



2022 North American Proficiency Testing Program
 Quarter 1 Water Report - Tuesday, April 19, 2022

Laboratory ID
 General

Water			Water 2022-301			Water 2022-302			Water 2022-303		
Analysis	Units	n	Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}
Bulk Properties											
pH		29	8.12	0.100		7.84	0.110		8.30	0.100	
EC	ds/m	26	0.493	0.017		0.084	0.004		0.440	0.020	
Cations											
Ca	mmolc/L	27	1.68	0.060		0.410	0.027		2.94	0.170	
Mg	mmolc/L	27	1.88	0.070		0.160	0.010		1.60	0.070	
Na	mmolc/L	27	1.57	0.045		0.153	0.008		0.340	0.010	
K	mmolc/L	26	0.135	0.030		0.047	0.007		0.046	0.007	
NH4-N	mmolc/L	7	0.010	0.009		0.008	0.005		0.006	0.005	
Sum Cations	mmolc/L	13	5.30	0.141		0.797	0.017		4.96	0.180	
SAR		13	1.16	0.030		0.290	0.010		0.230	0.010	
Adj-SAR		4	2.24	0.205		0.150	0.010		0.482	0.024	
Anions											
HCO3	mmolc/L	19	3.93	0.070		0.600	0.019		4.20	0.300	
CO3	mmolc/L	6	0.152	0.152		0.000	0.000		0.282	0.036	
Cl	mmolc/L	23	0.244	0.036		0.139	0.026		0.252	0.029	
NO3	mmolc/L	23	0.281	0.016		0.010	0.001		0.010	0.002	
SO4	mmolc/L	23	0.635	0.054		0.060	0.008		0.180	0.022	
Sum Anions	mmolc/L	12	5.06	0.105		0.864	0.080		4.71	0.145	
Cation-Anion Difference		9	0.193	0.036		0.020	0.000		0.203	0.041	
Other											
Boron	mg/L	14	0.030	0.005		0.030	0.005		0.020	0.003	
PO4-P Phosphorus - Spec	mg/L	3	0.031	0.002		0.005	0.003		0.015	0.004	
Phosphorus - ICP (Total)	mg/L	7	0.029	0.019		0.010	0.005		0.016	0.006	
TKN	mg/L					0.198	0.102		0.174	0.026	
Nitrogen Combustion (Total)	mg/L	2	3.64	0.440		0.212	0.012		0.236	0.036	
Total Organic Carbon	mg/L	3	2.20	0.080		1.40	0.130		2.99	0.190	

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.