CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1995
DateRun:	04/05/1995
Experimenters:	Donald Garlotta
ClientType:	Electrical Manufacturer
ProjectNumber:	Project #1
Substrates:	Aluminum, Gold
PartType:	Part
Contaminants:	Fluxes, Resins/Rosins
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Black light, Visual
Purpose:	Determine effectiveness of three cleaners

Experimental Procedure:

The purpose of this trial is to determine the effectiveness of three different cleaners for the removal of flux for Electrical Manufacturer.
Cleaning was performed for fifteen minutes at 160o F in a beaker agitated with a stir-bar. Rinsing was performed in a tap water bath followed by a DI water bath. Both rinses were for 5 minutes at 140 F. The parts were then dried under an air knife for two minutes and in a convection oven for 60 minutes (at 210 F). After drying the parts were visually observed for any residual flux and/or water spotting.

SUBSTRATE MATERIAL: Gold-Coated Aluminum
CONTAMINANTS: Rosin Solder Flux
CONTAMINATING PROCESS USED: received contaminated from Electrical Manufacturer

Results:

The black light showed that all the flux was removed from the part cleaned with the Calgon Geo-Guard 2215. There was a problem of water spotting on the parts. Both WR Grace cleaners were ineffective in removing the flux from the parts.

Summary:

Substrates:	Aluminum, Gold				
Contaminants:	Fluxes, Resins/Rosins				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Calgon Corporation	Geo Guard 2215	4	0.00	☑	
Magnaflux	Daraclean 211	10	0.00	☐	
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Conclusion:

The Geo-Guard 2215 seems to be a suitable chemistry for Electrical Manufacturer's needs. The water spotting could be a big problem, so a new rinsing and drying method needs to be determined.