



**2011 North American Proficiency Testing Program
3rd Quarter Report -November 7, 2011**

**Laboratory ID
general**

Water	Water 2011-307				Water 2011-308			Water 2011-309			
Analysis	Units	n	Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}
pH		31	8.00	<i>0.120</i>		7.89	<i>0.090</i>		7.76	<i>0.155</i>	
EC	dS/m	28	0.485	<i>0.015</i>		0.270	<i>0.010</i>		1.00	<i>0.030</i>	
Cations											
Ca	mmolc/L	29	2.73	<i>0.120</i>		1.76	<i>0.090</i>		4.10	<i>0.150</i>	
Mg	mmolc/L	29	1.86	<i>0.090</i>		0.770	<i>0.047</i>		2.29	<i>0.095</i>	
Na	mmolc/L	27	0.460	<i>0.027</i>		0.180	<i>0.010</i>		3.79	<i>0.193</i>	
K	mmolc/L	28	0.070	<i>0.010</i>		0.100	<i>0.010</i>		0.282	<i>0.015</i>	
NH4-N	mmolc/L	16	0.003	<i>0.000</i>		0.001	<i>0.000</i>		0.001	<i>0.000</i>	
Sum Cations	mmolc/L	18	5.18	<i>0.155</i>		2.83	<i>0.141</i>		10.5	<i>0.424</i>	
SAR		20	0.305	<i>0.015</i>		0.160	<i>0.030</i>		2.13	<i>0.140</i>	
Adj-SAR		7	0.590	<i>0.080</i>		0.230	<i>0.030</i>		3.87	<i>0.310</i>	
Anions											
HCO3	mmolc/L	20	3.49	<i>0.085</i>		1.96	<i>0.066</i>		2.91	<i>0.090</i>	
CO3	mmolc/L	13	0.000	<i>0.000</i>		0.000	<i>0.000</i>		0.000	<i>0.000</i>	
Cl	mmolc/L	25	0.530	<i>0.050</i>		0.171	<i>0.026</i>		1.85	<i>0.049</i>	
NO3	mmolc/L	30	0.267	<i>0.027</i>		0.279	<i>0.062</i>		0.029	<i>0.003</i>	
SO4	mmolc/L	21	0.690	<i>0.036</i>		0.250	<i>0.020</i>		5.70	<i>0.228</i>	
Sum Anions	mmolc/L	15	5.01	<i>0.160</i>		2.68	<i>0.120</i>		10.4	<i>0.405</i>	
Cation-Anion Difference		11	0.136	<i>0.164</i>		0.290	<i>0.240</i>		0.330	<i>0.330</i>	
Other											
Boron	mg/L	16	0.030	<i>0.010</i>		0.021	<i>0.002</i>		0.135	<i>0.013</i>	
PO4-P Phosphorus - Spec	mg/L	9	0.124	<i>0.024</i>		0.180	<i>0.058</i>		0.090	<i>0.009</i>	
Phosphorus - ICP (Total)	mg/L	18	0.129	<i>0.029</i>		0.177	<i>0.033</i>		0.094	<i>0.016</i>	
TKN	mg/L	6	0.556	<i>0.056</i>		0.575	<i>0.057</i>		0.500	<i>0.050</i>	
Nitrogen Combustion (Total)	mg/L										
Total Organic Carbon	mg/L	3	5.26	<i>0.112</i>		5.26	<i>0.382</i>		4.05	<i>0.678</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.