CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003

DateRun: 02/24/2003

Experimenters: Jason Marshall, Heidi Wilcox

ClientType: State Agency

ProjectNumber: Project #2

Substrates: Ceramics, Fiberglass, Chrome

PartType: Coupon

Contaminants: 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 product was successful in removing SSL Soil 1 from fiberglass, ceramic and chrome coupons. Table 1 lists the amount of soil applied and removed.

Table 1. Soil Application and Removal

Cleaner	Initial wt	Final wt	% Removed
Fiberglass	0.1281	0.0046	96.41
	0.0930	0.0022	97.63
	0.0845	0.0037	95.62
Ceramic	0.0766	0.0005	99.35
	0.0692	0.0015	97.83
	0.0364	-0.0004	101.10
Chrome	0.0627	0.0042	93.30
	0.0629	0.0079	87.44
	0.0557	0.0049	91.20

Summary:

Substrates:	Ceramics, Fiberglass, Chrome				
Contaminants:	Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
The Clean Environment Co	N-7 (the Natural) Basin, Tub and Tile Cleaner	33	96.55	☑	Fiberglass
The Clean Environment Co	N-7 (the Natural) Basin, Tub and Tile Cleaner	33	99.43	☑	Ceramic
The Clean Environment Co	N-7 (the Natural) Basin, Tub and Tile Cleaner	33	90.65	☑	Chrome

Conclusion: The second product from this vendor will be used on SSL Soil 2 on glass and chrome surfaces.