CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2023
DateRun:	05/31/2023
Experimenters:	Amelia Wagner
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:	The convectional oven was preheated to 480 degrees F. Meanwhile, three stainless steel coupons were chosen. In the fume hood, dry asphalt rocks were set on each coupon. The coupons were then put in the oven and were baked overnight.
Results:	The rocks of asphalt did not melt onto the coupons overnight in the oven. They were still solid, and while they had adhered a little bit to the coupon, they were easily scraped off. It was later realized that heating asphalt to a temperature over 400 degrees F will not melt it, but burn off the rubber content within the asphalt, effectively drying out the asphalt rocks preventing them from melting. The melting point of asphalt is about 330 degrees farenheit.
Summary:	
Conclusion:	This strategy of soiling coupons with asphalt was unsuccessful. A future test of using the oven is needed at a lower temperature.