



## 2020 North American Proficiency Testing Program Quarter 1 Water Report - Tuesday, May 12, 2020

Laboratory ID  
**General**

Water Analysis	Units	<i>n</i>	Water 2020-301			Water 2020-302			Water 2020-303		
			Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>
<b>Bulk Properties</b>											
pH		30	8.12	0.125		7.65	0.150		8.40	0.099	
EC	dS/m	30	0.460	0.012		0.225	0.009		0.650	0.019	
<b>Cations</b>											
Ca	mmolc/L	30	2.62	0.120		1.10	0.038		1.57	0.065	
Mg	mmolc/L	30	0.953	0.035		0.500	0.010		5.62	0.176	
Na	mmolc/L	30	1.32	0.045		0.576	0.026		0.550	0.020	
K	mmolc/L	29	0.360	0.013		0.030	0.000		0.010	0.001	
NH4-N	mmolc/L	9	0.000	0.000		0.000	0.000		0.000	0.000	
Sum Cations	mmolc/L	15	5.36	0.150		2.23	0.070		7.89	0.490	
SAR		17	0.980	0.020		0.640	0.020		0.300	0.010	
Adj-SAR		7	1.20	0.720		0.600	0.280		0.300	0.230	
<b>Anions</b>											
HCO3	mmolc/L	22	4.52	0.200		2.02	0.111		6.08	0.360	
CO3	mmolc/L	12	0.000	0.000		0.000	0.000		0.777	0.169	
Cl	mmolc/L	25	0.073	0.013		0.062	0.012		0.420	0.025	
NO3	mmolc/L	24	0.012	0.002		0.160	0.010		0.010	0.000	
SO4	mmolc/L	24	0.291	0.024		0.082	0.008		0.568	0.036	
Sum Anions	mmolc/L	14	5.07	0.150		2.36	0.120		7.50	0.429	
Cation-Anion Difference		9	0.300	0.063		0.075	0.014		0.648	0.140	
<b>Other</b>											
Boron	mg/L	19	0.044	0.010		0.010	0.002		0.049	0.009	
PO4-P Phosphorus - Spec	mg/L	8	0.070	0.016		0.008	0.000		0.013	0.001	
Phosphorus - ICP (Total)	mg/L	13	0.107	0.014		0.034	0.007		0.026	0.004	
TKN	mg/L	4	1.43	0.085		0.030	0.030		0.075	0.035	
Nitrogen Combustion (Total)	mg/L										
Total Organic Carbon	mg/L	4	19.6	1.16		1.11	0.063		1.83	0.022	

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.