CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 03/08/2004

Experimenters: Dave Hout

ClientType: Lab

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Cutting/Tapping Fluids

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: Laboratory evaluations of alternative cleaning products

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning.

One product was used at full strength and seven products were heated to 130 F on a hot plate. Twenty-four preweighed coupons were coated with Cutting Fluid - Monroe Fluid Tech Cool Tool II and allowed to dry for a half an hour and reweighed. Three coupons were cleaned in each solution for 5 minutes using stir-bar-agitation, rinsed in a tap water bath for 15 seconds at 120 F and dried using air blow off for 30 seconds at 68 F. Coupons were allowed to dry for a half an hour and then reweighed a final time. Efficiencies were calculated.

Results:

Summary:

Substrates:	Stainless Steel				
Contaminants:	Cutting/Tapping Fluids				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Calgon Corporation	Geo Guard 3015	5	89.41	☑	
Watson Technical Associates	Watson Formula 9000	5	101.57	☑	
SOQ Environmental Technology	Ecomate FN	5	100.31	☑	
Buckeye International	XL 100 Cleaner & Degreaser	5	98.72	☑	
US Polychem Corporation	Polychem A 2000 P	5	96.71	☑	
Quaker Chemical	Formula 625 XL	5	97.76	☑	
Jet Lube Inc	Jet Lube 5000	5	98.59	☑	
Dow Chemical Company	XUS 40571 Development Solvent	100	100.77	☑	

Conclusion: All products were effective at removing the contaminant at an efficiency rate of >89%