CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2015

DateRun: 06/10/2015

Experimenters: Jason Marshall, Alicia Melvin

ClientType: Chemical Company

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Greases, Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate Methyl 408 and Ethyl 408 on their removal effectiveness of different soils on different substrates.

Experimental Procedure: GS34 Soil 1 was the maintenance soil that was made up of 10 grams of carbon black, 10 grams iron oxide, 100 ml WD-40, 100 ml hydraulic oil, and 100 ml gear oil. Ethyl 408 performed better at removing this soil from stainless steel. The GS34 Soil 2 was the production soil which was made up of 200 ml Quench Oil and 200 ml cutting oil.

Results: Both Methyl 408 and Ethyl 408 were excellent at removing this type of soil off of stainless steel. Both chemicals, in a span of 30 minutes, were able to take off at least half of the Apiezon Grease. If left immersed in these chemicals longer, the grease would most likely have been completely removed.

Degreasing			
Cleaning Category	Degreasing		
Soil type	Oil	Grease	
Specific soil	GS 34 Soil 1	GS 34 Soil 2	Apiezon Grease
Methyl 408	77.68%	99.31%	74.85%
Ethyl 408	83.04%	98.95%	68.04%

Summary:

Substrates:	Stainless Steel				
Contaminants:	Greases, Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Xf Technologies	Ethyl 408	100	83.33	☑	
Xf Technologies	Methyl 408	100	83.95	☑	

Conclusion: Overall, Ethyl 408 removes an average of 90.99% of oils, and Methyl 408 removes an average of 88.49%. Methyl 408, however, is better at removing grease.