CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2009
DateRun:	05/21/2009
Experimenters:	Jason Marshall, Junhee Cho
ClientType:	Machine Construction Company
ProjectNumber:	Project #2
Substrates:	Steel
PartType:	Part
Contaminants:	Greases, Oil
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Visual
Purpose:	To evaluate cleaners on supplied dirty parts following current cleaning process
Experimental Procedure:	The two products were selected from the previous trials based on success for removing the supplied soils using heated immersion cleaning. Both were used at full strength based on vendor recommendations. Beakers were heated to 130 F on a hot plate. Steel parts were supplied by the client with grease and oils caked on to the parts. One part was cleaned in each solution for 10 minutes using stir bar agitation. Parts were not rinsed but were dried using compressed air at room temperature for 30 seconds. Parts were visually inspected and pictures were taken.
Results:	Much of the oil and grease was visually observed to have been removed from various regions of the supplied parts. However, after cleaning and drying, both cleaning solutions left behind a residue on the parts making it difficult to assess effectiveness of the two products.

Cleaner	Part Location	Observation
Bean-e-doo	Threads	Some solid matter removed from threads. Residue remaining
		from cleaner. Grease still in threads
	Bolt head	Rust like material gone
	Overall part	Cleaner residue left on most areas but most in the threads
Smart Solve 605	Threads	Some solid matter removed from threads. Residue remaining
		from cleaner. Grease still in threads
	Bolt head	Rust like material gone
	Overall part	Cleaner residue left on most areas but most in the threads

Summary:

Substrates:	Steel
Contaminants:	Greases, Oil

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Franmar Chemical	Bean-e-doo (Parts Washer Solvent)	100	0.00	☐	
United Laboratories International	Smart Solve 605	100	0.00	☐	

Conclusion: Cleaned parts will be returned to for inspection to determine whether products were effective at removing the greases and oils.