Testing Details
Testing for the presence and abundance of the SARS-CoV2 genome in the above samples was performed using a kit designed by the US Centers for Disease Control and Prevention (CDC 2019-Novel Coronavirus (2019-nCoV), Real-Time RT-PCR Diagnostic Panel). The test was used here to determine whether a detectable amount of viral genome was present. Each of the above samples were split and processed as two replicates. RNA was isolated from inactivated/concentrated replicates, reverse-transcribed to DNA and used as template in quantitative PCR reactions as per kit instructions. Duplicate CDC-designed tests were performed on each replicate to detect two distinct locations on the SARS-CoV2 genome (N1 and N2). Genome numbers were quantified using a standard curve of known copy numbers of N1 and N2 generated using the same PCR assay.

Wastewater surveillance for SARS-CoV2 is novel and a developing technology, so results must be taken with consideration. Virus levels may fluctuate due to flow rates, flow volumes, and other factors. Absence of viral signal may not mean complete absence of virus in the community, although presence of viral signal certainly means presence of virus in the community at the time of sampling. Comparisons among sampling sites (e.g. between municipalities) is not recommended. Archer Biologicals, LLC is not responsible for misinterpretation of the presented data. For more information, visit our website: www.archerbiologicals.com/wastewatersurveillance