



**2012 North American Proficiency Testing Program  
2nd Quarter Report - July 9, 2012**

Laboratory ID  
**general**

<b>Water Analysis</b>	<b>Units</b>	<b>n</b>	<b>Water 2012-304</b>			<b>Water 2012-305</b>			<b>Water 2012-306</b>		
			<b>Median</b>	<b>MAD</b>	<b>Lab<sup>1,2</sup></b>	<b>Median</b>	<b>MAD</b>	<b>Lab<sup>1,2</sup></b>	<b>Median</b>	<b>MAD</b>	<b>Lab<sup>1,2</sup></b>
<b>pH</b>		30	<b>8.28</b>	<i>0.075</i>		<b>8.00</b>	<i>0.100</i>		<b>7.97</b>	<i>0.100</i>	
<b>EC</b>	dS/m	28	<b>4.41</b>	<i>0.110</i>		<b>0.504</b>	<i>0.009</i>		<b>0.488</b>	<i>0.008</i>	
<b>Cations</b>											
<b>Ca</b>	mmolc/L	29	<b>2.49</b>	<i>0.128</i>		<b>2.53</b>	<i>0.085</i>		<b>2.74</b>	<i>0.125</i>	
<b>Mg</b>	mmolc/L	29	<b>9.83</b>	<i>0.600</i>		<b>1.95</b>	<i>0.090</i>		<b>1.89</b>	<i>0.087</i>	
<b>Na</b>	mmolc/L	28	<b>28.6</b>	<i>2.67</i>		<b>0.830</b>	<i>0.040</i>		<b>0.490</b>	<i>0.030</i>	
<b>K</b>	mmolc/L	29	<b>1.21</b>	<i>0.170</i>		<b>0.110</b>	<i>0.010</i>		<b>0.070</b>	<i>0.010</i>	
<b>NH4-N</b>	mmolc/L	11	<b>0.011</b>	<i>0.003</i>		<b>0.000</b>	<i>0.000</i>		<b>0.000</b>	<i>0.000</i>	
<b>Sum Cations</b>	mmolc/L	15	<b>42.1</b>	<i>2.73</i>		<b>5.38</b>	<i>0.213</i>		<b>5.11</b>	<i>0.182</i>	
<b>SAR</b>		17	<b>11.6</b>	<i>1.44</i>		<b>0.565</b>	<i>0.030</i>		<b>0.325</b>	<i>0.025</i>	
<b>Adj-SAR</b>		9	<b>27.2</b>	<i>5.47</i>		<b>0.870</b>	<i>0.071</i>		<b>0.555</b>	<i>0.085</i>	
<b>Anions</b>											
<b>HCO3</b>	mmolc/L	18	<b>10.2</b>	<i>0.535</i>		<b>4.38</b>	<i>0.130</i>		<b>3.49</b>	<i>0.080</i>	
<b>CO3</b>	mmolc/L	12	<b>0.000</b>	<i>0.000</i>		<b>0.000</b>	<i>0.000</i>		<b>0.000</b>	<i>0.000</i>	
<b>Cl</b>	mmolc/L	24	<b>31.5</b>	<i>1.40</i>		<b>0.540</b>	<i>0.060</i>		<b>0.536</b>	<i>0.046</i>	
<b>NO3</b>	mmolc/L	26	<b>0.040</b>	<i>0.010</i>		<b>0.020</b>	<i>0.005</i>		<b>0.272</b>	<i>0.020</i>	
<b>SO4</b>	mmolc/L	21	<b>2.49</b>	<i>0.160</i>		<b>0.445</b>	<i>0.025</i>		<b>0.698</b>	<i>0.028</i>	
<b>Sum Anions</b>	mmolc/L	15	<b>44.9</b>	<i>1.09</i>		<b>5.43</b>	<i>0.160</i>		<b>5.09</b>	<i>0.130</i>	
<b>Cation-Anion Difference</b>		10	<b>0.223</b>	<i>1.48</i>		<b>0.018</b>	<i>0.088</i>		<b>0.089</b>	<i>0.069</i>	
<b>Boron</b>	mg/L	20	<b>0.500</b>	<i>0.047</i>		<b>0.050</b>	<i>0.010</i>		<b>0.032</b>	<i>0.007</i>	
<b>PO4-P Phosphorus - Spec</b>	mg/L	6	<b>0.129</b>	<i>0.010</i>		<b>0.035</b>	<i>0.007</i>		<b>0.121</b>	<i>0.029</i>	
<b>Phosphorus - ICP (Total)</b>	mg/L	17	<b>0.140</b>	<i>0.035</i>		<b>0.029</b>	<i>0.007</i>		<b>0.100</b>	<i>0.025</i>	
<b>TKN</b>	mg/L	4	<b>1.45</b>	<i>0.109</i>		<b>0.076</b>	<i>0.000</i>		<b>0.352</b>	<i>0.034</i>	
<b>Nitrogen Combustion (Total)</b>	mg/L	1	<b>2.18</b>	<i>0.000</i>		<b>0.327</b>	<i>0.000</i>		<b>4.44</b>	<i>0.000</i>	
<b>Total Organic Carbon</b>	mg/L	3	<b>16.5</b>	<i>0.981</i>		<b>0.835</b>	<i>0.166</i>		<b>4.73</b>	<i>0.322</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.