CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2021
DateRun:	12/13/2021
Experimenters:	Zoe Lawson
ClientType:	Lab
ProjectNumber:	Project #7
Substrates:	Ceramics, Plastic, Painted metal
PartType:	Coupon
Contaminants:	Hucker's Soil
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	Control testing to monitor hucker's soil consistency.
Experimental Procedure:	Nine pre-weighed coupons were contaminated with 0.5 grams of Hucker’s soil (Evaporated Milk; 26.5%, Creamy Peanut Butter; 17%, Salted Butter; 17%, Stone Ground Wheat Flour; 17%, Linseed Oil; 2.25%, Saline Solution; 5.25%, India Ink; 6.8%, Lemon Juice; 8.2%). Coupons were aged for two hours at room temperature (68°F) before dirty weights were recorded. Coupons of the same substrate were placed into the Straight Line Washability (SLW) unit, three at a time, and treated twice with water. A Wypall was attached to the SLW sled and was also treated twice with water. Each test ran 20 cycles (~30 seconds of cleaning). Coupons were air-dried at room temperature (68°F) overnight before final weights were recorded.

Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Water	Ceramic	0.5015	0.0961	80.84	79.59	79.92
		0.4909	0.1136	76.86		
		0.4557	0.0862	81.08		
	Painted Steel	0.5672	0.1379	75.69	78.87	
		0.4965	0.0902	81.83		
		0.5168	0.1081	79.08		
	Plastic	0.5022	0.1124	77.62	81.3	
		0.4202	0.0679	83.84		
		0.5171	0.0908	82.44		

Summary:

Conclusion: The overall removal percentage for this control test was 79.92%.