



**2008 North American Proficiency Testing Program  
4th Quarter Report - November 28, 2008**

Laboratory ID

Water Analysis	Units	n	Water 2008-310			Water 2008-311			Water 2008-312		
			Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>
pH		36	8.61	0.150		8.04	0.115		7.95	0.135	
EC	dS/m	34	0.76	0.138		1.84	0.074		1.02	0.040	
<b>Cations</b>											
Ca	mmol/L	33	1.61	0.085		4.82	0.190		3.860	0.154	
Mg	mmol/L	33	3.93	0.163		4.52	0.180		2.37	0.094	
Na	mmol/L	33	2.33	0.110		8.83	0.414		3.75	0.178	
K	mmol/L	31	0.145	0.005		0.462	0.024		0.080	0.010	
NH4-N	mmol/L	17	0.003	0.003		0.000	0.000		0.000	0.000	
Sum Cations	mmol/L	14	8.14	0.286		18.5	0.740		10.2	0.405	
SAR		16	1.40	0.056		4.15	0.165		2.14	0.103	
Adj-SAR		6	2.95	0.150		9.10	0.900		4.27	0.170	
<b>Anions</b>											
HCO3	mmol/L	21	3.78	0.221		4.22	0.230		3.21	0.128	
CO3	mmol/L	17	0.600	0.350		0.000	0.025		0.000	0.000	
Cl	mmol/L	24	2.83	0.115		8.17	0.325		4.86	0.194	
NO3	mmol/L	31	0.005	0.005		0.440	0.065		0.020	0.010	
SO4	mmol/L	25	0.800	0.046		5.70	0.275		1.97	0.090	
Sum Anions	mmol/L	15	7.90	0.466		18.5	0.74		10.1	0.35	
Cation-Anion Difference		43	0.00	0.000		0.00	0.000		0.00	0.000	
Boron	mg/L	20	0.078	0.025		0.326	0.023		0.058	0.010	
PO4-P Phosphorus - Spec	mg/L	5	0.020	0.006		1.040	0.041		0.020	0.020	
Phosphorus - ICP (Total)	mg/L	16	0.021	0.021		1.042	0.077		0.014	0.014	
TKN	mg/L	6	0.475	0.140		2.90	2.365		0.310	0.110	
Nitrogen Combustion (Total)	mg/L	1	0.513	0.020		6.93	0.000		0.386	0.015	
Total Organic Carbon	mg/L	5	5.70	0.260		4.77	0.200		2.13	0.419	

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.