



**2008 North American Proficiency Testing Program  
2nd Quarter Report - July 5, 2008**

Laboratory ID

Water Analysis	Units	n	Water 2008-304			Water 2008-305			Water 2008-306		
			Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>
<b>pH</b>		30	<b>7.62</b>	<i>0.115</i>		<b>8.20</b>	<i>0.105</i>		<b>7.50</b>	<i>0.155</i>	
<b>EC</b>	dS/m	28	<b>0.99</b>	<i>0.138</i>		<b>0.48</b>	<i>0.019</i>		<b>15.5</b>	<i>0.745</i>	
<b>Cations</b>											
<b>Ca</b>	mmolc/L	30	<b>5.60</b>	<i>0.342</i>		<b>2.46</b>	<i>0.077</i>		<b>21.5</b>	<i>1.445</i>	
<b>Mg</b>	mmolc/L	30	<b>4.84</b>	<i>0.216</i>		<b>1.39</b>	<i>0.060</i>		<b>1.06</b>	<i>0.090</i>	
<b>Na</b>	mmolc/L	29	<b>0.740</b>	<i>0.040</i>		<b>1.05</b>	<i>0.040</i>		<b>118</b>	<i>11.3</i>	
<b>K</b>	mmolc/L	28	<b>0.062</b>	<i>0.011</i>		<b>0.061</b>	<i>0.009</i>		<b>10.3</b>	<i>0.902</i>	
<b>NH4-N</b>	mmolc/L	12	<b>0.001</b>	<i>0.001</i>		<b>0.001</b>	<i>0.001</i>		<b>0.112</b>	<i>0.010</i>	
<b>Sum Cations</b>	mmolc/L	16	<b>11.2</b>	<i>0.44</i>		<b>5.08</b>	<i>0.18</i>		<b>156</b>	<i>7.5</i>	
<b>SAR</b>		16	<b>0.32</b>	<i>0.012</i>		<b>0.77</b>	<i>0.051</i>		<b>35.4</b>	<i>3.94</i>	
<b>Adj-SAR</b>		8	<b>0.83</b>	<i>0.055</i>		<b>1.39</b>	<i>0.090</i>		<b>63.2</b>	<i>5.30</i>	
<b>Anions</b>											
<b>HCO3</b>	mmolc/L	20	<b>8.45</b>	<i>0.221</i>		<b>3.04</b>	<i>0.150</i>		<b>1.58</b>	<i>0.089</i>	
<b>CO3</b>	mmolc/L	15	<b>0.00</b>	<i>0.000</i>		<b>0.07</b>	<i>0.070</i>		<b>0.00</b>	<i>0.000</i>	
<b>Cl</b>	mmolc/L	25	<b>0.120</b>	<i>0.030</i>		<b>1.44</b>	<i>0.060</i>		<b>152</b>	<i>6.5</i>	
<b>NO3</b>	mmolc/L	30	<b>0.030</b>	<i>0.015</i>		<b>0.080</b>	<i>0.020</i>		<b>0.016</b>	<i>0.016</i>	
<b>SO4</b>	mmolc/L	24	<b>2.83</b>	<i>0.145</i>		<b>0.245</b>	<i>0.029</i>		<b>1.725</b>	<i>0.205</i>	
<b>Sum Anions</b>	mmolc/L	16	<b>11.4</b>	<i>0.27</i>		<b>4.86</b>	<i>0.233</i>		<b>159</b>	<i>7.0</i>	
<b>Cation-Anion Difference</b>		41	<b>-0.15</b>			<b>0.22</b>			<b>-2.39</b>		
<b>Boron</b>	mg/L	22	<b>0.110</b>	<i>0.011</i>		<b>0.020</b>	<i>0.010</i>		<b>1.825</b>	<i>0.125</i>	
<b>PO4-P Phosphorus - Spec</b>	mg/L	5	<b>0.015</b>	<i>0.015</i>		<b>0.023</b>	<i>0.023</i>		<b>0.002</b>	<i>0.002</i>	
<b>Phosphorus - ICP (Total)</b>	mg/L	15	<b>0.001</b>	<i>0.001</i>		<b>0.030</b>	<i>0.022</i>		<b>0.026</b>	<i>0.026</i>	
<b>TKN</b>	mg/L	5	<b>0.426</b>	<i>0.236</i>		<b>0.643</b>	<i>0.357</i>		<b>1.600</b>	<i>0.520</i>	
<b>Nitrogen Combustion (Total)</b>	mg/L	1	<b>0.463</b>	<i>0.000</i>		<b>1.340</b>	<i>0.000</i>		<b>1.740</b>	<i>0.000</i>	
<b>Total Organic Carbon</b>	mg/L	3	<b>1.863</b>	<i>0.313</i>		<b>1.576</b>	<i>0.153</i>		<b>0.510</b>	<i>0.251</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.