CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2007

DateRun: 06/03/2007

Experimenters: Jason Marshall

ClientType: Metal

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Part

Contaminants: Lubricating/Lapping Oils

Cleaning Methods: Ultrasonics

Analytical Methods: Visual

Purpose: To evaluate top 5 products on supplied parts using ultrasonics cleaning.

Experimental Procedure: The five successful products from the previous trials were selected to test on the supplied parts. Each product was heated to 130 on a hot plate. The heated solutions were then poured into a tall cylinder (25 ml glass graduated cylinders) and placed in a heated ultrasonic tank. Each solution was degassed for five minutes.

Two dirty parts were immersed into the solutions. The parts were placed in the upright position and cleaned for 5 minutes using a Crest 40 kHz ultrasonic tank at 130 F. Parts were then rinsed in a DI Spray for 15 seconds at room temperature and dried with compressed air for 30 seconds also at room temperature. Visual observations were made on the cleaned parts. Parts were packaged to be sent back to client for final observations.

Results: Visually, all five products removed exterior soils. During cleaning, bubbles were observed coming out the tops of each of the parts which would signify that the cleaning solutions were getting into and out of the inner diameter of the parts.
When the parts were being packaged, one of the five products - D Greeze 500 LO left a tacky residue on the parts.

Summary:

Substrates:	Stainless Steel				
Contaminants:	Lubricating/Lapping Oils				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
AG Environmental Products	Soy Gold 1100	100	0.00	☑	
Bio Chem Systems	Solsafe 245	100	0.00	☑	
Buckeye International	Shopmaster RC	100	0.00	☑	
Dysol	DS 108 Wipe Solvent	100	0.00	☑	
Transene Company, Inc.	D Greeze 500 LO	100	0.00	☐	

Conclusion: Four of the five products performed well based on the outside cleaning of the supplied parts. Finally, assessment of the inside diameters will be conducted by the client.