CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2023
DateRun:	06/05/2023
Experimenters:	Dylan Labonte
ClientType:	Department of Public Works
ProjectNumber:	Project #1
Substrates:	Stainless Steel
PartType:	Coupon
Contaminants:	Asphalt
Cleaning Methods:	
Analytical Methods:	Scrape Test, Visual
Purpose:	To figure out how to melt asphalt onto stainless steel coupons so that it is not easily scraped off to mimic the the difficulty of getting asphalt off of the client's tools
Experimental Procedure:	Two methods were utilized for testing. Method A (uncovered): A beaker was filled with 850 ml of water and placed on a hot plate to boil. Once boiling, a smaller beaker with solid asphalt and a stainless steel coupon was placed into the beaker of boiling water. It was then left to sit for 30 minutes before being removed. Method B (covered): A beaker was filled with 850 ml of water and placed on a hot plate to boil. While waiting for the water to boil, asphalt and a stainless steel coupon were placed into a sealed plastic bag. Once the water began to boil, the bag with asphalt and coupon was lowered into the boiling water for 30 minutes before being removed. In both methods, after the coupons were removed from the boiling water, they were placed on a tray where any excess asphalt from the vessel the coupons were in was placed onto the coupon. A second coupon was then placed ontop of the original coupon and asphalt, forming a 'sandwhich' to pack down the asphalt onto the original coupon. The coupons were then left to dry overnight.
Results:	The asphalt did not melt and is still in its solid state. While the rocks have slightly adhered to the coupons, they are easily scraped off with a putty knife. Future testing of different strategies is needed.
Summary:	
Conclusion:	These methods were unsuccessful in soiling coupons with asphalt