

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016  
 DateRun: 12/12/2016  
 Experimenters: John Truong, James Keats  
 ClientType: Maintenance Shop  
 ProjectNumber: Project #1  
 Substrates: Aluminum  
 PartType: Coupon  
 Contaminants: Greases, Lubricating/Lapping Oils, Dirt  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Gravimetric  
 Purpose: Evaluate cleaners for bike cleaning

Experimental Procedure: Initial weights of the coupons were recorded. The coupons were then soiled with 1.6g of bike soil. Dirty weights were measured and they were placed in threes into the Manual SLW machine. The coupons and paper towel were both sprayed twice with the selected cleaner. 5 complete back and forth cycles were run and the coupons were then allowed to dry. Once dry, the clean weights were recorded. This process was repeated for each cleaner.

| Cleaner                    | Substrate               | Coupon # | Initial wt of cont. | Final wt of cont. | %Cont Removed |
|----------------------------|-------------------------|----------|---------------------|-------------------|---------------|
| Simple Green               | Painted Stainless Steel | 2        | 1.7134              | 0.0605            | 96.47         |
|                            |                         | 3        | 1.7686              | 0.0476            | 97.31         |
|                            |                         | 10       | 1.3045              | 0.0671            | 94.86         |
| WD-40 Bike Wash            | Painted Stainless Steel | 11       | 1.6266              | 0.1206            | 92.59         |
|                            |                         | 20       | 1.6056              | 0.0980            | 93.90         |
|                            |                         | 33       | 1.6566              | 0.0969            | 94.16         |
| Goo Gone Remover Spray Gel | Painted Stainless Steel | 49       | 1.9437              | 0.0644            | 96.69         |
|                            |                         | 60       | 2.0849              | 0.0488            | 97.66         |
|                            |                         | 121      | 1.9408              | 0.0550            | 97.17         |
| Water                      | Painted Stainless Steel | 1        | 2.0715              | 0.1378            | 93.35         |
|                            |                         | 6        | 2.0560              | 0.1105            | 94.63         |
|                            |                         | 7        | 2.1508              | 0.2301            | 89.30         |
| Finishline Super Bike Wash | Painted Stainless Steel | 9        | 1.9948              | 0.5843            | 70.71         |
|                            |                         | 13       | 1.9886              | 0.7817            | 60.69         |
|                            |                         | 51       | 1.8969              | 0.1223            | 93.55         |

Summary:

|                              |   |               |                    |                                     |                      |
|------------------------------|---|---------------|--------------------|-------------------------------------|----------------------|
| <b>Substrates:</b>           | Aluminum                                |               |                    |                                     |                      |
| <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> |
| Environmental Intelligence   | Simple Green Cleaner & Degreaser        | 100           | 96.21              | <input checked="" type="checkbox"/> |                      |
| WD 40 Company                | WD 40 Foaming Bike Wash                 | 100           | 92.42              | <input checked="" type="checkbox"/> |                      |
| Goo Gone                     | Goo Gone Original                       | 100           | 93.54              | <input checked="" type="checkbox"/> |                      |
| Finish Line Technologies Inc | Super Bike Wash Concentrate             | 100           | 97.17              | <input checked="" type="checkbox"/> |                      |
| Water                        | Water                                   | 100           | 74.98              | <input type="checkbox"/>            |                      |

Conclusion: The four products worked well on removing the bike soil.