



**2015 North American Proficiency Testing Program
2nd Quarter Report - July 13, 2015**

Laboratory ID
general

Water Analysis	Units	n	Water 2015-304			Water 2015-305			Water 2015-306		
			Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}
pH		36	7.65	<i>0.155</i>		7.79	<i>0.115</i>		7.89	<i>0.096</i>	
EC	dS/m	34	0.570	<i>0.015</i>		0.520	<i>0.019</i>		0.280	<i>0.010</i>	
Cations											
Ca	mmolc/L	34	1.43	<i>0.058</i>		3.40	<i>0.155</i>		1.61	<i>0.128</i>	
Mg	mmolc/L	34	1.36	<i>0.076</i>		1.19	<i>0.082</i>		0.604	<i>0.049</i>	
Na	mmolc/L	34	2.55	<i>0.190</i>		0.950	<i>0.070</i>		0.550	<i>0.035</i>	
K	mmolc/L	33	0.210	<i>0.012</i>		0.022	<i>0.005</i>		0.066	<i>0.006</i>	
NH4-N	mmolc/L	14	0.004	<i>0.001</i>		0.000	<i>0.000</i>		0.001	<i>0.001</i>	
Sum Cations	mmolc/L	18	5.59	<i>0.243</i>		5.51	<i>0.249</i>		2.82	<i>0.287</i>	
SAR		17	2.15	<i>0.120</i>		0.610	<i>0.020</i>		0.500	<i>0.025</i>	
Adj-SAR		7	3.50	<i>0.300</i>		1.30	<i>0.050</i>		0.760	<i>0.040</i>	
Anions											
HCO3	mmolc/L	26	2.39	<i>0.170</i>		3.48	<i>0.250</i>		1.62	<i>0.115</i>	
CO3	mmolc/L	12	0.000	<i>0.000</i>		0.000	<i>0.000</i>		0.000	<i>0.000</i>	
Cl	mmolc/L	29	1.50	<i>0.060</i>		0.567	<i>0.047</i>		0.170	<i>0.040</i>	
NO3	mmolc/L	27	0.024	<i>0.003</i>		0.020	<i>0.003</i>		0.011	<i>0.002</i>	
SO4	mmolc/L	30	1.63	<i>0.075</i>		1.38	<i>0.081</i>		1.00	<i>0.056</i>	
Sum Anions	mmolc/L	14	5.55	<i>0.150</i>		5.62	<i>0.369</i>		2.78	<i>0.182</i>	
Cation-Anion Difference		10	0.145	<i>0.179</i>		0.150	<i>0.215</i>		0.155	<i>0.039</i>	
Other											
Boron	mg/L	25	0.129	<i>0.009</i>		0.020	<i>0.004</i>		0.025	<i>0.004</i>	
PO4-P Phosphorus - Spec	mg/L	7	0.082	<i>0.016</i>		0.010	<i>0.004</i>		0.017	<i>0.004</i>	
Phosphorus - ICP (Total)	mg/L	16	0.100	<i>0.020</i>		0.000	<i>0.010</i>		0.010	<i>0.010</i>	
TKN	mg/L	3	0.800	<i>0.350</i>		0.100	<i>0.100</i>		0.100	<i>0.100</i>	
Nitrogen Combustion (Total)	mg/L	2	0.562	<i>0.262</i>		0.398	<i>0.102</i>		0.792	<i>0.608</i>	
Total Organic Carbon	mg/L	4	7.93	<i>0.325</i>		1.00	<i>0.010</i>		1.89	<i>0.505</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.