CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2025
DateRun:	09/10/2025
Experimenters:	Tatyanna Moreland Junior
ClientType:	Lab
ProjectNumber:	Project #8
Substrates:	Stainless Steel
PartType:	Coupon
Contaminants:	Oil
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Gravimetric
Purpose:	To evaluate the chemical mixture SB-29 (54% Benzyl Alcohol, 30% Ethyl Lactate, 16% Propylene Carbonate) effectiveness at removing different oils from stainless steel coupons.
Experimental Procedure:	Three stainless steel coupons were used for each of the four contaminants (J90, L.S. Starret Mobil DTE24, Milform F0411-A, and L.S. Starret Hocut 795) being tested, for a total of 12 coupons per cleaner. The initial weights of each coupon were recorded. The bottom third of every coupon was soiled by applying the contaminant with a swab. The dirty weights of each coupon were then recorded. The coupons were then subjected to unheated immersion in the cleaners for 10 minutes. After the coupons were cleaned, they were left to air-dry for a week, and then the clean weights of each coupon were taken.

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Results:

Soil:	Initial wt of cont.	Final wt of cont.	%Cont Removed	Average % Removal
J90	0.0658	0.007	89.36	89.80
	0.0567	-0.0002	100.35	
	0.0891	0.0181	79.69	
L.S. Starret Mobil DTE24	0.0346	0.0192	44.51	29.69
	0.0374	0.0285	23.80	
	0.0424	0.0336	20.75	
Milform F0411-A	0.0257	-0.0007	102.72	94.68
	0.0351	-0.0027	107.69	
	0.0254	0.0067	73.62	
L.S. Starret Hocut 795	0.0394	-0.0004	101.02	102.33
	0.0294	-0.0002	100.68	
	0.0208	-0.0011	105.29	

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Summary:

Substrates:	Stainless Steel				
Contaminants:	Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
TURI Cleaning lab	SB-29	100	0.00	☑	Was effective for 3/4 soils

Conclusion:

The cleaner was effective at removing J90, Milform F0411-A and L.S. Starret Hocut 795; it seemed to remove unrecorded contaminants from the coupons, making the final weights lower than the initial. The coupons soiled with J90 and L.S. Starret Mobil DTE24 were still wet after a week of drying, so the mediums may not be compatible, or they could be wiped clean.