



**2017 North American Proficiency Testing Program  
3rd Quarter Report - October 11, 2017**

Laboratory ID  
**general**

Water Analysis	Units	n	Water 2017-307			Water 2017-308			Water 2017-309		
			Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>
pH		28	<b>8.00</b>	<i>0.100</i>		<b>8.22</b>	<i>0.120</i>		<b>7.96</b>	<i>0.085</i>	
EC	dS/m	26	<b>0.598</b>	<i>0.018</i>		<b>0.399</b>	<i>0.012</i>		<b>0.788</b>	<i>0.031</i>	
<b>Cations</b>											
Ca	mmolc/L	26	<b>3.82</b>	<i>0.176</i>		<b>2.55</b>	<i>0.090</i>		<b>4.61</b>	<i>0.170</i>	
Mg	mmolc/L	26	<b>2.58</b>	<i>0.115</i>		<b>1.76</b>	<i>0.091</i>		<b>4.21</b>	<i>0.210</i>	
Na	mmolc/L	27	<b>0.244</b>	<i>0.014</i>		<b>0.230</b>	<i>0.010</i>		<b>0.350</b>	<i>0.010</i>	
K	mmolc/L	25	<b>0.013</b>	<i>0.002</i>		<b>0.020</b>	<i>0.003</i>		<b>0.014</b>	<i>0.002</i>	
NH4-N	mmolc/L	7	<b>0.001</b>	<i>0.001</i>		<b>0.007</b>	<i>0.001</i>		<b>0.000</b>	<i>0.000</i>	
Sum Cations	mmolc/L	11	<b>6.83</b>	<i>0.326</i>		<b>4.63</b>	<i>0.161</i>		<b>9.38</b>	<i>0.405</i>	
SAR		14	<b>0.140</b>	<i>0.009</i>		<b>0.150</b>	<i>0.010</i>		<b>0.170</b>	<i>0.010</i>	
Adj-SAR		4	<b>0.300</b>	<i>0.005</i>		<b>0.300</b>	<i>0.010</i>		<b>0.400</b>	<i>0.005</i>	
<b>Anions</b>											
HCO3	mmolc/L	21	<b>5.12</b>	<i>0.155</i>		<b>3.70</b>	<i>0.230</i>		<b>6.77</b>	<i>0.180</i>	
CO3	mmolc/L	11	<b>0.000</b>	<i>0.000</i>		<b>0.490</b>	<i>0.109</i>		<b>0.000</b>	<i>0.000</i>	
Cl	mmolc/L	25	<b>0.390</b>	<i>0.028</i>		<b>0.177</b>	<i>0.023</i>		<b>0.764</b>	<i>0.054</i>	
NO3	mmolc/L	26	<b>0.699</b>	<i>0.057</i>		<b>0.010</b>	<i>0.002</i>		<b>0.720</b>	<i>0.070</i>	
SO4	mmolc/L	22	<b>0.301</b>	<i>0.022</i>		<b>0.410</b>	<i>0.030</i>		<b>0.531</b>	<i>0.051</i>	
Sum Anions	mmolc/L	11	<b>6.62</b>	<i>0.237</i>		<b>4.42</b>	<i>0.223</i>		<b>8.92</b>	<i>0.290</i>	
Cation-Anion Difference		7	<b>0.250</b>	<i>0.250</i>		<b>0.452</b>	<i>0.238</i>		<b>0.487</b>	<i>0.377</i>	
<b>Other</b>											
Boron	mg/L	14	<b>0.018</b>	<i>0.002</i>		<b>0.012</b>	<i>0.001</i>		<b>0.023</b>	<i>0.006</i>	
PO4-P Phosphorus - Spec	mg/L	6	<b>0.044</b>	<i>0.008</i>		<b>0.020</b>	<i>0.015</i>		<b>0.042</b>	<i>0.008</i>	
Phosphorus - ICP (Total)	mg/L	11	<b>0.050</b>	<i>0.008</i>		<b>0.021</b>	<i>0.002</i>		<b>0.030</b>	<i>0.004</i>	
TKN	mg/L	5	<b>0.200</b>	<i>0.106</i>		<b>0.154</b>	<i>0.093</i>		<b>0.338</b>	<i>0.138</i>	
Nitrogen Combustion (Total)	mg/L										
Total Organic Carbon	mg/L	2	<b>1.08</b>	<i>0.165</i>		<b>0.788</b>	<i>0.028</i>		<b>1.49</b>	<i>0.046</i>	