CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2015
DateRun:	10/26/2015
Experimenters:	Alicia Melvin
ClientType:	Cleaning Equipment Mfr
ProjectNumber:	Project #1
Substrates:	Liquid
PartType:	Coupon
Contaminants:	
Cleaning Methods:	
Analytical Methods:	Colorimeter
Purpose:	Stabilizer Module Series II
Experimental Procedure:	The TURI Lab recently completed an evaluation on the life span of a Series II Stabilzer unit. This model was the 800 gallon capacity unit. Based on the 750 grams capacity of stabilizers, the laboratory conducted a small scale version of the life expectancy. The capacity of the stabilizer was decreased 100x, resulting in 7.5 grams of stabilizer being used. Based on the reduction factor, the lab expected that the volume of water would be decreased on the same order, from 800 gallons to 8 gallons.
Results:	During the bench scale experimentation, initial pH levels were successfully decreased after the first gallon of water. However, the Lab found that the pH levels started to be elevated to a point where the unit would not provide water with the capacity to hold more ozone. Between 3 and 4 gallons was where this appeared to be the point of limiting returns of the pH reduction. Converting these results to the real world volume, this would equate to 300-400 gallons being passed through a Series II stabilizer unit, far below the expected 800 gallons. Temperature for the three runs was held fairly constant during each run: 22.4, 23.9 and 23.3 C. Series II stabilizer unit used in this experiment was not used for any of the other performance tests conducted at the TURI Lab. This was to ensure that the maximum capacity of a typical unit could be determined.
Summary:	
Conclusion:	Converting these results to the real world volume, this would equate to 300-400 gallons being passed through a Series II stabilizer unit, far below the expected 800 gallons.