CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1995
DateRun:	08/22/1995
Experimenters:	Donald Garlotta, Jay Jankauskas
ClientType:	Lapping Job Shop
ProjectNumber:	Project #1
Substrates:	Steel
PartType:	Part
Contaminants:	Lubricating/Lapping Oils, Dirt, Films
Cleaning Methods:	Low Pressure Spray
Analytical Methods:	Visual
Purpose:	Preliminary test to evaluate cleaners
Experimental Procedure:	PART #1 CLEANING PRODUCT: Oakite Inproclean #3800 CONCENTRATION: 10% by volume PART #2 CLEANING PRODUCT: Cleaning Systems Inc. Release CONCENTRATION: 15% by volume PART #3 CLEANING PRODUCT: Calgon Corporation Geo-Guard #3015 CONCENTRATION: 10% by volume PART #4 CLEANING PRODUCT: AW Chesterton KPC 820N CONCENTRATION: 4% by volume The purpose of this trial is simply to perform a preliminary test demonstration for Lapping Job Shop to show the effectiveness of various cleaners in removing lapping oils. For the various cleaners, cleaning will take place for five minutes at 110 F. All three parts will first be rinsed for one minute in a tap water bath set at 110 F. One of the parts will then be rinsed in a room temperature DI bath for 10 seconds. After rinsing the parts were then placed under the air knives for one minute and then blown dry with the heat gun. After drying the parts were observed for lapping compound residue and spotting. One part was then cleaned in the Graymills spray unit. Cleaning temperature was set at 100 F and cleaning took place for two minutes. The part was then rinsed under warn, running tap water for a few seconds.
Results:	All four cleaners were successful in quickly removing the lapping compound from the parts. No spotting was noticed on the parts, so a DI rinse may not be necessary.

Summary:

Substrates:	Steel				
Contaminants:	Lubricating/Lapping Oils, Dirt, Films				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Oakite Products	Inproclean 3800	10	0.00	☑	
AW Chesterton	KPC 820 N	4	0.00	☑	
Cleaning Systems	Release	15	0.00	☑	
Calgon Corporation	Geo Guard 3015	10	0.00	☑	

Conclusion: Preliminary tests show that all four cleaners and both mechanical methods are possible cleaning methods for Lapping Job Shop. Future testing should be done with a variety of substrates and on parts that are more heavily contaminated.