



**2017 North American Proficiency Testing Program
1st Quarter Report - April 14, 2017**

Laboratory ID
general

Water Analysis	Units	n	Water 2017-301			Water 2017-302			Water 2017-303		
			Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}
pH		29	7.73	<i>0.130</i>		8.07	<i>0.070</i>		6.58	<i>0.160</i>	
EC	dS/m	29	0.155	<i>0.006</i>		0.665	<i>0.020</i>		0.190	<i>0.004</i>	
Cations											
Ca	mmolc/L	28	0.891	<i>0.037</i>		2.76	<i>0.070</i>		0.690	<i>0.032</i>	
Mg	mmolc/L	28	0.410	<i>0.020</i>		2.38	<i>0.103</i>		0.346	<i>0.017</i>	
Na	mmolc/L	28	0.240	<i>0.010</i>		1.69	<i>0.063</i>		0.470	<i>0.010</i>	
K	mmolc/L	28	0.030	<i>0.002</i>		0.044	<i>0.006</i>		0.064	<i>0.006</i>	
NH4-N	mmolc/L	10	0.000	<i>0.000</i>		0.000	<i>0.000</i>		0.000	<i>0.000</i>	
Sum Cations	mmolc/L	13	1.55	<i>0.060</i>		6.84	<i>0.297</i>		1.55	<i>0.060</i>	
SAR		13	0.300	<i>0.010</i>		1.06	<i>0.020</i>		0.650	<i>0.020</i>	
Adj-SAR		5	0.340	<i>0.050</i>		2.30	<i>0.010</i>		0.090	<i>0.050</i>	
Anions											
HCO3	mmolc/L	22	1.21	<i>0.040</i>		3.70	<i>0.300</i>		0.162	<i>0.022</i>	
CO3	mmolc/L	13	0.000	<i>0.000</i>		0.433	<i>0.078</i>		0.000	<i>0.000</i>	
Cl	mmolc/L	26	0.083	<i>0.010</i>		2.43	<i>0.110</i>		0.366	<i>0.029</i>	
NO3	mmolc/L	24	0.014	<i>0.002</i>		0.170	<i>0.020</i>		0.983	<i>0.079</i>	
SO4	mmolc/L	25	0.258	<i>0.018</i>		0.340	<i>0.026</i>		0.010	<i>0.002</i>	
Sum Anions	mmolc/L	13	1.55	<i>0.050</i>		6.70	<i>0.205</i>		1.55	<i>0.056</i>	
Cation-Anion Difference		6	0.030	<i>0.030</i>		0.160	<i>0.250</i>		0.020	<i>0.020</i>	
Other											
Boron	mg/L	18	0.013	<i>0.003</i>		0.010	<i>0.002</i>		0.007	<i>0.002</i>	
PO4-P Phosphorus - Spec	mg/L	6	0.020	<i>0.010</i>		0.530	<i>0.020</i>		0.020	<i>0.013</i>	
Phosphorus - ICP (Total)	mg/L	13	0.015	<i>0.002</i>		0.500	<i>0.030</i>		0.010	<i>0.003</i>	
TKN	mg/L	6	0.060	<i>0.000</i>		0.070	<i>0.000</i>		1.03	<i>0.000</i>	
Nitrogen Combustion (Total)	mg/L	2	0.258	<i>0.000</i>		2.73	<i>0.000</i>		16.0	<i>0.000</i>	
Total Organic Carbon	mg/L	4	1.35	<i>0.005</i>		0.121	<i>0.121</i>		0.025	<i>0.025</i>	

1 - Values flagged exceed Warning Limits " * " 2.5 x MAD (Median Absolute Deviation) and Control Limits " *** " 4 x MAD. " < " and "ND" values not recorded.

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