



**2014 North American Proficiency Testing Program
2nd Quarter Report - July 15, 2014**

Laboratory ID
general

Water Analysis	Units	n	Water 2014-304			Water 2014-305			Water 2014-306		
			Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}
pH		29	7.85	0.160		8.15	0.120		8.14	0.090	
EC	dS/m	28	0.470	0.010		1.36	0.040		0.784	0.018	
Cations											
Ca	mmol/L	28	2.30	0.105		4.75	0.190		3.87	0.250	
Mg	mmol/L	28	0.820	0.045		7.26	0.529		4.22	0.320	
Na	mmol/L	28	1.46	0.090		4.06	0.197		0.835	0.045	
K	mmol/L	27	0.130	0.010		0.140	0.012		0.070	0.010	
NH4-N	mmol/L	12	0.003	0.003		0.006	0.006		0.001	0.001	
Sum Cations	mmol/L	14	4.73	0.215		16.2	0.745		8.96	0.375	
SAR		12	1.19	0.070		1.63	0.050		0.410	0.012	
Adj-SAR		6	1.96	0.050		3.33	0.330		0.850	0.060	
Anions											
HCO3	mmol/L	18	2.16	0.131		2.23	0.207		2.76	0.220	
CO3	mmol/L	11	0.000	0.000		0.000	0.000		0.000	0.000	
Cl	mmol/L	24	1.07	0.056		0.570	0.040		0.590	0.031	
NO3	mmol/L	24	0.065	0.014		0.040	0.008		0.110	0.020	
SO4	mmol/L	23	1.31	0.070		13.1	1.13		5.12	0.390	
Sum Anions	mmol/L	11	4.77	0.230		16.1	0.650		8.80	0.350	
Cation-Anion Difference		6	0.290	0.160		0.835	0.550		0.240	0.140	
Other											
Boron	mg/L	19	0.090	0.010		0.257	0.025		0.079	0.019	
PO4-P Phosphorus - Spec	mg/L	5	0.080	0.050		0.055	0.005		0.075	0.054	
Phosphorus - ICP (Total)	mg/L	12	0.030	0.005		0.110	0.020		0.031	0.006	
TKN	mg/L	6	0.425	0.425		0.575	0.128		0.370	0.370	
Nitrogen Combustion (Total)	mg/L	3	0.917	0.017		0.800	0.286		1.49	0.137	
Total Organic Carbon	mg/L	3	0.126	0.126		7.22	0.148		0.252	0.252	

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.