2009 North American Proficiency Testing Program
2nd Quarter Report - August 20, 2009

Laboratory ID

Water			Water 2009-304			Water 2009-305			Water 2009-306		
Analysis	**Units**	***n***	**Median**	***MAD***	**Lab[1,2]**	**Median**	***MAD***	**Lab[1,2]**	**Median**	***MAD***	**Lab[1,2]**
pH		30	**7.80**	*0.180*		**7.15**	*0.310*		**8.17**	*0.135*	
EC	dS/m	9	**0.540**	*0.021*		**2.46**	*0.115*		**2.84**	*0.075*	
Cations											
Ca	mmolc/L	9	**1.54**	*0.064*		**18.4**	*1.25*		**1.02**	*0.077*	
Mg	mmolc/L	10	**1.05**	*0.042*		**6.04**	*0.241*		**5.70**	*0.436*	
Na	mmolc/L	9	**2.40**	*0.143*		**6.15**	*0.499*		**23.0**	*2.025*	
K	mmolc/L	9	**0.061**	*0.009*		**0.790**	*0.045*		**0.630**	*0.041*	
NH4-N	mmolc/L	7	**0.002**	*0.002*		**0.010**	*0.002*		**0.000**	*0.000*	
Sum Cations	mmolc/L	5	**4.96**	*0.362*		**31.2**	*1.555*		**29.2**	*2.087*	
SAR		3	**2.17**	*0.160*		**1.84**	*0.137*		**12.9**	*1.149*	
Adj-SAR		0	**3.19**	*0.220*		**5.02**	*0.480*		**32.5**	*3.000*	
Anions											
HCO3	mmolc/L	2	**2.03**	*0.081*		**11.5**	*0.460*		**17.2**	*0.700*	
CO3	mmolc/L	0	**0.000**	*0.000*		**0.000**	*0.000*		**0.693**	*0.602*	
Cl	mmolc/L	4	**2.59**	*0.108*		**3.69**	*0.100*		**10.0**	*0.370*	
NO3	mmolc/L	10	**0.042**	*0.018*		**0.000**	*0.000*		**0.000**	*0.000*	
SO4	mmolc/L	5	**0.496**	*0.025*		**15.9**	*1.240*		**3.59**	*0.193*	
Sum Anions	mmolc/L	1	**5.17**	*0.206*		**31.7**	*1.268*		**31.3**	*0.803*	
Cation-Anion Difference		16	**0.000**	*0.000*		**0.000**	*0.000*		**0.000**	*0.000*	
Boron	mg/L	7	**0.040**	*0.003*		**0.870**	*0.076*		**1.18**	*0.075*	
PO4-P Phosphorus - Spec	mg/L	5	**0.040**	*0.010*		**0.025**	*0.007*		**0.201**	*0.021*	
Phosphorus - ICP (Total)	mg/L	7	**0.046**	*0.017*		**0.010**	*0.010*		**0.220**	*0.079*	
TKN	mg/L	1	**0.300**	*0.300*		**0.200**	*0.200*		**0.280**	*0.250*	
Nitrogen Combustion (Total)	mg/L	1	**0.849**	*0.000*		**0.207**	*0.000*		**0.310**	*0.000*	
Total Organic Carbon	mg/L	3	**3.70**	*0.480*		**0.720**	*0.520*		**10.5**	*1.100*	

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.