CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005

DateRun: 08/07/2005

Experimenters: Jason Marshall

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Marble

PartType: Coupon

Contaminants: Calcium/lime

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric, Photography

Purpose: To evaluate two products for marble immersion.

Experimental Procedure: Several marble chips of similar size and shape were weighed to determine the baseline weight of each piece. The selected chips were then immersed in the two supplied products at vendor recommended dilutions and allowed to soak for 18 hours. The marble chips were removed from the products and rinsed in a tap water spray at 120 F for 3 minutes to remove loose material from the chips. Then the chips were dried for 15 minutes using a Master Appliance Heat gun at 300 F. When the chips cooled to room temperature, final weights were recorded to determine weight loss, if any. Observations were made and photographs were taken after the initial immersion of the chips into solutions (5 minutes), at 60 minutes and then following the overnight immersion.

Results: Neither of the two products changed the weight of the marble chips to any significant level. Both dissolved less than 0.2% The table lists the initial and final weights as well as the removal percentages. Photographs are also included for the three time intervals and for the marble chips after soaking.

Product	Initial wt	Final wt	% Wt loss
Super H2O2	6.3208	6.3165	0.07
	10.1586	10.1477	0.11
	28.0580	28.0545	0.01
	27.3926	27.3743	0.07
H2Orange2	7.2469	7.2188	0.39
	16.2702	16.2590	0.07
	26.6182	26.5973	0.08
	31.7948	31.7579	0.12

Summary:

Substrates:	Marble				
Contaminants:	Calcium/lime				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Cleanline Products	H2O2 Super Citrus Concentrate	5	0.06	☐	Average weight loss
EnvirOx LLC	H2Orange2	10	0.16	☐	Average weight loss

Conclusion: Both products did not dissolve the marble.