



**2013 North American Proficiency Testing Program  
3rd Quarter Report - October 9, 2013**

Laboratory ID  
**general**

<b>Water Analysis</b>	<b>Units</b>	<b>n</b>	<b>Water 2013-307</b>			<b>Water 2013-308</b>			<b>Water 2013-309</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>		27	<b>8.00</b>	<i>0.110</i>		<b>7.87</b>	<i>0.130</i>		<b>8.14</b>	<i>0.110</i>	
<b>EC</b>	dS/m	25	<b>0.990</b>	<i>0.020</i>		<b>1.08</b>	<i>0.028</i>		<b>0.831</b>	<i>0.019</i>	
<b>Cations</b>											
<b>Ca</b>	mmolc/L	26	<b>2.79</b>	<i>0.160</i>		<b>6.11</b>	<i>0.310</i>		<b>4.06</b>	<i>0.150</i>	
<b>Mg</b>	mmolc/L	26	<b>2.44</b>	<i>0.150</i>		<b>5.76</b>	<i>0.465</i>		<b>2.81</b>	<i>0.240</i>	
<b>Na</b>	mmolc/L	26	<b>4.60</b>	<i>0.207</i>		<b>0.68</b>	<i>0.049</i>		<b>2.01</b>	<i>0.095</i>	
<b>K</b>	mmolc/L	26	<b>0.300</b>	<i>0.020</i>		<b>0.080</b>	<i>0.010</i>		<b>0.100</b>	<i>0.003</i>	
<b>NH4-N</b>	mmolc/L	5	<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>Sum Cations</b>	mmolc/L	14	<b>9.99</b>	<i>0.480</i>		<b>12.4</b>	<i>0.760</i>		<b>8.74</b>	<i>0.460</i>	
<b>SAR</b>		16	<b>2.81</b>	<i>0.155</i>		<b>0.290</b>	<i>0.015</i>		<b>1.12</b>	<i>0.035</i>	
<b>Adj-SAR</b>		6	<b>5.65</b>	<i>0.115</i>		<b>0.670</b>	<i>0.045</i>		<b>2.33</b>	<i>0.045</i>	
<b>Anions</b>											
<b>HCO3</b>	mmolc/L	18	<b>4.24</b>	<i>0.165</i>		<b>4.75</b>	<i>0.205</i>		<b>3.41</b>	<i>0.150</i>	
<b>CO3</b>	mmolc/L	2	<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	21	<b>1.89</b>	<i>0.080</i>		<b>0.620</b>	<i>0.060</i>		<b>1.35</b>	<i>0.070</i>	
<b>NO3</b>	mmolc/L	22	<b>0.023</b>	<i>0.002</i>		<b>0.280</b>	<i>0.024</i>		<b>0.020</b>	<i>0.003</i>	
<b>SO4</b>	mmolc/L	21	<b>4.15</b>	<i>0.130</i>		<b>7.05</b>	<i>0.320</i>		<b>4.21</b>	<i>0.160</i>	
<b>Sum Anions</b>	mmolc/L	11	<b>10.2</b>	<i>0.360</i>		<b>12.7</b>	<i>0.306</i>		<b>9.01</b>	<i>0.310</i>	
<b>Cation-Anion Difference</b>		7	<b>0.172</b>	<i>0.477</i>		<b>0.094</b>	<i>0.729</i>		<b>0.120</b>	<i>0.410</i>	
<b>Other</b>											
<b>Boron</b>	mg/L	19	<b>0.343</b>	<i>0.017</i>		<b>0.047</b>	<i>0.007</i>		<b>0.090</b>	<i>0.020</i>	
<b>PO4-P Phosphorus - Spec</b>	mg/L	5	<b>0.042</b>	<i>0.042</i>		<b>0.030</b>	<i>0.030</i>		<b>0.020</b>	<i>0.020</i>	
<b>Phosphorus - ICP (Total)</b>	mg/L	15	<b>0.030</b>	<i>0.006</i>		<b>0.010</b>	<i>0.005</i>		<b>0.030</b>	<i>0.005</i>	
<b>TKN</b>	mg/L	5	<b>0.300</b>	<i>0.300</i>		<b>0.200</b>	<i>0.200</i>		<b>0.100</b>	<i>0.100</i>	
<b>Nitrogen Combustion (Total)</b>	mg/L	2	<b>0.683</b>	<i>0.337</i>		<b>4.415</b>	<i>0.575</i>		<b>0.670</b>	<i>0.391</i>	
<b>Total Organic Carbon</b>	mg/L	2	<b>0.240</b>	<i>0.240</i>		<b>0.491</b>	<i>0.491</i>		<b>1.580</b>	<i>0.003</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.