CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2003
DateRun:	03/09/2003
Experimenters:	Jason Marshall, Heidi Wilcox
ClientType:	State Agency
ProjectNumber:	Project #2
Substrates:	Ceramics, Fiberglass, Chrome
PartType:	Coupon
Contaminants:	Films, Soaps
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric, Photography
Purpose:	To evaluate newly supplied cleaner on SSL Soil 1 on three substrates

Experimental Procedure:

One supplied cleaning product was diluted to vendor recommended concentrations for bathroom cleaning. The product was diluted with DI water. Three preweighed fiberglass, three ceramic and three chrome coupons were coated with SSL Soil 1 (Bathroom soap scum: Vaseline Dry Skin Lotion 21.4%, Dial Clean Rinsing Body Wash 14.3%, Market Basket Shampoo & Conditioner (Pert) 28.6%, Soft Soap Natural Liquid hand soap 21.4%, Coast Deodorant bar soap 7.2% and Water 7.1%) using a hand held swab and allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added. Photographs were taken.

Three coupons were placed into a Gardner Straight Line Washability unit. A Professional Painter's Rag was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The cleaning unit was run for 20 cycles (~33 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded and a second set of photographs were taken. Efficiencies were calculated and recorded.

Results:

The cleaning solutions had little difficulty with SSL Soil 1 on all three substrates. The table below lists the amount of soil added and removed.

Table 1. Soil Removal

Cleaner	Initial wt	Final wt	% Removed
FG Lav Safe	0.2261	0.0056	97.52
	0.1734	0.0112	93.54
	0.2070	0.0092	95.56
Ceramic LS	0.1503	0.0022	98.54
	0.0945	0.0009	99.05
	0.1723	0.0021	98.78
Chrome LS	0.1198	0.0009	99.25
	0.0865	0.0039	95.49
	0.0994	0.0062	93.76

Summary:

Substrates:	Ceramics, Fiberglass, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Next-Gen Supply Group	LAV Safe 8	33	95.54	☑	Fiberglass
Next-Gen Supply Group	LAV Safe 8	33	98.79	☑	Ceramic
Next-Gen Supply Group	LAV Safe 8	33	96.17	☑	Chrome

Conclusion:

The overall efficiency for the bathroom cleaner, LAV Safe, was 96.83, passing the cut off of 85%. The glass cleaner will be tested next on SSL Soil 2.