CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2001

DateRun: 06/19/2001

Experimenters: Jason Marshall

ClientType: Metal

ProjectNumber: Project #1

Substrates: Aluminum, Carbon Steel, Stainless Steel

PartType: Part

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

Cleaning Methods: Ultrasonics

Analytical Methods: Black light, Visual

Purpose: To clean supplied parts with the successful cleaners

Experimental Procedure: The four successful cleaners from the previous trial were again diluted to 5% using DI water in 600 ml beakers and placed in a Crest 40 kHz ultrasonic tank model 4Ht 1014-6. Solutions were heated to 130 F. From the supplied parts, two different types of parts were selected for each cleaning solution. The parts were observed under black light as a way to determine the level of contamination present. The parts were cleaned for 2 minutes with ultrasonic energy, rinsed in tap water at 120 F for 30 seconds and dried using a heat gun at 500 F for 1 minute. Final observations were made and parts were packaged up to be sent to client.

Results: All four cleaners appeared to clean the supplied parts. The following table shows which parts were cleaned in which solution and any notable observations made during the cleaning trial. Not all parts fluoresced under the black light.

Cleaner	Part	Observations
1	TCN	fluoresced under black light prior to cleaning, but not after, part looked clean
1	Oldham (AL)	part looked clean
2	Collar before splitting	fluoresced under black light prior to cleaning,
2	Flexible coupling (SS)	parts looked clean
3	Flexible coupling	brown oil surfacing during cleaning, part looked clean
3	Collars	brown oil surfacing during cleaning, part looked clean
4	TCN Blackened	solution became cloudy, parts looked clean
4	1/2 rigged collar	rusty to start, cleaning removed a lot of rust, solution became cloudy, part looked

Summary:

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Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Oakite Products	Inproclean 3800	5	0.00	☑	
Magnaflux	Daraclean 283	5	0.00	☑	
Bio Chem Systems	Green Stuff 6325	5	0.00	☑	
Today & Beyond	Beyond 2001	5	0.00	☑	

Conclusion: The cleaned parts have been packaged to be returned to client for further inspection. All four solutions improved the cleanliness of the parts. The Green Stuff and Beyond 2001 both showed the most signs of

cleaning. This could have been because the parts the solutions were cleaning were dirtier than the other parts cleaned in the other two solutions.