CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 10/12/2016

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.

Results:

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:

Substrates:	Nickel, Steel				
Contaminants:	Greases, Lubricating/Lapping Oils, Dirt				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Troy Corporation	Tetra T08867	1000	0.00	☑	
Troy Corporation	Tetra T08868	100	0.00	☐	
Troy Corporation	Tetra T08869	100	0.00	☐	
Troy Corporation	Tetra T08870	100	0.00	☑	
Troy Corporation	Tetra T08871	100	0.00	☐	

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.