CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1995
DateRun:	06/27/1995
Experimenters:	Donald Garlotta, Jay Jankauskas
ClientType:	Brass Instrument Manufacturer
ProjectNumber:	Project #1
Substrates:	Brass
PartType:	Part
Contaminants:	Coatings
Cleaning Methods:	Immersion/Soak
Analytical Methods:	FTIR
Purpose:	Determine if Lacq-off will affect finish of parts
Experimental Procedure:	Two parts were received from Musical Instrument Re-finisher. One part was contaminated with lacquer while the other part was clean. To see if the Lacq-off will affect the finish of the parts, FTIR spectroscopy will be used to analyse the parts. Two Spectra were taken of the part without lacquer. Three spectra were taken of the contaminated part. Due to the varying amounts of lacquer on the part these three spectra were slightly different. Cleaning was done in a beaker using stirbar aggitation. The Lacquoff was made up of 40% lacq-off A, 15% lacq-off B and 45% water. Cleaning was done at 170 F. It was unknown how long the cleaning would take so the part was checked at 5 minute intervals until it appeared to be totally clean. After twenty minutes the part had quite a bit of lacquer on it so it was left to clean for 15 more minutes and then 25 more minutes. This still didn't work so the part was soaked in the Lacq-off overnight at room temperature.
Results:	At first glance it appeared that the lacq-off was doing a great job. There were sections of the sample in which the lacquer just peeled off. Upon further inspection at 5 minutes there was still areas where there was a large amount of lacquer. The same thing was noticed at 10, 15, 20, 35 and 60 minutes. At this point it was decided that the part would soak in the lacq-off overnight at room temperature to see if the lacq-off was compatible with the lacquer. When the part was checked in the morning, all the lacquer was gone, but the lacq-off also removed quite a bit of finish on the brass.

Summary:

Substrates:	Brass				
Contaminants:	Coatings				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Frederick Gumm Chemical	Lacq off A/B	15	0.00	☐	40 A /15 B

Conclusion: The Lacq-off is definitely effective in removing the lacquer. The only thing now it to determine how long the brass has to stand in the cleaner to remove the lacquer but not effect the brass finish.