CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2006
DateRun:	07/10/2006
Experimenters:	Jason Marshall
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Ceramics, Fiberglass, Chrome
PartType:	Coupon
Contaminants:	Films, Soaps
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To evaluate supplied product for bathroom cleaning on three substrates.
Experimental Procedure:	The supplied cleaning products were diluted to vendor recommended concentration for bathroom cleaning (30:1, 20:1, 20:1, 10:1). The product was diluted with DI water. Twelve 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. 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. Efficiencies were calculated and recorded.
Results:	Each product had some difficulty removing the bathroom soap scum from the ceramic coupons. The table lists the amount of soil added, the amount remaining and the percent removed for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
Degreaser Ceramic	0.2104	0.0408	80.61
	0.2807	0.0658	76.56
	0.2198	0.0438	80.07
Toilet Bowl Ceramic	0.1163	0.0264	77.30
	0.2187	0.0509	76.73
	0.1002	0.0291	70.96
RTU Bathroom Ceramic	0.1063	0.0406	61.81
	0.1103	0.0279	74.71
	0.0789	0.0197	75.03
Heavy Duty Ceramic	0.1525	0.0532	65.11
	0.1486	0.0271	81.76
	0.1561	0.0399	74.44
Degreaser Chrome	0.2294	0.0152	93.37
	0.1822	0.0107	94.13
	0.1736	0.0191	89.00
Toilet Bowl Chrome	0.1086	0.0115	89.41
	0.1281	0.0122	90.48
	0.1273	0.0144	88.69
RTU Bathroom Chrome	0.1204	0.0052	95.68
	0.1536	0.0082	94.66
	0.1253	0.0114	90.90
Heavy Duty Chrome	0.1516	0.0083	94.53
	0.1316	0.0062	95.29

CLEANING LABORATORY EVALUATION SUMMARY

	0.1295	0.0054	95.83
Degreaser Fiberglass	0.1657	0.0132	92.03
	0.1053	0.0188	82.15
	0.1642	0.0182	88.92
Toilet Bowl Fiberglass	0.2130	0.0147	93.10
	0.1033	0.0142	86.25
	0.2034	0.0091	95.53
RTU Bathroom Fiberglass	0.1340	0.0121	90.97
	0.1759	0.0149	91.53
	0.2003	0.0267	86.67
Heavy Duty Fiberglass	0.1771	0.0150	91.53
	0.1055	0.0139	86.82
	0.1517	0.0151	90.05

Summary:

Substrates:	Ceramics, Fiberglass, Chrome
Contaminants:	Films, Soaps

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Cogent Environmental Solutions	DFC Degreaser	3.33	86.31	☑	
Cogent Environmental Solutions	DFC Toilet Bowl Cleaner	5	85.38	☑	
Cogent Environmental Solutions	DFC RTU Bathroom Cleaner	5	84.66	☑	
Cogent Environmental Solutions	DFC Heavy Duty Cleaner	10	89.47	☑	

Conclusion: The products were successful in removing at least 85% of the applied soil.