## PURAFIL ENVIRONMENTAL CORROSIVITY REPORT

10-Jun-2010

**Company:** 111017

Room Area ID: Reference #:



 Sales Order #:
 C002682

 CCC Panel #:
 P67432

 Date In:
 20-May-2010

 Date Out:
 04-Jun-2010

Days In Service: 15

**CCC Panel # P67432** 

ISA Class G1 Mild

Copper Corrosion 277 Å/30 Days

Silver Corrosion 325 Å/30 Days

(see next page for complete analysis)

## Summary for PURAFIL CCC # P67432

The electrolytic reduction analysis on Corrosion Classification Coupon #P67432 shows the presence of only very low concentrations of contaminants in the environment tested. The hydrogen sulfide level is not expected to exceed 3 ppb and the sulfur dioxide level should be less than 10 ppb. The analysis shows only a trace of chlorine, however, particular care must be given to equipment exposed to atmospheres containing chlorinated contaminants. During the test period, corrosion, as shown by the copper coupon, is not a factor in determining equipment reliability.

Please note: Copper's reactivity is sensitive to temperature and relative humidity and can therefore exhibit seasonal variation. For example, below 30% relative humidity (typical for heated indoor air in winter), copper readings will be dramatically reduced. However, silver's reactivity is not affected by temperature and relative humidity. Due to the elevated level of film growth on the silver coupon, corrosion may be a factor in determining equipment reliability; continued monitoring is recommended.

Your local representative for additional information and assistance is:

Environmental Health and Eng

117 Fourth Avenue, Needham MA 02494, USA

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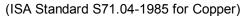
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## PURAFIL CCC # P67432 Analysis Results

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	0 Å	
Cu <sub>2</sub> O	140 Å	189 Å	247 Å	
Unknowns	137 Å	185 Å	241 Å	
Totals	277 Å	374 Å	488 Å	
Silver Films				
AgCI	44 Å	530 Å	2650 Å	
Ag <sub>2</sub> S	187 Å	2278 Å	11388 Å	
Unknowns	94 Å	1150 Å	5751 Å	
Totals	325 Å	3958 Å	19789 Å	
Gold Pore Corrosion: Note: 1000 Å = 0.1 micron				

## **Equipment Reliability Correlation**





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