2016 North American Proficiency Testing Program
1st Quarter Report - April 11, 2016

Laboratory ID
general

Water			Water 2016-301			Water 2016-302			Water 2016-303		
Analysis	**Units**	***n***	**Median**	***MAD***	**Lab[1,2]**	**Median**	***MAD***	**Lab[1,2]**	**Median**	***MAD***	**Lab[1,2]**
pH		29	**8.01**	*0.110*		**7.90**	*0.120*		**7.36**	*0.210*	
EC	dS/m	29	**0.749**	*0.017*		**0.830**	*0.031*		**0.070**	*0.007*	
Cations											
Ca	mmolc/L	28	**2.89**	*0.090*		**5.07**	*0.153*		**0.370**	*0.020*	
Mg	mmolc/L	28	**1.23**	*0.065*		**1.58**	*0.075*		**0.047**	*0.007*	
Na	mmolc/L	28	**3.14**	*0.133*		**2.35**	*0.140*		**0.205**	*0.015*	
K	mmolc/L	28	**0.101**	*0.009*		**0.080**	*0.010*		**0.017**	*0.002*	
NH4-N	mmolc/L	10	**0.000**	*0.000*		**0.000**	*0.000*		**0.000**	*0.000*	
Sum Cations	mmolc/L	13	**7.27**	*0.180*		**9.03**	*0.261*		**0.620**	*0.050*	
SAR		13	**2.20**	*0.039*		**1.27**	*0.040*		**0.440**	*0.030*	
Adj-SAR		5	**4.10**	*0.070*		**2.95**	*0.150*		**0.090**	*0.025*	
Anions											
HCO3	mmolc/L	22	**2.75**	*0.175*		**4.73**	*0.305*		**0.395**	*0.074*	
CO3	mmolc/L	13	**0.000**	*0.000*		**0.000**	*0.000*		**0.000**	*0.000*	
Cl	mmolc/L	26	**2.78**	*0.201*		**0.387**	*0.040*		**0.170**	*0.031*	
NO3	mmolc/L	24	**0.010**	*0.002*		**0.734**	*0.061*		**0.010**	*0.001*	
SO4	mmolc/L	25	**1.77**	*0.080*		**3.04**	*0.100*		**0.060**	*0.010*	
Sum Anions	mmolc/L	13	**7.66**	*0.278*		**9.01**	*0.210*		**0.620**	*0.090*	
Cation-Anion Difference		6	**0.154**	*0.513*		**0.190**	*0.183*		**0.039**	*0.041*	
Other											
Boron	mg/L	18	**0.040**	*0.005*		**0.030**	*0.004*		**0.010**	*0.002*	
PO4-P Phosphorus - Spec	mg/L	6	**0.019**	*0.012*		**0.014**	*0.014*		**0.014**	*0.010*	
Phosphorus - ICP (Total)	mg/L	13	**0.004**	*0.004*		**0.010**	*0.010*		**0.002**	*0.002*	
TKN	mg/L	6	**0.300**	*0.232*		**0.400**	*0.370*		**0.200**	*0.130*	
Nitrogen Combustion (Total)	mg/L	2	**0.247**	*0.007*		**10.9**	*0.075*		**0.260**	*0.020*	
Total Organic Carbon	mg/L	4	**3.24**	*0.330*		**1.74**	*0.420*		**4.79**	*0.545*	

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.