CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 05/26/2004

Experimenters: Jason Marshall

ClientType: Lab

ProjectNumber: Project #1

Substrates: Sterling/Silver

PartType: Coupon

Contaminants: Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: Laboratory evaluations of alternative cleaning products

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning.

The five products were used at full strength in a 250 ml beaker and heated to 96 F on a hot plate. Fifteen preweighed silver plated copper coupons were coated with the Houghton International Cindol 3401 oil (64742-46-7) using a handheld swab. Coupons were weighed a second time to determine the amount of soil added to each coupon. Three coupons were cleaned in each solution for 5 minutes using stir-bar agitation. After cleaning parts were weighed a final time and efficiencies were calculated.

Results:

Summary:

Substrates:	Sterling/Silver				
Contaminants:	Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
DuPont	Vertrel MCA	100	91.50	☑	
Micro Care	Heavy Duty Degreaser C	100	94.87	☑	
Micro Care	Flux Remover C	100	89.94	☑	
3M	HFE 7200	100	98.54	☑	
Enviro Tech International Inc	Ensolv A	100	96.81	☑	

Conclusion: All five removed over 85%.