CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2015
DateRun:	10/27/2015
Experimenters:	Alicia Melvin
ClientType:	Cleaning Equipment Mfr
ProjectNumber:	Project #1
Substrates:	Liquid
PartType:	Coupon
Contaminants:	Greases, Food
Cleaning Methods:	
Analytical Methods:	Colorimeter
Purpose:	Soil Testing In Ozone Series

Experimental Procedure: Tersano claims that Series 1 can stabilize sanitation time for up to four hours and cleaning up to 3 days. The Series 2 is reported to stabilize sanitation time for up to 24 hours, cleaning time for up to 6 days. Series 1 is a common filter for janitorial settings. Four soils were selected to determine what happens to the ozone levels when soil is added to the water.

Results: Initials all started above 500 MVs for initial readings. With only 1 gram of soil, all samples except the Bathroom soap scum dropped between 300-200MV from the initial readings. The second gram of soil made the Bathroom soap scum drop 300MV down to near DI water levels. This soil had the most significant drop in ORP readings, and will be picked for further testing since it is the most common that janitorial staff will encounter in industrial settings.

Summary:

Conclusion: Tersano claims that Series 1 can stabilize sanitation time for up to four hours and cleaning up to 3 days. The Series 2 is reported to stabilize sanitation time for up to 24 hours, cleaning time for up to 6 days. Series 1 is a common filter for janitorial settings. Ozonated water was run from the lotus machine for 30 seconds before filling the clean 1000ml beaker for each test. Initial readings of the Oxidation Reduction Potential (ORP) meter were recorded and two minutes were set on the clock. A precut square from a microfiber towel was coated with 1 gram of the Bathroom soil. At the end of two minutes, the towel was submerged five times and wrung out like a mop. Every two minutes, another gram of Bathroom Soil was added to the microfiber towel.

Observations showed that with every gram of soil added to the towel that was submerged, the millivolts (MV) dropped dramatically and had lower levels than clean tap water or DI water after 10g of soil in the sample.