



**2010 North American Proficiency Testing Program
4th Quarter Report - January 26, 2011**

Laboratory ID
General

Water Analysis	Units	n	Water 2010-310			Water 2010-311			Water 2010-312		
			Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}	Median	MAD	Lab^{1,2}
pH		27	8.30	<i>0.100</i>		7.31	<i>0.210</i>		8.07	<i>0.123</i>	
EC	dS/m	24	0.804	<i>0.022</i>		2.510	<i>0.075</i>		0.460	<i>0.012</i>	
Cations											
Ca	mmolc/L	23	2.750	<i>0.110</i>		18.03	<i>0.565</i>		2.86	<i>0.118</i>	
Mg	mmolc/L	24	3.265	<i>0.142</i>		6.01	<i>0.240</i>		1.192	<i>0.060</i>	
Na	mmolc/L	23	2.353	<i>0.112</i>		6.260	<i>0.260</i>		0.620	<i>0.030</i>	
K	mmolc/L	22	0.210	<i>0.009</i>		0.803	<i>0.044</i>		0.072	<i>0.006</i>	
NH4-N	mmolc/L	9	0.000	<i>0.000</i>		0.000	<i>0.005</i>		0.000	<i>0.000</i>	
Sum Cations	mmolc/L	16	8.61	<i>0.227</i>		31.70	<i>0.793</i>		4.86	<i>0.166</i>	
SAR		14	1.32	<i>0.054</i>		1.798	<i>0.072</i>		0.435	<i>0.035</i>	
Adj-SAR		7	2.790	<i>0.210</i>		5.100	<i>0.300</i>		0.80	<i>0.060</i>	
Anions											
HCO3	mmolc/L	19	5.200	<i>0.200</i>		11.32	<i>0.522</i>		3.13	<i>0.110</i>	
CO3	mmolc/L	15	0.174	<i>0.174</i>		0.000	<i>0.000</i>		0.000	<i>0.000</i>	
Cl	mmolc/L	22	1.892	<i>0.050</i>		3.695	<i>0.140</i>		0.58	<i>0.030</i>	
NO3	mmolc/L	25	0.025	<i>0.015</i>		0.012	<i>0.008</i>		0.025	<i>0.015</i>	
SO4	mmolc/L	19	1.248	<i>0.055</i>		16.841	<i>0.625</i>		0.970	<i>0.030</i>	
Sum Anions	mmolc/L	14	8.51	<i>0.300</i>		31.68	<i>1.352</i>		4.72	<i>0.209</i>	
Cation-Anion Difference		25	0.000	<i>0.081</i>		0.000	<i>0.362</i>		0.000	<i>0.155</i>	
Boron	mg/L	19	0.105	<i>0.007</i>		0.863	<i>0.043</i>		0.048	<i>0.005</i>	
PO4-P Phosphorus - Spec	mg/L	7	0.106	<i>0.033</i>		0.044	<i>0.146</i>		0.040	<i>0.017</i>	
Phosphorus - ICP (Total)	mg/L	14	0.116	<i>0.025</i>		0.010	<i>0.010</i>		0.020	<i>0.007</i>	
TKN	mg/L	5	0.97	<i>0.270</i>		0.300	<i>0.300</i>		0.400	<i>0.335</i>	
Nitrogen Combustion (Total)	mg/L	1	0.72	<i>0.000</i>		0.241	<i>0.000</i>		0.513	<i>0.000</i>	
Total Organic Carbon	mg/L	3	4.3	<i>0.431</i>		18.80	<i>0.000</i>		2.69	<i>0.306</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.