CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2003
DateRun:	03/25/2003
Experimenters:	Jason Marshall
ClientType:	State Agency
ProjectNumber:	Project #2
Substrates:	Ceramics
PartType:	Coupon
Contaminants:	Soaps
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric, Photography
Purpose:	To reevaluate product based on test results from previous trials

Experimental Procedure:

One supplied cleaning product was diluted to 12 and 6% according to vendor recommended concentrations for bathroom cleaning. The product was diluted with DI water. Six preweighed ceramic 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 the 12% cleaning solution. Each coupon was sprayed 7-10 times with the same cleaning solution. The cleaning unit was run for 20 cycles (~33 seconds).
The second set of three coupons were sprayed with the 6% solution and allowed to sit for 60 seconds prior to operating the manual wiping process. 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 12% dilution was successful in removing the soil. The table below lists the amount of soil applied and removed from the coupons.

Table 1. Soil Removal

Cleaner	Initial wt	Final wt	% Removed
12%	0.2278	0.0218	90.43
	0.3424	0.0105	96.93
	0.2840	0.0086	96.97
6% with 60sec	0.1898	0.041	78.40
	0.2276	0.0543	76.14
	0.4013	0.0417	89.61

Summary:

Substrates:	Ceramics				
Contaminants:	Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Cogent Environmental Solutions	Ecogent General All Purpose Cleaner	12	94.78	☑	SSL Soil 1
Cogent Environmental Solutions	Ecogent General All Purpose Cleaner	6	81.38	☐	SSL Soil 1

Conclusion:

The increase in product concentration had a more beneficial result than the increased soak time did. At the higher concentration the efficiency exceed the 85% cut off.