

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016  
 DateRun: 10/13/2016  
 Experimenters: Nicholas Landberg, James Keats, Dan Aspach  
 ClientType: Maintenance Shop  
 ProjectNumber: Project #1  
 Substrates: Nickel, Steel  
 PartType: Part  
 Contaminants: Greases, Lubricating/Lapping Oils, Dirt  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Gravimetric, Visual  
 Purpose: Evaluate Troy Corp cleaners on supplied dirty chain

Experimental Procedure: An old bike chain was obtained and cut into 6 sections, each 20 links long. Then a rag was sprayed twice with the first cleaner. The chain was held with medium pressure in the now wet section of rag and dragged along it. It was dragged through a total of 4 times. This process was repeated for each cleaner being tested using a different section of rag for each. One chain was left uncleaned to be used as a control.

Cleaner	Initial weight	Cleaned weight	Removed weight
TO8867	54.6962	55.598	-0.9018
TO8868	55.7654	55.7531	0.0123
TO8869	55.3274	55.5319	-0.2045
TO8870	54.904	55.606	-0.702
TO8871	56.8373	56.9078	-0.0705

A significant number of the chains were heavier after cleaning. While the outside of the chains looked to be cleaner than the control, the insides of the chains seemed to be the same. Chain A and D seemed to be slightly shinier than the others.

Summary:	<b>Substrates:</b>	Nickel, Steel				
	<b>Contaminants:</b>	Greases, Lubricating/Lapping Oils, Dirt				
	<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
	Troy Corporation	Tetra T08867	1000		<input checked="" type="checkbox"/>	
	Troy Corporation	Tetra T08868	100		<input type="checkbox"/>	
	Troy Corporation	Tetra T08869	100		<input type="checkbox"/>	
	Troy Corporation	Tetra T08870	100		<input checked="" type="checkbox"/>	
	Troy Corporation	Tetra T08871	100		<input type="checkbox"/>	

Conclusion: Comparing the chains to the cleaners that are currently being used should provide a better basis for effectiveness comparison. Also, if possible, pictures of the "clean" chains at Freewheelers could be obtained to provide a better idea of what a clean chain should look like.