CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2007

DateRun: 10/16/2007

Experimenters: Jason Marshall, Shweta Bansal

ClientType: Environmental Service Firm

ProjectNumber: Project #1

Substrates: Cadmium plated steel

PartType: Coupon

Contaminants: Carbon Deposits, Cutting/Tapping Fluids, Greases, Lubricating/Lapping Oils, Dirt, Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate cleaning performance of samples taken after 6 months of use.

Experimental Procedure: Six samples from three locations (two from each) were emptied into 400 ml beakers and used at requested temperature for cleaning. In addition, an unused cleaning product was included for comparison.

Twenty-one preweighed coupons were coated with a composite soil made from the filtration bags collected at the three sites. The contaminant mix was allowed to dry on the coupons for one hour. After this drying, a second weight was recorded to determine the amount of soil added. Three coupons were immersed into each sample and cleaned for 5 minutes using no agitation. At the end of the cleaning, coupons were rinsed for 15 seconds in tap water and dried using compressed air at room temperature. Once the coupons were dry, the final weights were recorded, and efficiencies were calculated.

Results: There were no major differences in the cleaning efficiencies for all the samples from each site. The second sample collected from Flahertys was the only samples to have efficiencies lower than 98%. The table below lists the amount of soil added, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
Bergdales 5	0.4489	0.0108	97.59
	0.8501	0.0129	98.48
	0.9977	0.0081	99.19
Bergdales 6	1.0125	0.0083	99.18
	0.6349	0.0122	98.08
	0.4262	0.0125	97.07
Flahertys 5	0.6779	0.0091	98.66
	1.2229	0.0069	99.44
	0.7464	0.0105	98.59
Flahertys 6	0.4225	0.0208	95.08
	0.3789	0.0148	96.09
	0.9618	0.0077	99.20
Syversons 5	0.7991	0.0083	98.96
	0.8121	0.0199	97.55
	0.9886	0.0147	98.51
Syversons 6	0.6100	0.0206	96.62
	0.6814	0.0065	99.05
	1.0462	0.0071	99.32
New	1.0989	0.0097	99.12
	1.0689	0.0113	98.94
	0.8155	0.0123	98.49

Summary:

Substrates:	Cadmium plated steel				
Contaminants:	Carbon Deposits, Cutting/Tapping Fluids, Greases, Lubricating/Lapping Oils, Dirt, Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Kleer Flo Company	Degreasol Formula 99-R		0.00	☐	

Conclusion: Cleaning performances were consistent for all three locations and the fresh cleaning product.