength: 52217.929 nT
Magnetic Dip Angle: 85.650 °
Declination Date: October 11, 2010
Magnetic Declination Model: BGGM 2010
North Reference: Grid North
Grid Correction: -1.957 °
Total Corr Mag North->Grid North: 12.423 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (rUS)	Easting (rUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie-In	0.00	0.00	169.70	0.00	0.00	0.00	0.00	N/A	14307019.64	768537.36	N 39 21 20.52	W 108 5 3.12
KOP, Build @ 1.5deg/100' DLS	600.00	0.00	169.70	600.00	0.00	0.00	0.00	0.00	14307019.64	768537.36	N 39 21 20.52	W 108 5 3.12
Begin Tangent Ohio Creek (Top Km)	1268.87	10.03	169.70	1265.46	20.48	-57.47	10.44	1.50	14306962.14	768547.81	N 39 21 19.96	W 108 5 2.96
Williams Fork Fm	2515.48	10.03	169.70	2493.00	96.63	-271.16	49.26	0.00	14306748.36	768586.65	N 39 21 17.86	W 108 5 2.38
	3073.00	10.03	169.70	3042.00	130.68	-366.72	66.63	0.00	14306652.75	768604.02	N 39 21 16.92	W 108 5 2.11
TOP GAS	4031.66	10.03	169.70	3986.00	189.24	-531.05	96.48	0.00	14306488.34	768633.89	N 39 21 15.31	W 108 5 1.66
Coal Ridge (Paludal)	4943.61	10.03	169.70	4884.00	244.95	-687.36	124.88	0.00	14306331.95	768662.30	N 39 21 13.77	W 108 5 1.23
Rollins SS (lles Fm)	5299.05	10.03	169.70	5234.00	266.66	-748.29	135.95	0.00	14306271.00	768673.37	N 39 21 13.17	W 108 5 1.06
Drop @ 1.5deg/100' DLS	5401.15	10.03	169.70	5334.54	272.89	-765.79	139.13	0.00	14306253.49	768676.55	N 39 21 13.00	W 108 5 1.02
Cozzette	5570.60	7.49	169.70	5502.00	281.94	-791.19	143.74	1.50	14306228.08	768681.17	N 39 21 12.75	W 108 5 0.95
Corcoran	5810.82	3.89	169.70	5741.00	290.29	-814.62	148.00	1.50	14306204.64	768685.43	N 39 21 12.52	W 108 5 0.88
Begin Vertical	6070.02	0.00	169.70	6000.00	293.38	-823.27	149.57	1.50	14306195.99	768687.00	N 39 21 12.44	W 108 5 0.86
Mancos A	6547.02	0.00	169.70	6477.00	293.38	-823.27	149.57	0.00	14306195.99	768687.00	N 39 21 12.44	W 108 5 0.86
Mancos B	7402.02	0.00	169.70	7332.00	293.38	-823.27	149.57	0.00	14306195.99	768687.00	N 39 21 12.44	W 108 5 0.86
KOP, Build @ 8deg/100' DLS	8105.24	0.00	169.70	8035.22	293.38	-823.27	149.57	0.00	14306195.99	768687.00	N 39 21 12.44	W 108 5 0.86
Niobrara	8879.00	61.90	247.00	8667.00	668.71	-971.30	-199.17	8.00	14306047.89	768338.09	N 39 21 10.86	W 108 5 5.23
Begin Lateral	9255.24	92.00	247.00	8750.98	1027.67	-1112.87	-532.70	8.00	14305906.25	768004.41	N 39 21 9.35	W 108 5 9.41
Niobrara	11661.66	92.00	247.00	8667.00	3410.24	-2052.56	-2746.47	0.00	14304966.12	765789.61	N 39 20 59.32	W 108 5 37.17
OU 15-12H2 PBHL/TD	14274.87	92.00	247.00	8575.80	5997.57	-3073.00	-5150.48	0.00	14303945.20	763384.47	N 39 20 48.42	W 108 6 7.31

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_MVD-STD-Depth Only	Original Hole / Orchard Unit 15-12H2 R1 mib 12-Oct-10
22.000	14274.873	1/100.000	SLB_MWD-STD	Original Hole / Orchard Unit 15-12H2 R1 mib 12-Oct-10