



**2006 North American Proficiency Testing Program**  
**4<sup>th</sup> Quarter Report - January 20, 2007**

Laboratory ID

Water		Water 2006-310				Water 2006-311				Water 2006-312			
Analysis	Units	n	Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>		
pH		47	<b>8.09</b>	0.090		<b>8.16</b>	0.100		<b>7.97</b>	0.157			
EC	dS/m	45	<b>0.83</b>	0.033		<b>0.54</b>	0.023		<b>0.54</b>	0.030			
<b>Cations</b>													
Ca	mmolc/L	42	<b>2.26</b>	0.182		<b>3.12</b>	0.210		<b>3.02</b>	0.420			
Mg	mmolc/L	42	<b>1.71</b>	0.130		<b>1.72</b>	0.115		<b>2.19</b>	0.170			
Na	mmolc/L	41	<b>3.87</b>	0.199		<b>0.85</b>	0.046		<b>0.65</b>	0.036			
K	mmolc/L	40	<b>0.20</b>	0.010		<b>0.07</b>	0.008		<b>0.16</b>	0.011			
NH4-N	mmolc/L	20	<b>0.00</b>	0.005		<b>0.00</b>	0.005		<b>0.00</b>	0.005			
Sum Cations	mmolc/L	22	<b>8.07</b>	0.510		<b>5.72</b>	0.290		<b>5.86</b>	0.575			
SAR		23	<b>2.70</b>	0.100		<b>0.54</b>	0.040		<b>0.40</b>	0.030			
Adj-SAR		9	<b>5.03</b>	0.331		<b>1.08</b>	0.045		<b>0.86</b>	0.077			
<b>Anions</b>													
HCO3	mmolc/L	26	<b>2.99</b>	0.260		<b>3.56</b>	0.270		<b>4.90</b>	0.507			
CO3	mmolc/L	17	<b>0.03</b>	0.030		<b>0.04</b>	0.040		<b>0.00</b>	0.010			
Cl	mmolc/L	34	<b>4.04</b>	0.187		<b>0.74</b>	0.060		<b>0.24</b>	0.023			
NO3	mmolc/L	41	<b>0.01</b>	0.008		<b>0.01</b>	0.003		<b>0.22</b>	0.022			
SO4	mmolc/L	32	<b>0.69</b>	0.037		<b>1.25</b>	0.050		<b>0.21</b>	0.021			
Sum Anions	mmolc/L	20	<b>8.00</b>	0.330		<b>5.65</b>	0.240		<b>5.78</b>	0.397			
Cation-Anion Difference			<b>0.00</b>	0.000		<b>0.00</b>	0.000		<b>0.00</b>	0.000			
Boron	mg/L	28	<b>0.08</b>	0.015		<b>0.03</b>	0.015		<b>0.04</b>	0.010			
PO4-P Phosphorus - Spec	mg/L	16	<b>0.03</b>	0.005		<b>0.05</b>	0.036		<b>0.01</b>	0.009			
Phosphorus - ICP (Total)	mg/L	17	<b>0.04</b>	0.011		<b>0.04</b>	0.018		<b>0.03</b>	0.022			
TKN	mg/L	5	<b>0.44</b>	0.134		<b>0.15</b>	0.140		<b>0.15</b>	0.088			
Nitrogen Combustion (Total)	mg/L	3	<b>0.40</b>	0.021		<b>0.20</b>	0.035		<b>3.23</b>	0.100			
Total Organic Carbon	mg/L	4	<b>3.83</b>	0.465		<b>1.05</b>	0.045		<b>1.16</b>	0.741			

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.