CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1998
DateRun:	04/05/1998
Experimenters:	Jason Marshall
ClientType:	Manufacturers of Precision Parts and Assemblies
ProjectNumber:	Project #2
Substrates:	Stainless Steel
PartType:	Coupon
Contaminants:	Cutting/Tapping Fluids, Lubricating/Lapping Oils, Oil
Cleaning Methods:	
Analytical Methods:	OSEE
Purpose:	Cleanliness measurement of parts cleaned by client
Experimental Procedure:	Three sets of parts were measured using an OSEE instrument. Each set contained six parts chosen at random. One reading was made for each part and the average OSEE reading was determined. The resultant values were compared to results from previous trials. SUBSTRATE MATERIAL: Stainless Steel parts CONTAMINANTS: C-Eblis oil (sulfur based)
Results:	Consistent readings were obtained for all the parts tested. Table 1 lists the readings for the three sets as well as the calculated average. Table 1. OSEE Readings of cleaned parts

Set 1	Set 2	Set 3	
155	146	160	
164	161	169	
156	156	172	
173	154	169	
153	182	162	
162	160	144	
160.5	160	163	Average
		161	Overall Ave

Comparing these values to the results from the previous values reveals that this weeks parts are not as clean as the others. Table 2 lists the three weeks of data.
Table 2. Overall Comparison of Parts Cleaned

New Bath	2-Week Old Bath	This Week's Bath
1343	196	161

Summary:

Conclusion: OSEE readings can be used to determine a relative cleanliness of parts. The lower the OSEE value, the dirtier the part. In order to further justify this conclusion a cleaning trial will be conducted to relate percent removal to the OSEE readings.