



**2020 North American Proficiency Testing Program
Quarter 2 Water Report - Friday, July 3, 2020**

**Laboratory ID
General**

Water Analysis	Units	n	Water 2020-304			Water 2020-305			Water 2020-306		
			Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}
Bulk Properties											
pH		27	8.04	0.150		7.95	0.130		8.09	0.090	
EC	dS/m	25	0.440	0.020		0.090	0.003		0.250	0.010	
Cations											
Ca	mmolc/L	25	2.21	0.120		0.606	0.043		1.73	0.070	
Mg	mmolc/L	25	1.48	0.060		0.128	0.008		0.650	0.022	
Na	mmolc/L	25	0.830	0.030		0.120	0.007		0.235	0.014	
K	mmolc/L	24	0.100	0.006		0.016	0.004		0.030	0.001	
NH4-N	mmolc/L	10									
Sum Cations	mmolc/L	11	4.78	0.190		0.890	0.070		2.71	0.100	
SAR		12	0.600	0.006		0.190	0.010		0.210	0.010	
Adj-SAR		6	0.930	0.230		0.110	0.010		0.260	0.060	
Anions											
HCO3	mmolc/L	17	3.50	0.204		0.770	0.030		2.10	0.064	
CO3	mmolc/L	9									
Cl	mmolc/L	22	0.624	0.035		0.030	0.004		0.082	0.016	
NO3	mmolc/L	20	0.097	0.006		0.005	0.001		0.010	0.001	
SO4	mmolc/L	21	0.281	0.013		0.060	0.006		0.410	0.014	
Sum Anions	mmolc/L	11	4.62	0.220		0.860	0.027		2.70	0.168	
Cation-Anion Difference		6	0.290	0.248		0.030	0.034		0.145	0.152	
Other											
Boron	mg/L	14	0.040	0.004		0.006	0.001		0.026	0.002	
PO4-P Phosphorus - Spec	mg/L	5	0.070	0.007		0.020	0.005		0.020		
Phosphorus - ICP (Total)	mg/L	10	0.098	0.024		0.020	0.019		0.011	0.006	
TKN	mg/L	2	0.284	0.116		0.050	0.050		0.130	0.070	
Nitrogen Combustion (Total)	mg/L	1	1.28								
Total Organic Carbon	mg/L	3	3.00	0.100		2.00	0.400		2.00	0.200	

1 - Values flagged exceed Warning Limits " * " 2.5 x MAD (Median Absolute Deviation) and Control Limits " ** " 4 x MAD.

2 - Limits not compared to lab data for methods with less than 7 labs reporting.