## PURAFIL ENVIRONMENTAL CORROSIVITY REPORT

21-Oct-2010

**Company:** 115909

Room Area ID: Outdoors

Reference #:



 Sales Order #:
 C002697

 CCC Panel #:
 P67928

 Date In:
 29-Sep-2010

 Date Out:
 13-Oct-2010

Days In Service: 14

**CCC Panel # P67928** 

ISA Class G2 Moderate

Copper Corrosion 511 Å/30 Days

Silver Corrosion 398 Å/30 Days

(see next page for complete analysis)

## Summary for PURAFIL CCC # P67928

The electrolytic reduction analysis on Corrosion Classification Coupon #P67928 shows the presence of moderate concentrations of contaminants and high/variable humidity in the environment tested. The hydrogen sulfide level is expected to range between 3 and 10 ppb, sulfur dioxide between 10 and 100 ppb, and chlorine between 1 and 2 ppb. The presence of moisture and small amounts of inorganic chlorine compounds greatly accelerates sulfide corrosion. 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

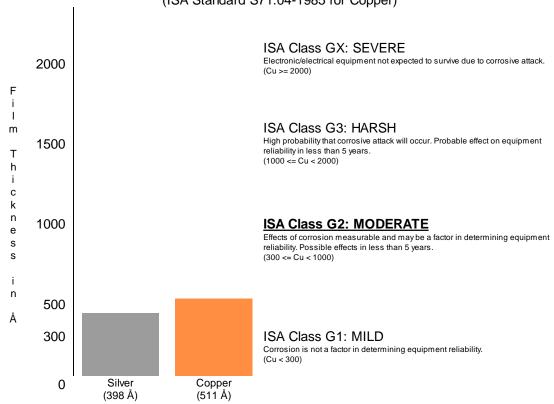
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## PURAFIL CCC # P67928 Analysis Results

Corrosion Film Composition Projections				Gold Coupon - Magnified 20x
	30 Days	1 Year	5 Year	Wagiiiieu 20x
Copper Films Cu <sub>2</sub> S	0 Å	0 Å	o Å	
Cu <sub>2</sub> O	325 Å	659 Å	1127 Å	
Unknowns	186 Å	378 Å	646 Å	
Totals	511 Å	1037 Å	1773 Å	
Silver Films				
AgCI	81 Å	984 Å	4921 Å	
Ag <sub>2</sub> S	317 Å	3856 Å	19278 Å	
Unknowns	0 Å	0 Å	0 Å	
Totals	398 Å	4840 Å	24199 Å	
Gold Pore Corrosion: Note: 1000 Å = 0.1 micron				

## **Equipment Reliability Correlation**

(ISA Standard S71.04-1985 for Copper)



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