

# PURAFIL ENVIRONMENTAL CORROSION REPORT

28-Oct-2010

Company: 115710

Sales Order #: C002697

CCC Panel #: P68008

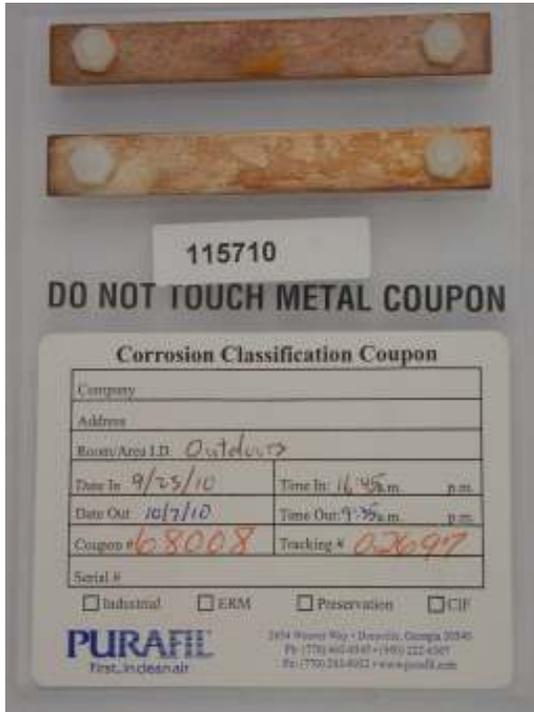
Room Area ID: Outdoors

Date In: 23-Sep-2010

Date Out: 07-Oct-2010

Reference #:

Days In Service: 14



<b>CCC Panel # P68008</b>
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<b>ISA Class GX</b> Severe
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<b>Copper Corrosion</b> 4894 Å/30 Days
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<b>Silver Corrosion</b> 1131 Å/30 Days
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(see next page for complete analysis)

### Summary for PURAFIL CCC # P68008

The electrolytic reduction analysis on Corrosion Classification Coupon #P68008 shows the presence of extremely high concentrations of contaminants and the possibility of high/variable humidity in the environment tested. The hydrogen sulfide level is expected to be in excess of 50 ppb, sulfur dioxide greater than 300 ppb, and chlorine greater than 10 ppb. The presence of moisture and small amounts of inorganic chlorine compounds greatly accelerates sulfide corrosion. Electronic/electrical equipment is not expected to survive in this environment due to corrosive attack.

Your local representative for additional information and assistance is:  
Environmental Health and Eng  
117 Fourth Avenue, Needham MA 02494, USA  
tminegishi@eheinc.com

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**PURAFIL CCC # P68008 Analysis Results**

<b>Corrosion Film Composition</b>				<b>Gold Coupon - Magnified 20x</b>
	Projections			
	30 Days	1 Year	5 Year	
<b>Copper Films</b>				
Cu <sub>2</sub> S	0 Å	0 Å	0 Å	
Cu <sub>2</sub> O	434 Å	1783 Å	5212 Å	
Unknowns	4460 Å	18310 Å	53540 Å	
Totals	4894 Å	20093 Å	58752 Å	
<b>Silver Films</b>				
AgCl	249 Å	3028 Å	15141 Å	
Ag <sub>2</sub> S	882 Å	10737 Å	53685 Å	
Unknowns	0 Å	0 Å	0 Å	
Totals	1131 Å	13765 Å	68826 Å	
<b>Gold Pore Corrosion:</b>				
Note: 1000 Å = 0.1 micron				

**Equipment Reliability Correlation**  
(ISA Standard S71.04-1985 for Copper)

