



**2022 North American Proficiency Testing Program  
Quarter 2 Water Report - 7/12/2023**

Laboratory ID  
**General**

<b>Water</b>		<b>Water 2023-304</b>			<b>Water 2023-305</b>			<b>Water 2023-306</b>			
<b>Analysis</b>	<b>Units</b>	<b>n</b>	<b>Median</b>	<b>MAD</b>	<b>Lab Result</b>	<b>Median</b>	<b>MAD</b>	<b>Lab Result</b>	<b>Median</b>	<b>MAD</b>	<b>Lab Result</b>
<b>pH &amp; EC</b>											
<b>pH</b>		28	<b>8.00</b>	0.16		<b>8.34</b>	0.17		<b>7.64</b>	0.16	
<b>EC</b>	dS/m	28	<b>0.49</b>	0.025		<b>0.57</b>	0.020		<b>0.11</b>	0.020	
<b>Cations</b>											
<b>Ca</b>	mmolc/L	25	<b>3.48</b>	0.21		<b>3.24</b>	0.12		<b>0.66</b>	0.030	
<b>Mg</b>	mmolc/L	25	<b>1.50</b>	0.060		<b>2.52</b>	0.14		<b>0.22</b>	0.020	
<b>Na</b>	mmolc/L	24	<b>0.43</b>	0.020		<b>0.47</b>	0.020		<b>0.16</b>	0.020	
<b>K</b>	mmolc/L	22	<b>0.033</b>	0.020		<b>0.058</b>	0.020		<b>0.030</b>	0.020	
<b>NH4-N</b>	mmolc/L	5	<b>0.003</b>	N/A		<b>0.003</b>	N/A		<b>0.003</b>	N/A	
<b>Sum Cations</b>	mmolc/L	11	<b>5.50</b>	0.11		<b>6.41</b>	0.35		<b>1.05</b>	0.070	
<b>SAR</b>	---	12	<b>0.27</b>	0.020		<b>0.27</b>	0.020		<b>0.24</b>	0.020	
<b>Adj-SAR</b>	---	5	<b>0.55</b>	N/A		<b>0.59</b>	N/A		<b>0.18</b>	N/A	
<b>Anions</b>											
<b>HCO3</b>	mmolc/L	17	<b>4.51</b>	0.21		<b>4.64</b>	0.21		<b>0.80</b>	0.040	
<b>CO3</b>	mmolc/L	4	<b>0.15</b>	N/A		<b>0.21</b>	0.14		<b>0.00</b>	N/A	
<b>Cl</b>	mmolc/L	19	<b>0.14</b>	0.020		<b>0.46</b>	0.050		<b>0.098</b>	0.028	
<b>NO3</b>	mmolc/L	13	<b>0.004</b>	0.020		<b>0.030</b>	0.020		<b>0.011</b>	0.020	
<b>SO4</b>	mmolc/L	20	<b>0.81</b>	0.037		<b>1.02</b>	0.043		<b>0.17</b>	0.020	
<b>Sum Anions</b>	mmolc/L	10	<b>5.47</b>	0.11		<b>5.97</b>	0.55		<b>1.06</b>	0.075	
<b>Cation-Anion Difference</b>	---	8	<b>0.15</b>	0.12		<b>0.29</b>	0.21		<b>0.12</b>	0.070	
<b>Miscellaneous</b>											
<b>Boron</b>	mg/L	13	<b>0.020</b>	0.020		<b>0.020</b>	0.020		<b>0.008</b>	0.020	
<b>PO4-P Phosphorus - Spec</b>	mg/L	4	<b>0.010</b>	N/A		<b>0.021</b>	N/A		<b>0.016</b>	N/A	
<b>Phosphorus - ICP (Total)</b>	mg/L	4	<b>0.009</b>	N/A		<b>0.020</b>	N/A		<b>0.013</b>	N/A	
<b>TKN</b>	mg/L	3	<b>0.41</b>	N/A		<b>1.00</b>	N/A		<b>0.67</b>	N/A	
<b>Nitrogen Combustion (Total)</b>	mg/L	1	<b>0.022</b>	N/A		<b>0.53</b>	N/A		<b>0.27</b>	N/A	
<b>Total Organic Carbon</b>	mg/L	3	<b>1.00</b>	N/A		<b>3.30</b>	N/A		<b>3.03</b>	N/A	