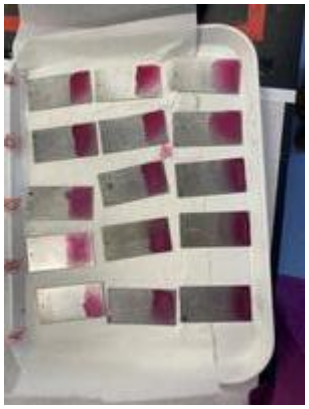
CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2026
DateRun:	03/02/2026
Experimenters:	Tatyanna Moreland Junior, Alexander Symko, Amelia Wagner
ClientType:	
ProjectNumber:	Project #8
Substrates:	Stainless Steel
PartType:	Coupon
Contaminants:	Blood
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Gravimetric, Visual
Purpose:	To evaluate the efficiency of the client's various cleaners at removing synthetic blood soil from a stainless steel substrate.
Experimental Procedure:	Three coupons were assigned to each cleaner making 15 coupons in total used. Initial weights were taken for each coupon then soiled with around 0.5 g of synthetic blood and left to dry overnight. Dilutions of the SuperNova.1 multi-enzymatic cleaner and 0.1 SuperNova.1 NpHD Neutral Detergent at 0.1 oz/gallon and a dilution of Pentazyme at 0.5oz/gallon were prepared the following day before testing, the Pentaprep and Caseprep cleaners were sent RTU (ready to use). The method of testing was heated immersion for three cleaners and unheated for the other two for 3 minutes then soaked in a DI water bath three times for 1 minute each. They were again set to dry over night and clean weights were taken the next day.
Results:	Results

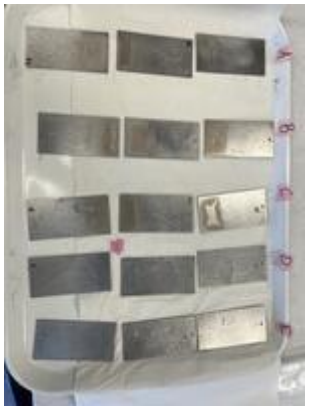
Temperature	Cleaner	Initial weight of Content	Final weight of Content	% Content Removed	Average % Removal
140 F	Multienzymatic det.	0.0078	1E-04	98.72	96.24
		0.0100	0.0010	90.00	
		0.0093	0.0000	100.00	
	NpHD Neutral Det.	0.0106	0.0007	93.40	92.89
		0.0111	0.0011	90.09	
		0.0104	0.0005	95.19	
	Pentazyme	0.0109	0.0004	96.33	97.23
		0.0109	0.0003	97.25	
		0.0106	0.0002	98.11	
Unheated	Pentaprep	0.0122	0.0005	95.90	98.19
		0.0116	-0.0002	101.72	
		0.0131	0.0004	96.95	
	Caseprep	0.0131	0.0011	91.60	98.31
		0.0120	-0.0004	103.33	
		0.0109	0.0000	100.00	

CLEANING LABORATORY EVALUATION SUMMARY

Dirty Coupons



Clean Coupons



Summary:

Substrates:	Stainless Steel
Contaminants:	Blood

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Case Medical Inc.	CasePrep Non-Enzymatic Pre-Soak Spray	100 %	98.31	☑	
Case Medical Inc.	PentaPrep Multi-Enzymatic Pre-Soak-CSA012	100 %	98.19	☑	
Case Medical Inc.	Pentazyme Multi-Enzymatic Cleaner	0.5 oz/ gal	97.23	☑	Left residue on coupons
Case Medical Inc.	SuperNova NpHD Detergent	0.1 oz/ gal	92.89	☑	Left residue on coupons
Case Medical Inc.	SuperNova .1 Multi-Enzymatic Cleaner-CSNC01G	0.1 oz/ gal	96.24	☑	Left residue on coupons

Conclusion:

All of the cleaners were seen to effectively remove the synthetic blood with gravimetric percent removals above 90%. Visually, the coupons cleaned with pentaprep and caseprep were the cleanest as the coupons cleaned by the multienzyme, supernova 0.1 and pentazyme had a residue left over on their surface. It's possible the soil is being burned onto the substrate from the heated cleaning process and the DI water bath is not aggressive enough to remove the residue.