CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2007
DateRun:	01/30/2007
Experimenters:	Jason Marshall
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Ceramics, Plastic, Steel
PartType:	Coupon
Contaminants:	Hucker's Soil
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To evaluate supplied products for all purpose janitorial cleaning
Experimental Procedure:	The supplied cleaning products were used at the recommended concentration (2%, 2% and 1.5%). Nine preweighed ceramic, six plastic and six steel coupons were coated with Hucker's Soil Formulation (Jif Creamy Peanut Butter 9.2%, Salted Butter 9.2%, Arrowhead Mills stone ground wheat flour 9.2%, Egg Yolk 9.2%, Evaporated milk 13.8%, Distilled water 45.8%, Printer's ink with boiled linseed oil 0.9%, Shaws saline solution 2.7%) using a handheld 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. AA Wypall X60 reinforced wipe 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 solution was allowed to penetrate for 30 seconds followed by cleaning in the SLW unit 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 efficiencies were calculated and recorded.
Results:	All three products were effective in removing the soil with a manual wiping action. Two of the products had lower efficiencies for removing the Hucker's soil from the plastic coupons. The third product, Blue Jay, had lower efficiency on the steel coupons. The table lists the amount of soil added and the amount remaining after cleaning and the product efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
120 Steel	0.2168	0.0093	95.71
	0.2219	0.0057	97.43
	0.1506	0.0139	90.77
108 Steel	0.1202	0.0063	94.76
	0.1254	0.0086	93.14
	0.1980	0.0141	92.88
120 Plastic	0.1479	0.0028	98.11
	0.1224	0.0084	93.14
	0.1438	0.0053	96.31
108 Plastic	0.0876	0.0089	89.84
	0.1428	0.0156	89.08
	0.1461	0.0102	93.02
120 Ceramic	0.1955	0.0350	82.10
	0.1205	0.0394	67.30
	0.3635	0.1192	67.21
108 Ceramic	0.3501	0.0390	88.86
	0.2510	0.0296	88.21
	0.1399	0.0228	83.70
Blue Jay Steel	0.6655	0.1082	83.74
	0.7624	0.1039	86.37
	0.8457	0.2769	67.26
Blue Jay Plastic	0.9588	0.0272	97.16
	0.6103	0.0211	96.54
	0.9727	0.0170	98.25
Blue Jay Ceramic	0.6652	0.0791	88.11
	0.9397	0.1544	83.57
	0.8453	0.1714	79.72

Summary:

CLEANING LABORATORY EVALUATION SUMMARY

Substrates:	Ceramics, Plastic, Steel				
Contaminants:	Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Next-Gen Supply Group	PC 120 Peroxide Mulitsurface Cleaner	2	87.56	☑	
Next-Gen Supply Group	PC 108 Spray & Wipe Cleaner	2	90.39	☑	
Next-Gen Supply Group	Blue Jay	1.5	86.75	☑	

Conclusion: The three products had an overall average efficiency over 85% and would be considered effective according to the Mass EPP protocol for an all-purpose cleaner.