CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1995
DateRun:	05/10/1995
Experimenters:	Donald Garlotta, Jay Jankauskas
ClientType:	Brass Instrument Manufacturer
ProjectNumber:	Project #1
Substrates:	Brass
PartType:	Coupon
Contaminants:	Cutting/Tapping Fluids, Greases, Lubricating/Lapping Oils, Oil
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Visual
Purpose:	Preliminary testing

Experimental Procedure:

Preliminary testing was done for a Musical Instrument Refinisher. Eight 260 brass coupons were contaminated with four contaminants (Clover Grease Mix Lapping Oil, Valvoline Wheel Bearing Grease, 90 Wt Gear Oil, and Selmer Tuning Slide and Cork Grease.) Each contaminant was spread on two coupons. Six possible cleaners were drop tested on the contaminated coupons. The cleaners were:
1) Sky Products Cleaner #10
2) Calgon Geo Guard #2215
3) Chem Tech Ct-10
4) Grace #211
5) Grace #212
6) Oakite #3800
One drop of each concentrated cleaner was placed on each contaminant to notice the lift that each cleaner was able to obtain in a set time. The time depended on the contaminant. Cleaner effects on the Gear oil and Selmer Grease were noticable instantly while the cleaners for the Lapping Oil abd the bearing grease were allowed to sit for a half an hour.

Results:

The results were as follows:
1) Lapping Oil- The Calgon Geo Guard did the best with Oakite doing the second best and Chem Tech showing some slight lift. All Other cleaners showed no lift at all. The Calgon Geo Guard seemed to leave some residue on the brass coupon.
2) Valvoline Bearing Grease- The Grace 212 Cleaner got the best lift, then the Calgon Geo-Guard while all other cleaners showed little lift.
3) 90 WT Gear Oil- The Calgon Geo-Guard, the ChemTech and the Grace 211 all performed excellent, with the rest of the cleaners showing pretty good lift. This appears to be the easiest compound to remove.
4) Selmer Cork Grease- The ChemTech and the Grace 211 performed the best with all other cleaners showing a slight lift.

Summary:

Substrates:	Brass				
Contaminants:	Cutting/Tapping Fluids, Greases, Lubricating/Lapping Oils, Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Sky Products Company Inc	Cleaner #10	100	0.00	☑	
Magnaflux	Daraclean 211	100	0.00	☐	
Oakite Products	Inproclean 3800	100	0.00	☑	
Calgon Corporation	Geo Guard 2215	100	0.00	☑	
Chemkleen International Inc.	CT 1 Multipurpose Cleaner	100	0.00	☐	

Conclusion:

From the lift test, it was decided that we would further test the three that performed best on the Lapping Oil and the Valvoline bearing Grease. This ended up being the Calgon Geo-Guard 2215, the Oakite 3800 and the Sky Cleaner #10.