CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2000

DateRun: 05/04/2000

Experimenters: Jason Marshall

ClientType: Metal Working

ProjectNumber: Project #1

Substrates: Alloys

PartType: Part

Contaminants: Cutting/Tapping Fluids, Lubricating/Lapping Oils, Oil

Cleaning Methods: Mechanical Agitation

Analytical Methods: OSEE

Purpose: To compare cleaning on front and back of samples.

Experimental Procedure: Five readings were taken from both front and back of both sets of cleaned parts. Readings were recorded for each sheet and an average was calculated and compared to the other sets of parts.

SUBSTRATE MATERIAL: Tantulum metal sheets
CONTAMINANTS: Mobil Oil Corp, Vactra Oil Light
CONTAMINATING PROCESS USED: Received cleaned/dirty

Results: The readings for the clean Z-mill 0.002" sheets had different average values for the two sides, 234 and 179. The dirty Z-mill 0.002" had slightly lower readings than the clean Z-mill 0.002" with readings of 200 and 174. The final set of sheets, the 0.005" pieces, had readings of 316 and 237. Table 1 lists the values for each piece measured, for both sides.

Table 1. OSEE Readings

Clean 0.002"						Dirty 0.002"				Cleaned 0.005"			
Piece 1		Piece 2		Piece 3		Piece 1		Piece 2		Piece 1		Piece 2	
Side 1	Side 2	Side 1	Side 2	Side 1	Side 2	Side 1	Side 2	Side 1	Side 2	Side 1	Side 2	Side 1	Side 2
257	183	234	209	232	189	145	141	176	163	312	233	306	239
243	179	176	158	232	174	134	169	230	234	317	219	318	244
255	179	224	163	212	162	185	219	183	224	344	251	360	231
267	195	225	219	232	175	180	266	175	134	291	288	305	226
251	146	235	177	230	177	125	254	206	194	301	212	306	226
254	176	219	185	228	175	154	210	194	190	313	241	319	233
Overall Average						Overall Average				Overall Average			
Side 1	Side 2					Side 1	Side 2			Side 1	Side 2		
234	179					174	200			316	237		

The sides 1 and 2 are not necessarily the same for all the parts. Which ever side was placed under the OSEE instrument first was side 1.

Summary:

Substrates:	Alloys				
Contaminants:	Cutting/Tapping Fluids, Lubricating/Lapping Oils, Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Environmental Technology	RB Degreaser Cleaner		0.00	☑	

Conclusion: Readings from the 3 sets varied from each other. To better compare readings, distinguishing between sides needs to be easier.