



**Biological Consulting Services**  
of North Florida, Inc.

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March 31, 2013

Syd Williams  
GenEon Technologies  
16026 University Oak  
San Antonio, TX 78249

RE: Study report on the efficacy of the solution produced by the Trio unit of the inactivation of Murine Norovirus I.

Dear Mr. Williams,

We have conducted the efficacy testing on the solution produced by the provided Trio system. The testing was conducted as per the recommendations and methodology provided in AOAC Method 961.02 (AOAC Official Methods of Analysis; 2005), ASTM E1053 "Standard Test Method for Efficacy of Virucidal Agents Intended for Inanimate Environmental Surfaces," and ASTM E2111-00 "Standard Quantitative Carrier Test Method to Evaluate the Bactericidal, Fungicidal, Mycobactericidal and Sporocidal Potencies of Liquid Chemical Germicides." Based on the observed results, the generated solution exhibited excellent virucidal efficacy against Murine Norovirus. Murine Norovirus is used as a surrogate in disinfection studies for human Norovirus (Calicivirus).

In the following pages, you will find a summary of the methodology used and the results of our analysis. Should you have any questions or concerns, please do not hesitate to contact me.

Best Regards,

George Lukasik, Ph.D.  
Laboratory Director

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**Table 1. The virucidal efficacy of the liquid generated by the provided Trio unit against Murine Norovirus at various contact times. Test was conducted as per AOAC Official Method 961.02; Germicidal Spray Products as Disinfectants (2005) and ASTM E1053 “Standard Test Method for Efficacy of Virucidal Agents Intended for Inanimate Environmental Surfaces”**

Microorganism	Number of replicates tested	Contact Time (Minutes)	Control Slide Average Infectious Units (iu) /mL #	Average iu/mL Recovered From Each Sprayed Slide*	Average Percent Reduction	Log <sub>10</sub> reduction
Murine Norovirus MNV-1 (Human Norovirus Surrogate)	3	1	1.7 x 10 <sup>4</sup>	0.8	99.994%	4.2
				0.8		
				1.4		
Murine Norovirus MNV-1 (Human Norovirus Surrogate)	3	3	1.1 x 10 <sup>4</sup>	<0.2	>99.998%	>4.8
				<0.2		
				<0.2		
Murine Norovirus MNV-1 (Human Norovirus Surrogate)	3	10	1.4 x 10 <sup>4</sup>	<0.2	>99.999%	>5.0
				<0.2		
				<0.2		

# This number represents the average number of infectious virus particles (units) recovered from glass slides inoculated, dried, and not exposed to treatment (positive control). \* Glass slides were inoculated and allowed to dry. Slides were sprayed to saturation with the solution and allowed to incubate at 24±2°C for -, 1, 3, and 10 minutes; using 800 ppm Chlorine solution (FAC) Slides were eluted and enumerated for infectious viral particles on RAW 264.7 cell monolayers as described in the methodology section.