



Knowledge Is PowerSM
Apparatus Maintenance and Power
Management For Energy Delivery

Report # 65573

Sample # 1

Laboratory Test Analysis Report for General Electric Co.

Received 11/08/2005

Date November 15, 2005

Serial Number: HB08694001	Equipment Number:	Container Id: 1944	Phase:
Substation Name: Mirant Kendall	Preservation System:	Miscellaneous Id:	Ambient Temp °C:
Design Type:	Transformer Name: T4A	Second Name:	Humidity:
Manufacturer: A-BB	Transformer Type: Transformer	Sample Point: Bottom	Top Oil Temp °C: 30
MFR. Year: 2001	Maximum kV: 13.8	Sequence #:	
Cooling System:	Maximum MVA: 12	Sample Date/By: 11/8/05	
Fluid Type: Mineral	XFMR Oil Capacity: 2185 Gallons	Appr Type: XFMR	
LTC MFR./Model:	LTC Type:	LTC Tank Type :	LTC Capacity:
			Filter LTC: Yes

Dissolved Gas Analysis The dissolved gas analysis is run in accordance with ASTM D 3612 and IEC 60567. Values are reported in ppm vol/vol at STP and calibrated with gas-in-oil standards. Values before August 15, 2002 are reported at NTP and calibrated with gas standards.

Report #	Sample Date	Top Oil Temp °C	Hydrogen (H2)	Oxygen (O2)	Nitrogen (N2)	Methane (CH4)	Carbon Monox. (CO)	Ethane (C2H6)	Carbon Dioxide (CO2)	Ethylene (C2H4)	Acetylene (C2H2)	Total Gas	COMB GAS	EST TCG %	C2H4/C2H2	Comb Gas Rate ppm/day
65573	11/08/2005	30	0	5850	81400	1.2	51	0	425	1.8	26	87755	80	0.05	0.07	0.04
59486	10/04/2004	37	0	16500	72700	2.0	14	0	329	5.0	42	89592	63	0.02	0.12	

Arcing in oil. Condition is moderate. Resample every 6 months.

Oil Quality Tests

Report #	Sample Date	Top Oil Temp °C	Water Content ppm	Relative Saturation %	Color	Diel D877 kV	Diel D1816 kV	Interfacial Tension dynes/cm	Neut. No. mgKOH/g	Pour Pt °C	PF25C %	PF 100C %	Specific Gravity 60/60	Viscosity @ 40°C cSt	Inhibitor Content %	Visual
					D 1500	D 877	D 1816	D 971	D 974	D 97	D 924	D 924	D 1298	D 445	D 2668	D 1524 Clear & Bright
65573	11/08/2005	30	6	7	L 0.5	37	29	41	< 0.01	< -40	0.0776	1.5500	0.891	8.80	0.248	

The water content as reported in relative saturation is good for in-service fluid. Other results are acceptable for in service fluid.

Additional Oil Quality Tests

Report #	Sample Date	Top Oil Temp °C	Viscosity (Saybolt) SUS
			D 2161
65573	11/08/2005	30	54.7

Miscellaneous Tests

Report #	Sample Date	Top Oil Temp °C	PCB Content ppm	Aroclor Detected
			D 4059	
65573	11/08/2005	30	< 2	

This sample is considered to be 'Non-PCB' (<50 ppm) per EPA regulations listed in 40 CFR part 761.