2022 North American Proficiency Testing Program
Quarter 4 Water Report - 1/17/2023

Laboratory ID
General

Water			Water 2022-310			Water 2022-311			Water 2022-312		
Analysis	**Units**	***n***	**Median**	**MAD**	**Lab Result**	**Median**	**MAD**	**Lab Result**	**Median**	**MAD**	**Lab Result**
pH & EC											
pH		26	**8.10**	0.16		**8.03**	0.16		**8.30**	0.17	
EC	dS/m	24	**1.18**	0.030		**0.27**	0.020		**0.55**	0.020	
Cations											
Ca	mmolc/L	22	**3.70**	0.16		**2.30**	0.12		**3.15**	0.17	
Mg	mmolc/L	24	**2.53**	0.10		**0.27**	0.020		**1.41**	0.094	
Na	mmolc/L	22	**5.31**	0.19		**0.19**	0.020		**1.15**	0.030	
K	mmolc/L	21	**0.076**	0.020		**0.050**	0.020		**0.052**	0.020	
NH4-N	mmolc/L	4	**0.010**	N/A		**0.006**	N/A		**0.008**	N/A	
Sum Cations	mmolc/L	10	**11.4**	0.29		**2.70**	0.14		**5.75**	0.22	
SAR	---	10	**2.99**	0.060		**0.17**	0.020		**0.76**	0.020	
Adj-SAR	---	5	**6.13**	N/A		**0.27**	N/A		**1.62**	N/A	
Anions											
HCO3	mmolc/L	16	**4.10**	0.13		**2.26**	0.060		**3.79**	0.20	
CO3	mmolc/L	4	**0.075**	N/A		**0.025**	N/A		**0.20**	N/A	
Cl	mmolc/L	21	**6.08**	0.24		**0.039**	0.024		**1.35**	0.100	
NO3	mmolc/L	13	**0.030**	0.020		**0.005**	0.020		**0.016**	0.020	
SO4	mmolc/L	15	**1.38**	0.050		**0.51**	0.031		**0.48**	0.020	
Sum Anions	mmolc/L	10	**11.4**	0.67		**2.80**	0.13		**5.69**	0.23	
Cation-Anion Difference	---	6	**0.30**	0.27		**0.060**	0.049		**0.16**	N/A	
Miscellaneous											
Boron	mg/L	14	**0.044**	0.020		**0.011**	0.020		**0.026**	0.020	
PO4-P Phosphorus - Spec	mg/L	3	**0.080**	N/A		**0.044**	N/A		**0.052**	N/A	
Phosphorus - ICP (Total)	mg/L	4	**0.043**	N/A		**0.017**	N/A		**0.038**	N/A	
TKN	mg/L	2	**350.0**	N/A		**150.0**	N/A		**300.0**	N/A	
Nitrogen Combustion (Total)	mg/L	1	**0.69**	N/A					**0.35**	N/A	
Total Organic Carbon	mg/L	2	**5.69**	N/A		**0.41**	N/A		**3.21**	N/A	