CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2008
DateRun:	02/07/2008
Experimenters:	Heidi Wilcox
ClientType:	Metal Working
ProjectNumber:	Project #1
Substrates:	Brass
PartType:	Part
Contaminants:	Buffing/Polishing Compounds
Cleaning Methods:	Vapor Degreasing
Analytical Methods:	Visual
Purpose:	To evaluate drop-in solvents on supplied parts using vapor degreasing
Experimental Procedure:	Two solvents, Lenium CP (10-30% nPB) and Microcare Heavy Duty Degreaser C (HFC), were selected from the previous trial based on performance and solvent types. A third product, one vendor supplied product, recommended for buffing compounds, 3M Novec 72DE), was included based on vendor recommendations. Each solvent was heated to boiling in a Branson 125 vapor degreaser. Parts were immersed into the boiling liquid for two minutes and then rinsed in the vapor region for less a minute. Parts were visually observed for effectiveness and brought to the client for further inspection.
Results:	One product, the 3M Novec 72DE HFE was thought to have possibly damaged one of the parts which will be brought to the client for inspection. The buffing compound was removed in areas, but the part looked white in spots. The other two products removed some of the buffing compound in the limited cleaning time. The lab had only dirty parts so there was not a reference for the level of cleanliness needed.

Summary:

Substrates:	Brass				
Contaminants:	Buffing/Polishing Compounds				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Petroferm Inc	Lenium CP (no longer available)	100	0.00	☑	
Micro Care	Heavy Duty Degreaser C	100	0.00	☑	
3M	Novec 72DE	100	0.00	☐	

Conclusion: All three classes of chemicals showed some promise in cleaning the parts. The parts will be brought to the client to be inspected, and the vapor degreasing process followed there will be explained further at that time. Vapor degreasing testing will continue with other products that showed promise during the coupon testing and future vapor degreasing trials will more closely follow the client's cleaning procedures after more details are collected at the next visit about ultrasonic, immersion and vapor residence times.