

# Proof of Concept Experiment: Annihilyte Elimination of COVID19 Virus on Contaminated Surfaces

Mako Medical, in partnership with Pure Aqua Solution LLC and Annihilare performed proof of concept testing of Annihilyte on the ability to eradicate COVID19 viral particles.

Mako Medical successfully demonstrated Annihilyte's ability to eliminate COVID19 viral particles through spraying application methods. The results of the experiment are described after a brief introduction to Annihilyte technology and Mako Medical's COVID19 testing.

### **About Annihilyte**

Annihilyte®, by Annihilare, is an EPA registered broad-spectrum tuberculocidal disinfectant. A very powerful disinfectant, while maintaining a neutral PH, it is safe around people and animals and is not harmful to surfaces. It appears on both the List K (cDiff) and List N (COVID 19) with the EPA. Annihilyte® is made by converting salt and water directly into Hypochlorous acid (HOCl), and is not derived from bleach (NaClO). Because of the neutral PH, Annihilyte® holds 76% of the chlorine gas in solution, allowing the free available chlorine (FAC) at 500 PPM to have more available HOCl than bleach based products. Not to mention, bleach based products are at 11 to 13 PH which is hazardous. Germs cannot become resistant to HOCl because of the neutral PH, so there is no need to monitor or 'rotate' the compound for optimal efficacy. A natural born killer of all pathogens, and over time, reverts back into water and salt making it environmentally friendly at the same time. As a noted point, HOCl is made in the human body to fight infection internally. Annihilyte® is GreenSeal® Certified GS-37 and GS-53

#### **About Mako Medical**

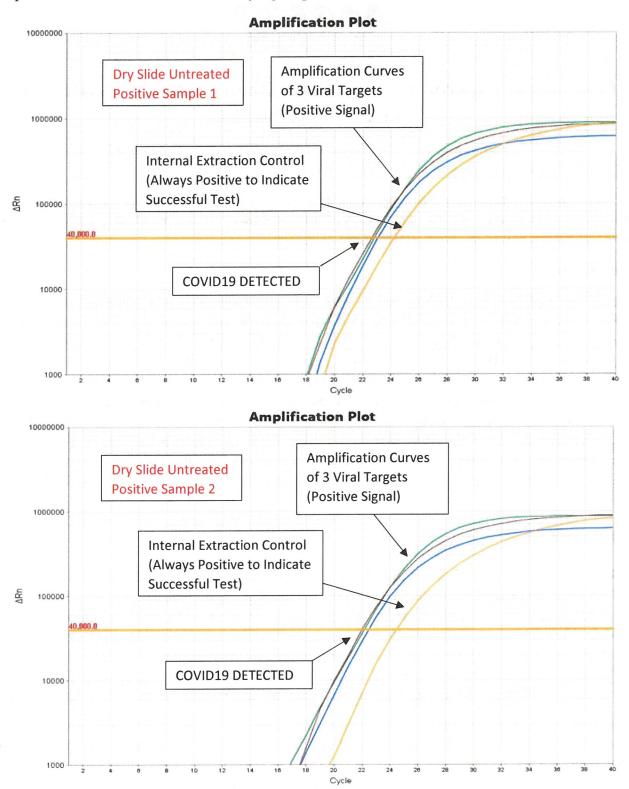
Mako Medical is a clinical diagnostic laboratory that performs COVID19 testing. Mako Medical utilizes RNA extraction and qPCR to detect COVID19 in nasopharyngeal swab samples in a clinical setting. Since the outbreak of COVID19, Mako Medical has processed and released thousands of COVID19 tests and results. Mako Medical utilizes ThermoFisher's Emergency Use Authorization (EUA) FDA-approved assay. Mako Medical has a Laboratory Developed Test (LDT) based on ThermoFisher's EUA workflow and submitted its own validated test to the FDA for EUA and was granted the ability to test patient samples based on the extensive in-house validation. Mako Medical has been performing COVID19 testing since April 3<sup>rd</sup>, 2020.

To determine the performance of Annihilyte against COVID19, Mako Medical performed the proof of concept testing as described. The experiment tested the direct spraying as well as backpack spraying action of Annihilyte.

## **Spraying Experiment**

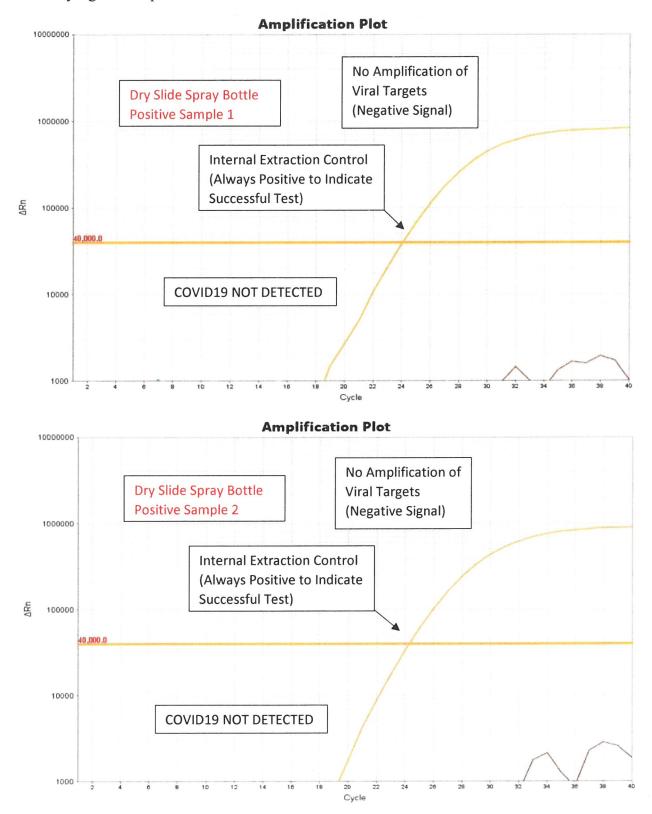
A Positive COVID19 sample, suspended in 0.45% saline transport solution, was smeared onto two glass slides. Slides were dried at 40°C for <5 minutes and the drying process of the glass slides was used to prepare

samples for the spray and aerosol experiments. To estimate the amount of viral material present in the smear, the untreated positive COVID19 samples were recaptured and processed through Mako Medical's COVID19 RNA extraction and qPCR process. There was minimal signal loss from the drying process. The amount of viral copies estimated to be on the dry slides is <10,000. Virus present at this amount would be representative of virus present in the environment. Summary figure presented below.

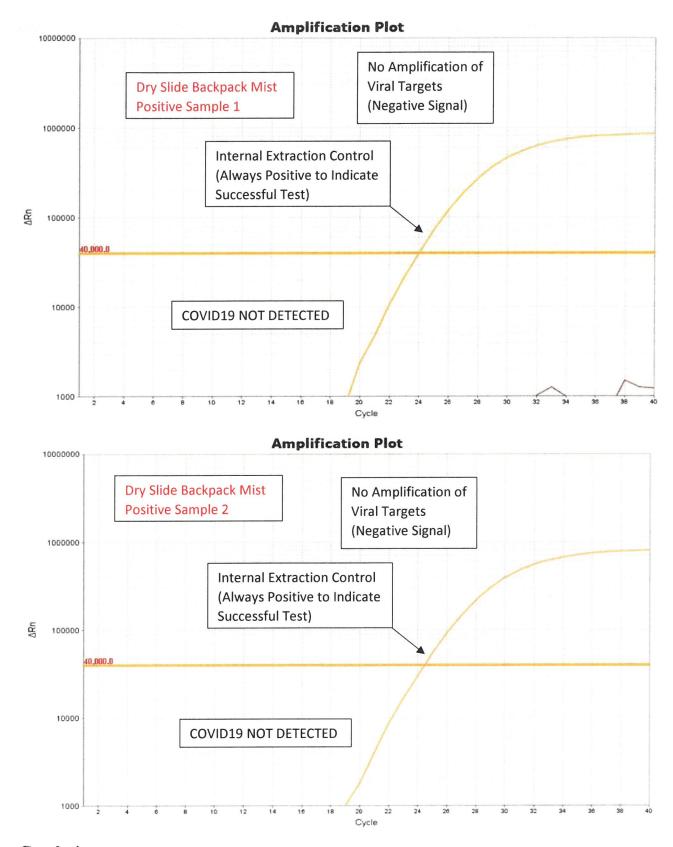


Dry slides processed at the same time of evaluation were also treated with Annihilyte. The first two samples were sprayed with a handheld spray bottle under a biosafety hood. Samples were recaptured by

suspension in 0.45% saline. Annihilyte disinfectant effectively eliminated the COVID19 virus at detectable levels. Summary figures are presented below.



The second two samples were sprayed with a backpack mister in a 12x8.5-foot enclosed room. Samples were recaptured by suspension in 0.45% saline. Annihilyte disinfectant effectively eliminated the COVID19 virus at detectable levels. Summary figures are presented below.



#### **Conclusion**

Mako Medical was able to successfully demonstrate that Annihilyte effectively eliminated COVID19 viral particles through both spray applications.

# **MAKO GENOMICS**

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