CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2019

DateRun: 07/08/2019

Experimenters: Sabrina Apel, Phillip Demers, Julie Nguyen

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics

PartType: Coupon

Contaminants: Food

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To evaluate the stability and effectiveness of Better Life Dish Soap against Seventh Generation dish liquid on the removal of Soil B from ceramic plates.

Experimental Procedure: Clean ceramic plates were soiled with six grams of 4009 Soil B (50% All Purpose Flour, 48% Crisco Shortening, and 2% Olive Oil) and air dried for 24 hours at room temperature (68˚F). Four millimeters of each dish soap were measured out and each were mixed with four liters of tap water heated to 120°F, which was recorded when poured sequentially into the washing basin. Twenty seconds after the reservoir was prepared, the manual cleaning method began. Each plate was washed at an angle, half submerged in the water, cleaning both the front and back sides of each plate with a sponge in a circular motion for 30 seconds. This process continued until half the surface of the wash solution showed a thin layer of foam. The number of plates cleaned as well as the final temperature of the water in the basin were recorded. The process was repeated three times for each dish soap.

Results: Water Hardness: 24 mg/L $CaCO_3$

Cleaner	Initial Temperature (˚F)	Final Temperature (˚F)	# of Plates Washed	Average Number of Plates
1	120	110	5	4.00
	122	118	3	
	124	117	4	
2	120	108	7	5.67
	120	110	6	
	122	104	4	

Summary:

Substrates:	Ceramics				
Contaminants:	Food				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Better Life	Better Life Dish Soap	100%	4.00	☐	
Seventh Generation	Free & Clear Dish Liquid	100%	5.67	☑	

Conclusion: Better Life was not as effective as the comparative cleaner.