

# PURAFIL ENVIRONMENTAL CORROSION REPORT

14-Jun-2010

Company: 111035

Sales Order #: C002697  
 CCC Panel #: P67986  
 Date In: 20-May-2010  
 Date Out: 04-Jun-2010  
 Days In Service: 15

Room Area ID:  
 Reference #:



CCC Panel # P67986

ISA Class GX  
Severe

Copper Corrosion  
3998 Å/30 Days

Silver Corrosion  
606 Å/30 Days

(see next page for complete analysis)

### Summary for PURAFIL CCC # P67986

The electrolytic reduction analysis on Corrosion Classification Coupon #P67986 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

---

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

---

Displaying Page 1    [Display Page 2](#)

**PURAFIL CCC # P67986 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	0 Å	0 Å	0 Å	
Cu <sub>2</sub> O	366 Å	903 Å	2020 Å	
Unknowns	3632 Å	8961 Å	20037 Å	
Totals	3998 Å	9864 Å	22057 Å	
<b>Silver Films</b>				
AgCl	87 Å	1060 Å	5299 Å	
Ag <sub>2</sub> S	412 Å	5011 Å	25053 Å	
Unknowns	107 Å	1307 Å	6535 Å	
Totals	606 Å	7378 Å	36887 Å	

**Gold Pore Corrosion:**  
Note: 1000 Å = 0.1 micron

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

