

**Appendix E**  
**Main Oil-filled Circuit Breaker Test Report,**  
**SIEMENS, 2013**

Siemens Canada Ltd	Serial#: 41107171011	Mfr: ITE	Control#: 6538675
	Location: MAIN OCB	kV: 12.74	Order#: 417528
MONCTON, NB E1E 3P7 CA	Equipment: OCB	kVA:	Account: 6150
ATTN: ARNOLD SAVOIE	Compartment: OCB	Year Mfd: 1976	Received: 05/16/2013
PO#: 41155217	Breathing: FB	Syringe ID:	Reported: 05/27/2013
Project ID: CERTAINTTEED MC ADAM	Bank: Phase:	Bottle ID: TAGY3739	
Customer ID:	Fluid: MIN USGal: 76G	Sampled By: D.B	
	Model:		

Lab Control Number:		6538675	874597
Date Sampled:		04/18/2013	08/19/1999
Order Number:		417528	64843
Oil Temp:		23	
<b>General Oil Quality (GOQ)</b>			
D-1533 <sup>1</sup>	Moisture in Oil (ppm):	20	45
D-971 <sup>1</sup>	Interfacial Tension (dynes/cm):	39.7	34
D-974 <sup>1</sup>	Acid Number (mg KOH/g):	< 0.001	0.03
D-1500 <sup>1</sup>	Color Number (Relative):	L0.5	
D-1524 <sup>1</sup>	Visual Exam. (Relative):	CLR&SPRK	
D-1524 <sup>1</sup>	Sediment Exam. (Relative):	ND	
D-877	Dielectric Breakdown (kV):		35
D1816 <sup>1</sup>	Dielectric Breakdown 2 mm (kV mm-C):	37 (2-21C)	
D-924 <sup>1</sup>	Power Factor @ 25C (%):	0.003	0.029
D-1298	Specific Gravity (Relative):	0.8818	0.88
<b>GOQ Diagnostics</b>		Moisture in Oil: Diagnostic not applicable.	
<b>PER IEEE C57.106-2006</b>		Interfacial Tension: Acceptable for in-service oil (25 dynes/cm min).	
(most recent sample)		Acid Number: Diagnostic not applicable.	
		Color Number and Visual: Acceptable for in-service oil (2.0 max). Acceptable for in-service oil (Not CARBON).	
		Dielectric Breakdown D-1816: Acceptable for in-service oil (27 kV min @ 2mm).	
		Power Factor @25C: Acceptable for in-service oil (1% max).	
<b>Comment:</b>			
<b>PCB</b>		Concentration (ppm): < 1.0 PPM	
ASTM Method D-4059 <sup>1</sup>		PCB Type (Arocolor): NA	
		Reporting Limit: 1	
<b>Comment:</b>			

## End of Test Report

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Authorized By:

  
JEAN-PIERRE EL-KHOURY-MERHEB  
SUPERVISEUR

Notations: 1. ISO/IEC 17025:2005 accredited, L-A-B Accredited Certificate Number L2303 06 2. This test is conducted by a subcontracted laboratory 3. Subcontracted laboratory has received ISO Standard 17025 accreditation for this test 5. This test is conducted by Weidmann Laboratory other than Primary Lab 6. Weidmann Laboratory has received ISO Standard 17025 accreditation for this test 7. Imported Sample. WEIDMANN Diagnostic Solutions accepts no responsibility for these results, accreditation status does not apply to these results 8. Imported Equipment  
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Siemens Canada Ltd	Serial#: TAG6611164	Mfr:	Control#: 6611164
	Location:	kV:	Order#: 433318
MONCTON, NB E1E 3P7 CA	Equipment: OCB	kVA:	Account: 6150
ATTN: ARNOLD SAVOIE	Compartment: OCB	Year Mfd:	Received: 12/09/2013
PO#: 41155214	Breathing:	Syringe ID: 63001025	Reported: 12/10/2013
Project ID: CERTAINTEED	Bank Phase:	Bottle ID:	
Customer ID: MAIN OCB	Fluid: MIN	Sampled By:	
	Model:		

	Lab Control Number:	6611164
	Date Sampled:	12/05/2013
	Order Number:	433318
	Oil Temp:	
Dissolved Gas Analysis (DGA)	Hydrogen (H2) (ppm):	2
ASTM	Methane (CH4) (ppm):	1
D-3612 <sup>1</sup>	Ethane (C2H6) (ppm):	<1
	Ethylene (C2H4) (ppm):	<1
	Acetylene (C2H2) (ppm):	<1
	Carbon Monoxide (CO) (ppm):	8
	Carbon Dioxide (CO2) (ppm):	648
	Nitrogen (N2) (ppm):	69307
	Oxygen (O2) (ppm):	33159
	Total Dissolved Gas (TDG) (ppm):	103125
	Total Dissolved Combustible Gas (TDCG) (ppm):	11
	Equivalent TCG (%):	0.0109
DGA	Ratio Analysis:	Heating to arcing gas ratios within normal limits..
Diagnostics		
Comment:		

## End of Test Report

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