CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 12/01/2004

Experimenters: Jason Marshall

ClientType: General

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Oil, Starch

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate successful products on client soiled coupons

Experimental Procedure: Five products were selected based on test results from the previous trial. Each product was diluted with DI water to vendor suggested concentration. The products were then heated to 130 F on a hot plate.

Fifteen preweighed, pre-contaminated stainless steel coupons were weighed a second time to determine the amount of soil that was added. Three coupons were cleaned in each product for five minutes using stir bar agitation. Cleaning was followed by a 15 second rinse in a tap water bath at 120 F and air blow off for 30 seconds at room temperature. Once dry, coupons were weighed a third time and efficiencies were calculated for each product tested.

Results: Three of the five products showed some signs of removing the cotton seed oil/starch mix within the five minutes of cleaning at 130 F. The table below lists the amount of soil added, the amount remaining and the percent removed for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
SC Oven & Grill	0.0383	0.0453	-18.28
	0.0618	0.0534	13.59
	0.1409	0.1950	-38.40
VPW SC 1000	0.0799	0.0463	42.05
	0.1641	0.4452	-171.30
	0.0563	0.0675	-19.89
Ecco Commercial	0.2380	0.2503	-5.17
	0.1275	0.0207	83.76
	0.0943	0.0305	67.66
Organic Cleaner/ Degreaser	0.0477	0.0213	55.35
	0.1354	0.1902	-40.47
	0.0785	0.0158	79.87
Super H2O2	0.1261	0.0322	74.46
	0.0841	0.0289	65.64
	0.1771	0.1363	23.04

Summary:

Substrates:	Stainless Steel				
Contaminants:	Oil, Starch				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Gemtek Products	Safe Care (SC) Oven & Grill Cleaner	10	-14.36	☐	
Orison Marketing	VPW SC 1000	20	-49.71	☐	
1st Envirosafety Inc. - No Longer Exists	Ecco Commercial Cleaner - For Comparison Purposes Only	25	48.75	☑	
1st Envirosafety Inc. - No Longer Exists	Organic Cleaner/Degreaser - For Comparison Purposes Only	25	31.58	☑	
Cleanline Products	H2O2 Super Citrus Concentrate	10	54.38	☑	

Conclusion: All five products will be cleaned for an addition ten minutes or 15 minutes total cleaning time. All other conditions will remain the same.