

Pease Wastewater Treatment Facility SARS-CoV-2 Biomarker Results Summary

Report Date: September 17, 2022

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Dates Sampled for this Monitoring Period:

Wednesday, September 14, 2022*
Wednesday, September 7, 2022
Wednesday, August 31, 2022
Wednesday, August 24, 2022
Wednesday, August 17, 2022
Wednesday, August 10, 2022
Wednesday, August 3, 2022
Wednesday, July 27, 2022
Wednesday, July 20, 2022
Wednesday, July 13, 2022
Wednesday, July 6, 2022

*New samples since last report

Method: A 24-hour composite sample was taken on the date shown above. This sample was preprocessed and extracted using a solids separation, Ceres Nanoscience viral concentration, and Kingfisher extraction approach. Two viral markers (N1 and N2) were quantified via Bio-Rad QX200 ddPCR.

Results: Both SARS-CoV-2 N1 and N2 viral biomarkers were detected (LOD=172 copies/100 ml) for this sample at the levels reported in Table 1. The range of SARS-CoV-2 viral biomarker values for all wastewater facilities participating in the NH surveillance program this week are shown in Figure 1.

Table 1: Sample date and biomarker results. "BDL" represents values below the quantified limits of instrument detection of 172 copies/100 mL wastewater.

Sample Date	SARS-CoV-2 Biomarkers	
	N1 copies/100mL	N2 copies/100mL
09/14/2022*	BDL	BDL
09/07/2022	238	179
08/31/2022	609	755
08/24/2022	BDL	BDL
08/17/2022	369	447
08/10/2022	209	273
08/03/2022	253	404
07/27/2022	311	407

07/20/2022	652	711
07/13/2022	BDL	201
07/06/2022	214	205

*New samples since last report

For more detailed information regarding local, county, and statewide COVID-19 infections, please refer to the data reported through the New Hampshire Division of Health and Human Services website <https://www.covid19.nh.gov/dashboard>.

Since June 6, 2022, the minimum values for SARS-CoV-2 measured in New Hampshire were below analytical detection limits (BDL) while the maximum reported N1 and N2 values across reporting facilities have been 12,332 and 12,703 copies/100 ml wastewater, respectively. For the 15 participating facilities the week of August 29, the maximum values measured are 12,332 and 12,703 copies/100 ml wastewater for N1 and N2, respectively.

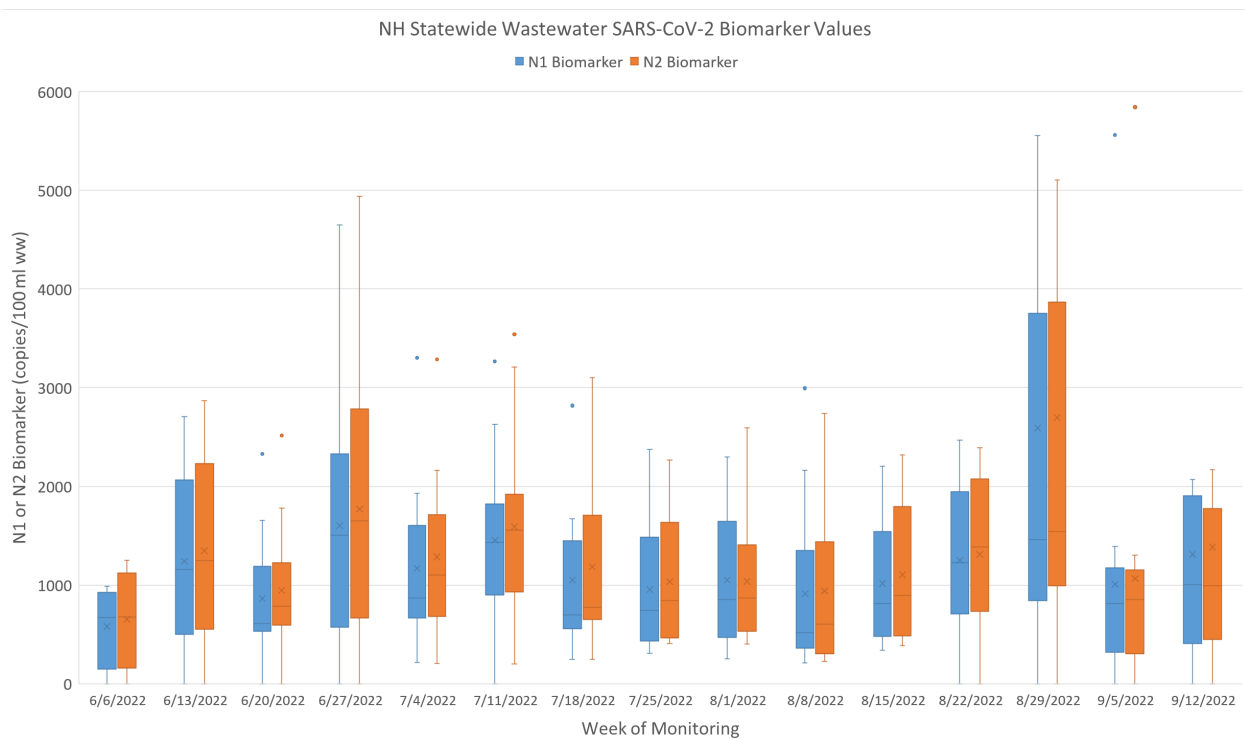


Figure 1. Range of SARS-CoV-2 biomarker values measured at participating wastewater facilities since the NH wastewater surveillance program began in early June 2022.