

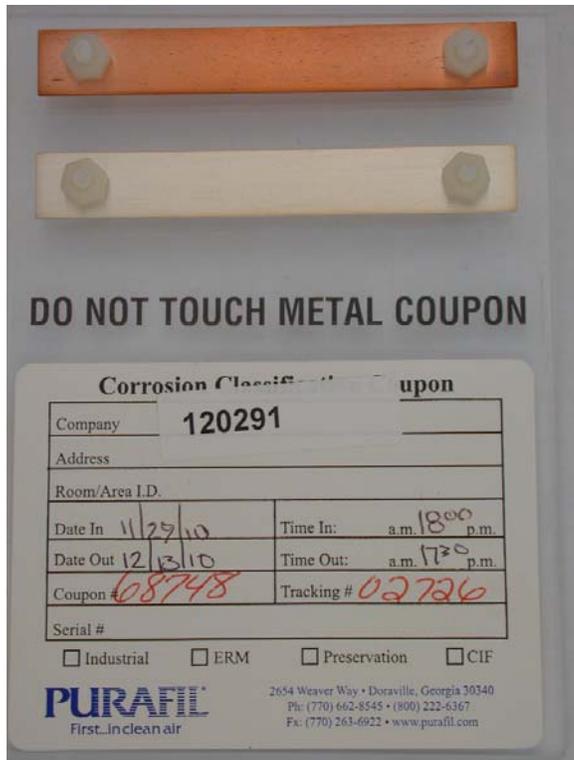
# PURAFIL ENVIRONMENTAL CORROSION REPORT

19-Jan-2011

Company: 120291

Sales Order #: C002726  
CCC Panel #: P68748  
Date In: 29-Nov-2010  
Date Out: 13-Dec-2010  
Days In Service: 14

Room/Area ID:  
Reference #:



<b>CCC Panel # P68748</b>
<b>ISA Class G2</b> Moderate
<b>Copper Corrosion</b> 383 Å/30 Days
<b>Silver Corrosion</b> 235 Å/30 Days

(see next page for complete analysis)

### Summary for PURAFIL CCC # P68748

The electrolytic reduction analysis on Corrosion Classification Coupon #P68748 shows the presence of moderate concentrations of contaminants in the environment tested. The hydrogen sulfide level is expected to range between 3 and 10 ppb and the sulfur dioxide level between 10 and 100 ppb. The effects of corrosion are measurable and may be a factor in determining equipment reliability.

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

Purafil, Inc. / 2654 Weaver Way, Doraville GA 30340 USA / (770) 662-8545 / (770) 263-6922  
Email: purafil@purafil.com / Internet: http://www.purafil.com

**PURAFIL CCC # P68748 Analysis Results**

<b>Corrosion Film Composition</b>				<b>Gold Coupon - Magnified 20x</b>
	Projections			
	<u>30 Days</u>	<u>1 Year</u>	<u>5 Year</u>	
<b>Copper Films</b>				
Cu <sub>2</sub> S	206 Å	275 Å	359 Å	
Cu <sub>2</sub> O	107 Å	143 Å	187 Å	
Unknowns	70 Å	93 Å	122 Å	
Totals	383 Å	511 Å	668 Å	
<b>Silver Films</b>				
AgCl	0 Å	0 Å	0 Å	
Ag <sub>2</sub> S	235 Å	2855 Å	14275 Å	
Unknowns	0 Å	0 Å	0 Å	
Totals	235 Å	2855 Å	14275 Å	
<b>Gold Pore Corrosion:</b>				
Note: 1000 Å = 0.1 micron				

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

