



**2021 North American Proficiency Testing Program
Quarter 2 Water Report - Tuesday, July 27, 2021**

**Laboratory ID
General**

Water Analysis	Units	n	Water 2021-304			Water 2021-305			Water 2021-306		
			Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}
Bulk Properties											
pH		32	8.00	<i>0.100</i>		8.10	<i>0.090</i>		8.04	<i>0.099</i>	
EC	dS/m	29	0.280	<i>0.010</i>		0.720	<i>0.040</i>		0.200	<i>0.010</i>	
Cations											
Ca	mmolc/L	30	2.30	<i>0.080</i>		3.44	<i>0.178</i>		1.46	<i>0.052</i>	
Mg	mmolc/L	30	0.415	<i>0.015</i>		3.62	<i>0.136</i>		0.542	<i>0.025</i>	
Na	mmolc/L	30	0.210	<i>0.010</i>		1.04	<i>0.035</i>		0.110	<i>0.008</i>	
K	mmolc/L	27	0.033	<i>0.003</i>		0.074	<i>0.004</i>		0.020	<i>0.003</i>	
NH4-N	mmolc/L	4	0.014	<i>0.005</i>		0.007	<i>0.004</i>		0.005	<i>0.003</i>	
Sum Cations	mmolc/L	13	2.97	<i>0.110</i>		8.12	<i>0.254</i>		2.16	<i>0.069</i>	
SAR		14	0.199	<i>0.019</i>		0.570	<i>0.020</i>		0.110	<i>0.010</i>	
Adj-SAR		5	0.280	<i>0.050</i>		1.25	<i>0.307</i>		0.150	<i>0.030</i>	
Anions											
HCO3	mmolc/L	21	2.16	<i>0.148</i>		5.95	<i>0.508</i>		1.85	<i>0.145</i>	
CO3	mmolc/L	6	0.140	<i>0.140</i>		0.533	<i>0.080</i>		0.090	<i>0.090</i>	
Cl	mmolc/L	20	0.056	<i>0.012</i>		0.774	<i>0.052</i>		0.094	<i>0.023</i>	
NO3	mmolc/L	19	0.006	<i>0.001</i>		0.071	<i>0.009</i>		0.031	<i>0.007</i>	
SO4	mmolc/L	25	0.680	<i>0.030</i>		0.946	<i>0.052</i>		0.070	<i>0.009</i>	
Sum Anions	mmolc/L	12	2.96	<i>0.079</i>		8.35	<i>0.266</i>		2.10	<i>0.184</i>	
Cation-Anion Difference		6	-0.039	<i>0.074</i>		0.371	<i>0.398</i>		0.009	<i>0.202</i>	
Other											
Boron	mg/L	16	0.020	<i>0.003</i>		0.068	<i>0.006</i>		0.010	<i>0.001</i>	
PO4-P Phosphorus - Spec	mg/L	6	0.014	<i>0.006</i>		0.012	<i>0.006</i>		0.035	<i>0.009</i>	
Phosphorus - ICP (Total)	mg/L	9	0.009	<i>0.001</i>		0.009	<i>0.001</i>		0.034	<i>0.007</i>	
TKN	mg/L	1	0.300	<i>0.000</i>		0.300	<i>0.000</i>		0.300	<i>0.000</i>	
Nitrogen Combustion (Total)	mg/L	1	0.018	<i>0.000</i>		0.126	<i>0.000</i>		0.061	<i>0.000</i>	
Total Organic Carbon	mg/L	5	2.89	<i>0.152</i>		1.88	<i>0.181</i>		3.54	<i>0.240</i>	

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.