



2017 North American Proficiency Testing Program
2nd Quarter Report - July 11, 2017

Laboratory ID
general

Water Analysis	Units	n	Water 2017-304			Water 2017-305			Water 2017-306		
			Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}
pH		28	8.10	0.105		8.20	0.095		7.50	0.115	
EC	dS/m	28	0.709	0.021		0.467	0.013		0.160	0.002	
Cations											
Ca	mmolc/L	27	4.00	0.220		2.40	0.090		0.770	0.041	
Mg	mmolc/L	27	2.03	0.120		1.42	0.072		0.471	0.031	
Na	mmolc/L	27	1.30	0.050		1.03	0.060		0.261	0.017	
K	mmolc/L	26	0.118	0.008		0.104	0.006		0.040	0.003	
NH4-N	mmolc/L	7	0.000	0.000		0.000	0.000		0.000	0.000	
Sum Cations	mmolc/L	10	7.42	0.130		4.87	0.160		1.47	0.032	
SAR		11	0.750	0.020		0.740	0.040		0.340	0.030	
Adj-SAR		5	1.70	0.040		1.40	0.070		0.300	0.010	
Anions											
HCO3	mmolc/L	19	4.96	0.240		3.12	0.175		0.859	0.069	
CO3	mmolc/L	9	0.730	0.126		0.560	0.113		0.000	0.000	
Cl	mmolc/L	22	1.81	0.107		0.717	0.037		0.293	0.028	
NO3	mmolc/L	23	0.197	0.016		0.031	0.004		0.190	0.018	
SO4	mmolc/L	21	0.315	0.028		0.920	0.043		0.176	0.012	
Sum Anions	mmolc/L	10	7.45	0.178		4.95	0.215		1.57	0.160	
Cation-Anion Difference		5	0.260	0.120		0.081	0.021		0.090	0.070	
Other											
Boron	mg/L	17	0.030	0.005		0.085	0.013		0.009	0.002	
PO4-P Phosphorus - Spec	mg/L	5	0.040	0.010		0.030	0.002		0.030	0.010	
Phosphorus - ICP (Total)	mg/L	9	0.025	0.003		0.029	0.003		0.020	0.002	
TKN	mg/L	4	0.246	0.100		0.100	0.070		0.257	0.065	
Nitrogen Combustion (Total)	mg/L	1	3.09	0.000		0.509	0.000		3.08	0.000	
Total Organic Carbon	mg/L	3	1.89	0.107		1.44	0.404		1.38	0.068	

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.