



**191 BOULEVARD  
GLEN ROCK, NJ 07452  
201-444-3620**

**Thermographic Inspection at**

**SMALLVILLE DPW**

**123 ANY WAY SMALLVILLE, CA 01234**

**2006-04-25**

**By**

**PETER PLEIN**



Thermography Inspection  
at  
SMALLVILLE DPW

Date:  
01-23-2006

**This is the in initial inspection for this location. Baseline amperage readings were not taken as per contract. Annual vacuuming of panels and transformers is recommended.**

#### Inspection Site Information

Customer	SMALLVILLE DPW
Address	123 ANY WAY SMALLVILLE, CA 01234
Contact person	TOM THUMB
Phone number	555-123-4567
E-mail address	TTHUMB@VERIZON.NET
Thermographer	PETER PLEIN

#### **INFORMATION**

#### **Overview of Fault Ratings:**

<b>0:</b> No abnormality	No action
<b>1:</b> Low grade fault	To be monitored – Plan new inspection
<b>2:</b> Medium grade fault	Repair at scheduled shut down
<b>3:</b> Severe fault	Repair ASAP
<b>4:</b> Critical fault	Repair immediately



Thermography Inspection  
at  
SMALLVILLE DPW

Date:  
01-23-2006

Summary of Inspection

Location	Equipment	Fault	Diff	Page
MAIN ELECTRIC ROOM	FUSED DICONNECT LPA	4	85.9	4
1ST FLOOR ELECTRIC ROOM	PANELBOARD LP-2A	Repair	38.2	5
PARKING DECK ELECTRIC CLOSET	LIGHTING CONTACTOR	Repair	39.6	6
PARKING DECK ELECTRIC CLOSET	LIGHTING CONTACTOR	Repair	40.9	7
2ND FLOOR ELECTRIC ROOM	PANELBOARD RP-3B	Repair	12.9	8
PENTHOUSE	DISCONNECT SWITCH	Repair	67.8	9
PENTHOUSE	FUSED DISCONNECT SWITCH P-3	Repair	29.3	10



**Thermography Inspection  
at  
SMALLVILLE DPW**

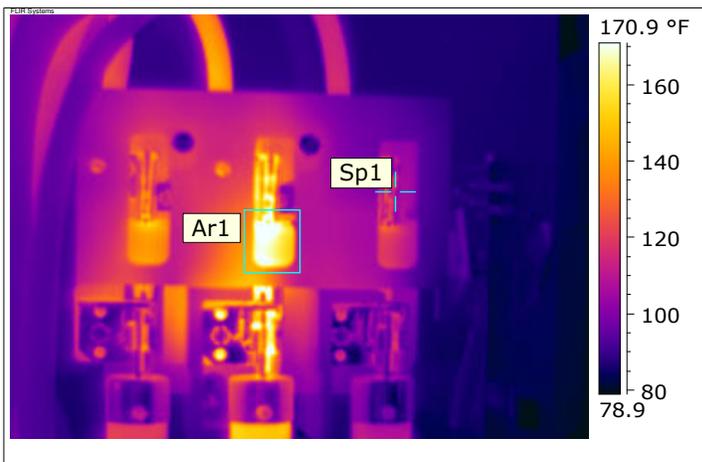
**Date:**  
01-23-2006

**Photo and Identification**



IR Text Comment	Value
Location	MAIN ELECTRIC ROOM
Equipment	FUSED DICONNECT LPA
Type	GENERAL ELECTRIC
Nom load	100
Actual load	23
Fault	4
Recommendation	REPLACE

**Thermogram 3/29/2006**



Label	Value
Sp1	105.4 °F
Ar1: Max	191.3 °F
<b>Temp rise (Ar1 - Sp1)</b>	<b>85.9 °F</b>

**Analysis & Recommended action:**

**B PHASE DISCONNECT SWITCH BLADE/BLADE PORT HAS A 85.9 DEGREE RISE  
DUE TO THE LARGE DELTA T AND LOW LOAD IT IS RECOMMENDED THAT THIS SWITCH BE  
REPLACED.**

A=22  
B=23  
C=23

**Inspected by :**

**PETER PLEIN**

Signature:.....

date: **01-23-2006**

Repaired by: .....

date:

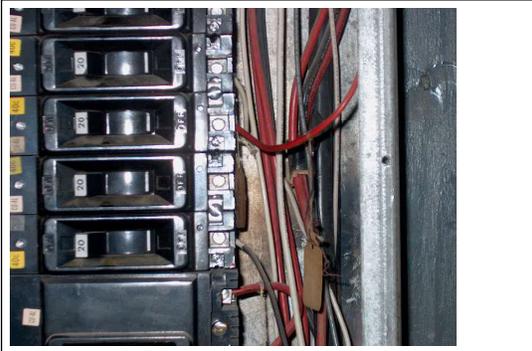
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**Thermography Inspection  
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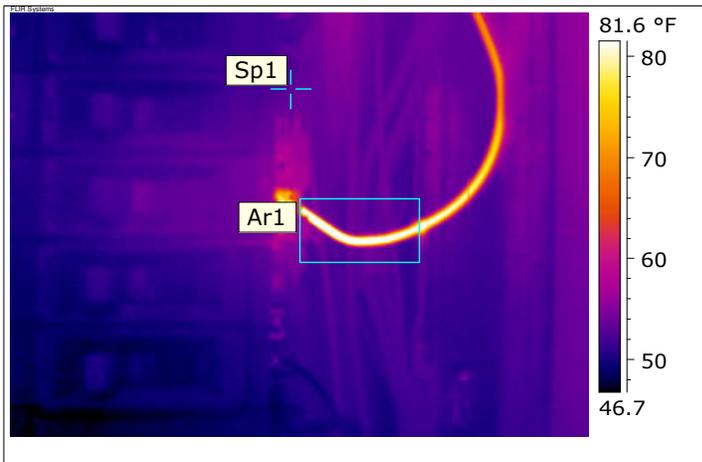
**Date:**  
01-23-2006

**Photo and Identification**



IR Text Comment	Value
Location	1ST FLOOR ELECTRIC ROOM
Equipment	PANELBOARD LP-2A
Nom load	20
Actual load	6.4
Fault	3
Recommendation	Repair

**Thermogram 3/7/2006**



Label	Value
Sp1	53.6 °F
Ar1: Max	91.8 °F
<b>Temp rise (Ar1 - Sp1)</b>	<b>38.2 °F</b>

**Analysis & Recommended action:**

**HIGH RESISTANCE CONNECTION**  
**CLEAN AND TIGHTEN ALL RELATED CONNECTIONS**

**Inspected by :** PETER PLEIN      Signature:.....      date: 01-23-2006

Repaired by: .....      date:

Comment:



Thermography Inspection  
at  
SMALLVILLE DPW

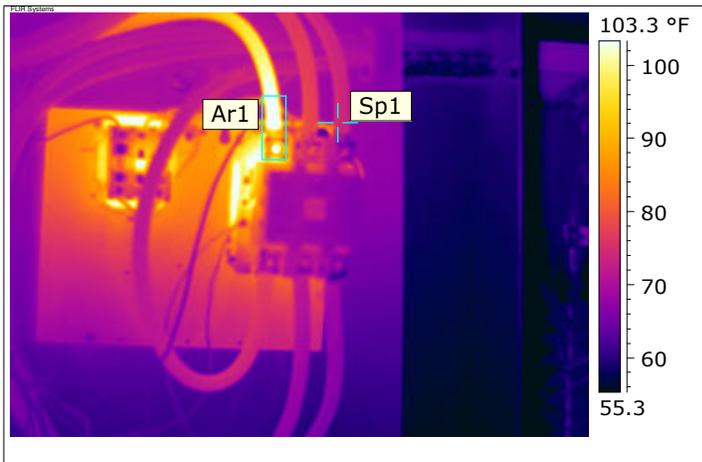
Date:  
01-23-2006

**Photo and Identification**



IR Text Comment	Value
Location	PARKING DECK ELECTRIC CLOSET
Equipment	LIGHTING CONTACTOR
Nom load	100
Actual load	37
Fault	3
Recommendation	Repair

**Thermogram 3/14/2006**



Label	Value
Sp1	74.6 °F
Ar1: Max	114.2 °F
<b>Temp rise (Ar1 - Sp1)</b>	<b>39.6 °F</b>

**Analysis & Recommended action:**

**HIGH RESISTANCE CONNECTION**

**REMOVE LUG AND CLEAN AND TIGHTEN ALL RELATED CONNECTIONS**

A=37  
B=41  
C=34

**Inspected by :**

PETER PLEIN

Signature:.....

date: 01-23-2006

Repaired by: .....

date:

Comment:



**Thermography Inspection  
at  
SMALLVILLE DPW**

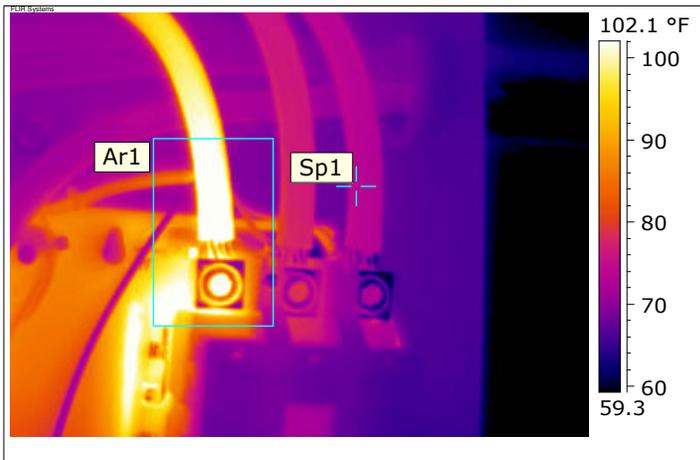
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01-23-2006

**Photo and Identification**



IR Text Comment	Value
Location	PARKING DECK ELECTRIC CLOSET
Equipment	LIGHTING CONTACTOR
Nom load	100
Actual load	37
Fault	3
Recommendation	Repair

**Thermogram 3/14/2006**



Label	Value
Sp1	74.1 °F
Ar1: Max	115.1 °F
<b>Temp rise (Ar1 - Sp1)</b>	<b>40.9 °F</b>

**Analysis & Recommended action:**

**HIGH RESISTANCE CONNECTION**

**REMOVE LUG AND CLEAN AND TIGHTEN ALL RELATED CONNECTIONS**

A=37  
B=41  
C=34

**Inspected by :**

**PETER PLEIN**

Signature:.....

date: **01-23-2006**

Repaired by: .....

date:

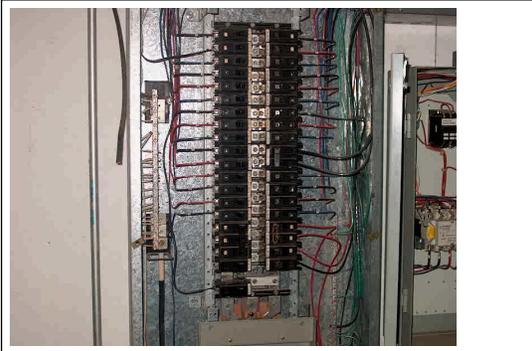
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**Thermography Inspection  
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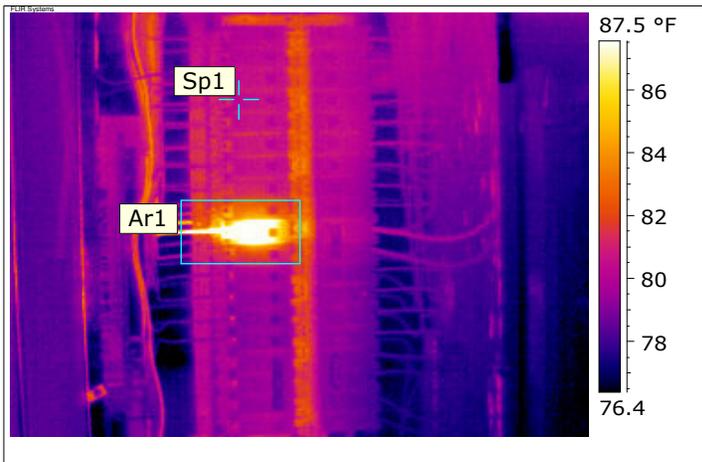
**Date:**  
01-23-2006

**Photo and Identification**



IR Text Comment	Value
Location	2ND FLOOR ELECTRIC ROOM
Equipment	PANELBOARD RP-3B
Nom load	20
Actual load	19.3
Fault	2
Recommendation	Repair
PROBLEM	OVERLOAD

**Thermogram 3/14/2006**



Label	Value
Sp1	80.3 °F
Ar1: Max	93.2 °F
<b>Temp rise (Ar1 - Sp1)</b>	<b>12.9 °F</b>

**Analysis & Recommended action:**

**LOAD EXCEEDS 80% OF BREAKER RATING**  
**REDUCE LOAD BELOW 80% OF 20 AMPS**

**Inspected by :**

**PETER PLEIN**

Signature:.....

date: **01-23-2006**

Repaired by: .....

date:

Comment:



**Thermography Inspection  
at  
SMALLVILLE DPW**

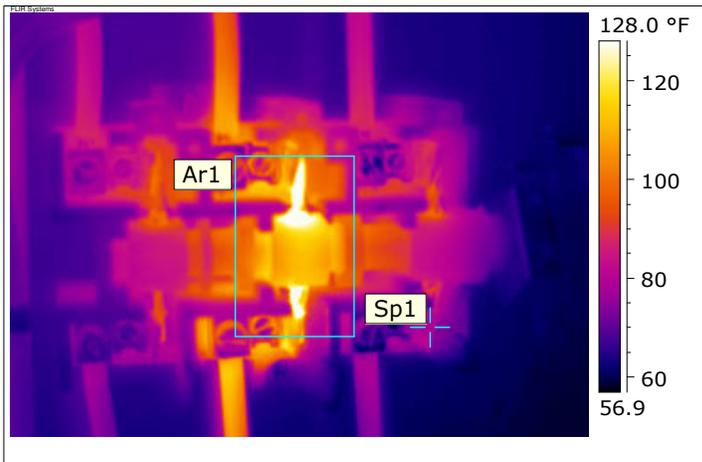
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**Photo and Identification**



IR Text Comment	Value
Location	PENTHOUSE
Equipment	DISCONNECT SWITCH
Nom load	100
Actual load	22
Fault	3
Recommendation	Repair
PROBLEM	CONTACT AREA WORN/LOOSE

**Thermogram 3/21/2006**



Label	Value
Sp1	78.6 °F
Ar1: Max	146.4 °F
<b>Temp rise (Ar1 - Sp1)</b>	<b>67.8 °F</b>

**Analysis & Recommended action:**

**HIGH RESISTANCE CONNECTION**

**CLEAN BLADE AND BLADE PORT SURFACES AND CHECK BLADE PORT TENSION.**

**NOTE DISCOLORED WIRE A PHASE LOAD SIDE**

**Inspected by :**

**PETER PLEIN**

Signature:.....

date: **01-23-2006**

Repaired by: .....

date:

Comment:



**Thermography Inspection  
at  
SMALLVILLE DPW**

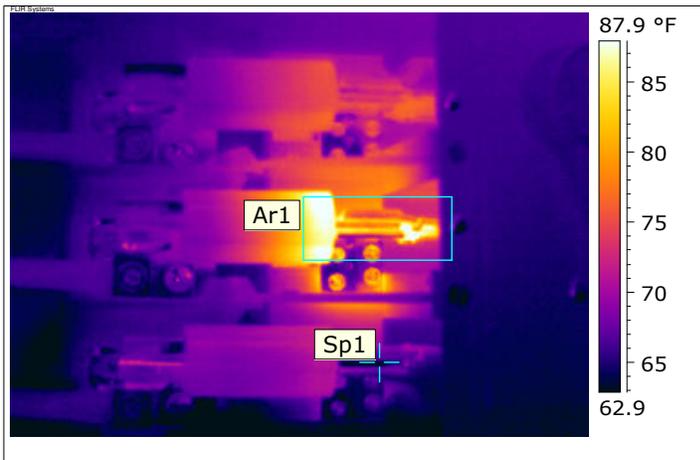
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01-23-2006

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IR Text Comment	Value
Location	PENTHOUSE
Equipment	FUSED DISCONNECT SWITCH P-3
Nom load	100
Actual load	41
Fault	2
Recommendation	Repair

**Thermogram 3/2/2006**



Label	Value
Sp1	63.0 °F
Ar1: Max	92.3 °F
<b>Temp rise (Ar1 - Sp1)</b>	<b>29.3 °F</b>

**Analysis & Recommended action:**

**HIGH RESISTANCE CONNECTION**

**CLEAN BLADE AND BLADE PORT SURFACES AND CHECK BLADE PORT TENSION.**

**Inspected by :** PETER PLEIN

Signature:.....

date: 01-23-2006

Repaired by: .....

date:

Comment: