CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1999
DateRun:	01/20/1999
Experimenters:	Jason Marshall
ClientType:	Electronics Manufacturer
ProjectNumber:	Project #1
Substrates:	Teflon
PartType:	Part
Contaminants:	Lubricating/Lapping Oils
Cleaning Methods:	Ultrasonics
Analytical Methods:	Visual
Purpose:	Evauating ultrasonic cleaning.
Experimental Procedure:	Two cleaning chemistries were selected based on the previous trial. Five percent solutions were made into 600 mL beakers and heated to 130 F. The contaminated parts and shavings were submerged into the cleaning solutions which were suspended in a Crest 40 kHz ultrasonic tank model 4Ht 1014-6. Cleaning took place for 5 minutes. Parts were then rinsed in two tap water rinses at 120 F. Parts and shavings were then air dried at room temperature. Observations were made to determine which cleaner worked the best. Evaluations were based on how white the shavings were after the parts sat for two hours. SUBSTRATE MATERIAL: Teflon parts and shavings CONTAMINANTS: Oil-lubricating oil (CAS # 64742-53-6, 64742-52-5)
Results:	After the two rinsing stages, it was noted that there was still oil left on the parts and the shavings. The oil was more uniformly distributed in the shavings. Neither cleaner was successful when used with ultrasonic cleaning.

Summary:

Substrates:	Teflon				
Contaminants:	Lubricating/Lapping Oils				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
By Pas and Star Products	Star Cleaning Miracle # 50	5	0.00	☐	
AW Chesterton	KPC 820 N	5	0.00	☐	

Conclusion: Since neither cleaning chemistries nor cleaning method worked, additional testing will be conducted on other cleaning chemistries. Semi-aqueous products may be selected for future testing.