CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006

DateRun: 09/07/2006

Experimenters: Jason Marshall

ClientType: General

ProjectNumber: Project #2

Substrates: Plastic

PartType: Part

Contaminants: Inks, Paints

Cleaning Methods: Ultrasonics

Analytical Methods: Visual

Purpose: To evaluate supplied alternative product on removing coating from golf ball

Experimental Procedure: The product used at full strength and was heated to 120 and 150 F in a 40 kHz ultrasonic tank. One golf ball was cleaned at each temperature for 40 minutes. At ten minute intervals of the cleaning, the ball was rinsed in a tap water spray for 15 seconds at 120 F and wiped dry with a paper towel. Observations were made and compared to the client's current cleaner.

Results:

Temp	Time	Observation
120	10	No signs of removal
120	20	Some ink could be wiped off
120	30	Some coating removed
120	40	Not shiny but still had ink remaining
150	10	Comparable to the 40 minutes of cleaning at 120F
150	20	Still not a lot of ink removal
150	30	Coating "cracking" and ink was dull
150	40	Lots of "cracking" in the coating

Summary:

Substrates:	Plastic				
Contaminants:	Inks, Paints				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
WSI Industries	N Terpinal RS 98	100	0.00	☐	
WSI Industries	N Terpinal RS 98	100	0.00	☑	Partially successful

Conclusion: Neither temperature resulted in a complete removal of the ink and paint from the golf ball after 40 minutes of ultrasonic cleaning.