CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2025
DateRun:	12/18/2025
Experimenters:	Amelia Wagner
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #3
Substrates:	
PartType:	Coupon
Contaminants:	
Cleaning Methods:	
Analytical Methods:	Performance Test, Visual
Purpose:	To compare the foaming generation and foam stability of two Chemtrax formulations to baseline high efficiency laundry detergents.

Experimental Procedure:

1. **Prepare solutions:** Create a 0.5% detergent solution by mixing detergent with distilled water. The cleaners tested include MS LLD, Arm & Hammer High Efficiency Laundry Detergent, and Tide High Efficiency Laundry Detergent
2. **Fill test tubes:** Pour 1 ml of the solution into a test tube.
3. **Add water:** Add 5 ml of distilled water to each test tube.
4. **Shake:** Seal the test tube and shake it 10 times to create foam.
5. **Measure foam height:** Measure the amount of foam generated in ml.
6. **Time:** Record the time it takes for the foam to fully dissipate (5 minutes interval)

Results:

Chemtrax Option 1: 4.5ml of foam generated. The foam did not dissipate within 5 minutes.

Chemtrax Option 2: 2ml of foam generated. The foam dissipated in 1 minute and 51 seconds.

Arm and Hammer HE: 3ml of foam generated. Foam did not dissipate within 5 minutes.

Tide HE: 2ml of foam generated. Foam did not dissipate within 5 minutes.

Summary:

Conclusion: The Chemtrax Option 2 formulation matched the amount of foam generated by the Tide HE detergent and exhibited less foam stability than the Tide HE detergent. The Chemtrax Option 2 formulation will likely be successful with use in a high efficiency washing machine.