

2012



1-877-526-IRIS

Electrical Inspection
using Infrared
Thermography

Brian Jastrow Level III
Thermographer
Report By: Robert Galati

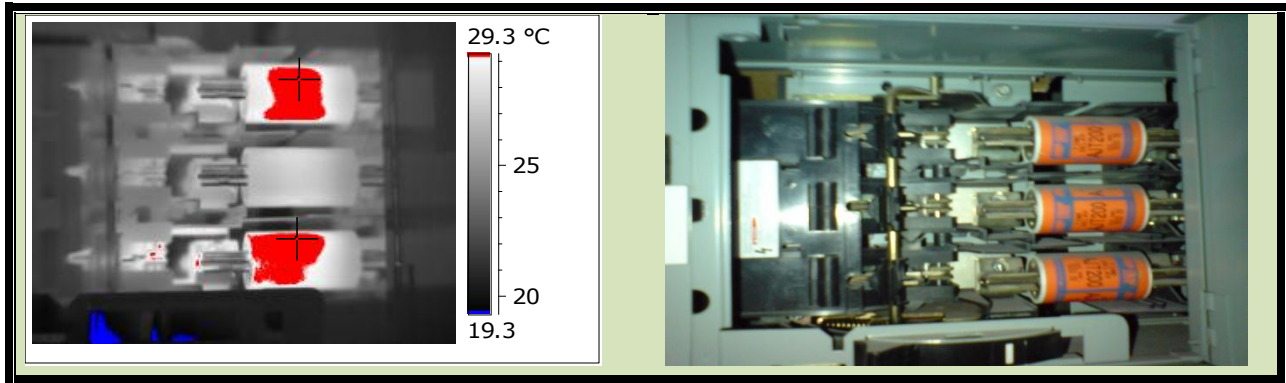


SAMPLE REPORT - INDUSTRIAL PLANT

January 18,19,20, 2012

FAULT #1

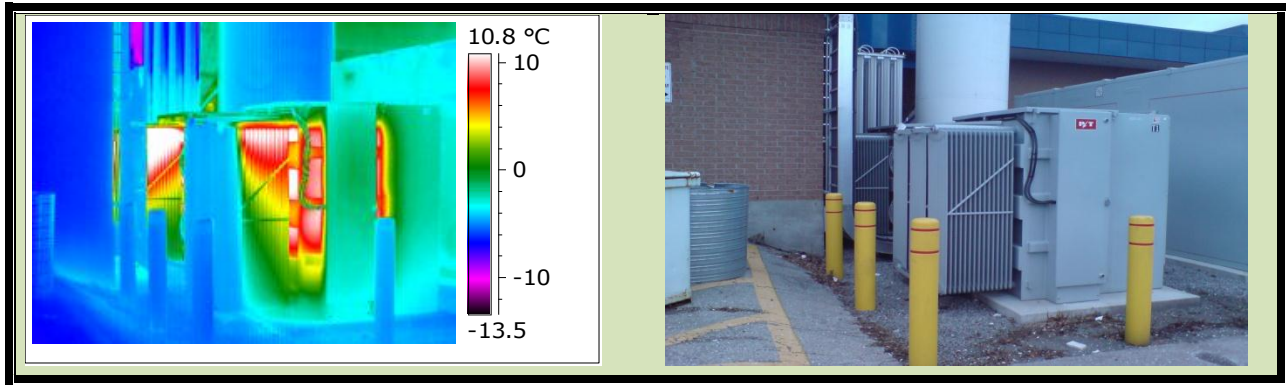
PRIORITY	LOCATION	EQUIPMENT
Medium	Main Substation #1	200 amp Fused Disconnect Switch



PARAMETERS		ANALYSIS AND RECOMMENDATION
Date	1/19/2012	<p>Designation: "Lighting Panel" Brand: "Siemens" 200 amp 600 VAC 3 Phase 60 Hz</p> <p>CAT# VK73644</p> <p>Service Fused Disconnect Switches</p> <p>Replace A phase and C phase fuses. Exercise and lubricate switch mechanism.</p> <p>LOADS: A PHASE 63.1 amp B PHASE 60.9 amp C PHASE 64.8 amp</p>
Filename	IR_14944.jpg	
Max Temperature	30.5 °C	
Min Temperature	18.5 °C	
Atmospheric Temperature	21.6 °C	
Object Distance	2.2 m	
Sp1 Temperature	30.1 °C	
Sp2 Temperature	30.4 °C	

REFERENCE #1

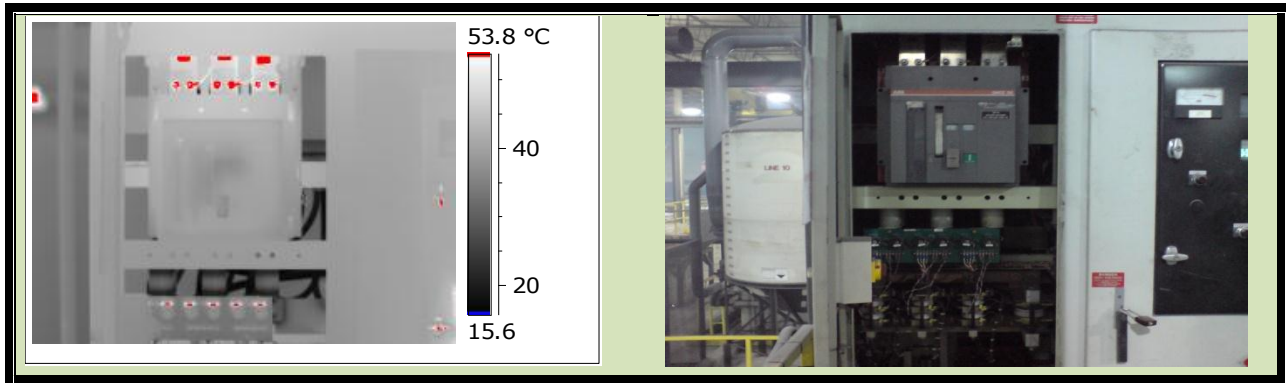
PRIORITY	LOCATION	EQUIPMENT
None	Outdoor Substation	2500 KV Oil Filled Transformers



PARAMETERS		ANALYSIS AND RECOMMENDATION
Date	1/19/2012	S & C 2500 KV Typical thermal signature across transformer radiators.
Filename	IR_14936.jpg	
Max Temperature	16.3 °C	
Min Temperature	-11.5 °C	
Atmospheric Temperature	-1.6 °C	
Object Distance	11.0 m	

REFERENCE #2

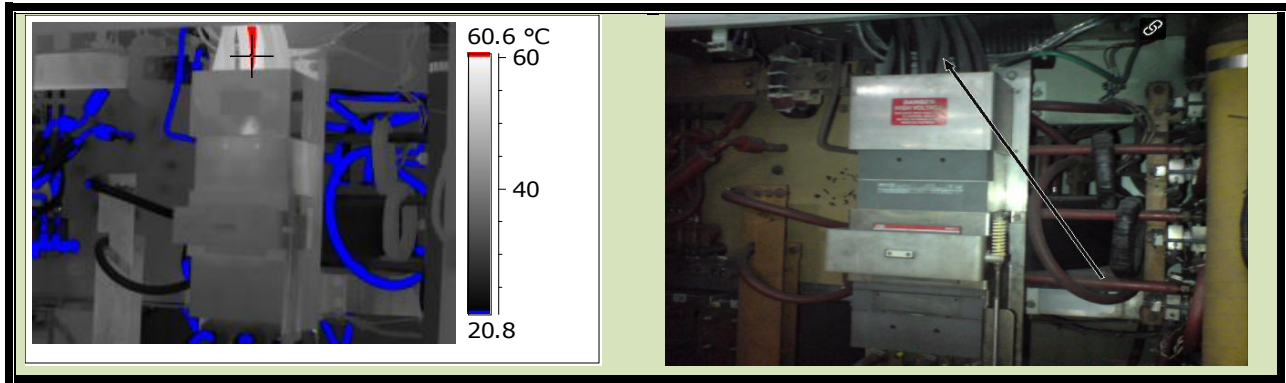
PRIORITY	LOCATION	EQUIPMENT
None	Induction Furnace #5	2000 amp Molded Case Breaker



PARAMETERS		ANALYSIS AND RECOMMENDATION
Date	1/19/2012	Designation: Induction Furnace #5 "ABB" 2000 amp Molded Case Breaker 600 VAC 3 Phase 60 Hz No thermal variances due to high resistance. No loads taken.
Filename	IR_14938.jpg	
Max Temperature	91.3 °C	
Min Temperature	16.4 °C	
Atmospheric Temperature	28.0 °C	
Object Distance	1.8 m	

FAULT #2

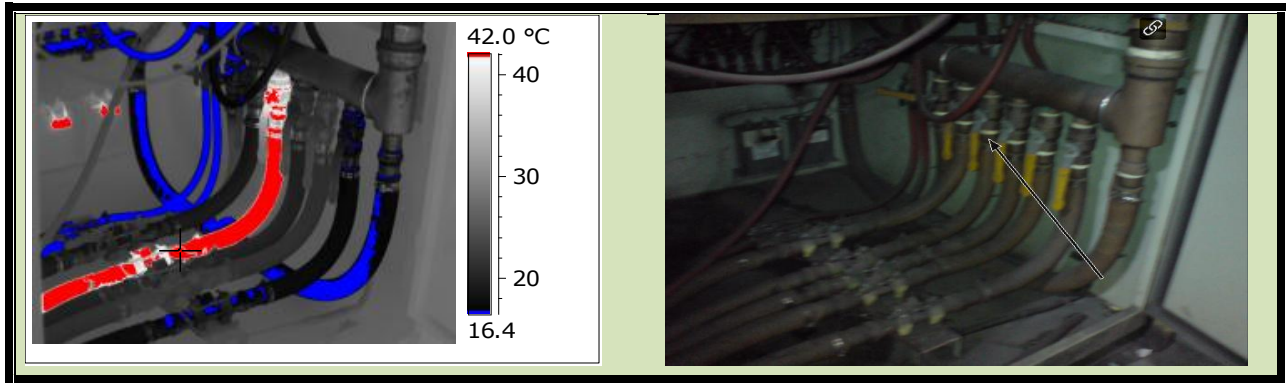
PRIORITY	LOCATION	EQUIPMENT
High	Induction Furnace #10	1200 amp Molded Case Breaker



PARAMETERS		ANALYSIS AND RECOMMENDATION
Date	1/19/2012	Designation: "Induction Furnace #10" "ABB" 1200 amp Molded Case Breaker 600 VAC 3 Phase 60 Hz No loads taken. Thermal variance detected B phase lineside conductor, possibly migrating down to lug connection. Repair ASAP then re-scan.
Filename	IR_14940.jpg	
Max Temperature	65.7 °C	
Min Temperature	17.3 °C	
Atmospheric Temperature	28.0 °C	
Object Distance	1.8 m	
Sp1 Temperature	61.9 °C	

FAULT #3

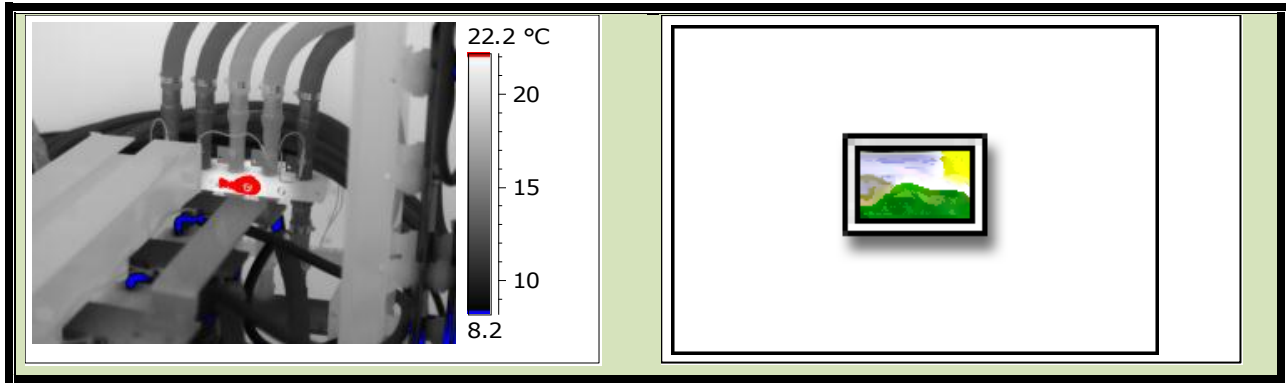
PRIORITY	LOCATION	EQUIPMENT
Medium	Induction Furnace #20	1200 amp Molded Case Breaker



PARAMETERS		ANALYSIS AND RECOMMENDATION
Date	1/19/2012	<p>Designation: "Water Lines"</p> <p>Thermal variance detected across line #5 caused by possible congestion within line down-stream or up-stream. Repair ASAP.</p>
Filename	IR_14942.jpg	
Max Temperature	>150.2 °C	
Min Temperature	14.9 °C	
Atmospheric Temperature	28.0 °C	
Object Distance	1.8 m	
Sp1 Temperature	47.4 °C	

NOTE #1

PRIORITY	LOCATION	EQUIPMENT
	Induction furnace #5	Fibreglass Support



PARAMETERS		ANALYSIS AND RECOMMENDATION
Date	1/20/2012	Bracket (cold water) Signs of conduction. Investigate in greater detail.
Filename	IR_14956.jpg	
Max Temperature	23.5 °C	
Min Temperature	7.5 °C	
Atmospheric Temperature	20.4 °C	
Object Distance	1.5 m	