



2002 North American Proficiency Testing Program
3rd Quarter Report October 22, 2002

Laboratory ID

Water Sample 2002-307 Sample 2002-308 Sample 2002-309

Analysis	Units	n	Median	MAD	Lab	Median	MAD	Lab	Median	MAD	Lab
pH	Unit	32	7.99	0.13		8.65	0.08		7.35	0.15	
EC	ds/m	32	0.21	0.01		0.84	0.03		1.61	0.05	
Cations											
Ca ⁺²	mmol/L	30	1.35	0.06		0.16	0.02		4.04	0.19	
Mg ⁺²	mmol/L	30	0.39	0.02		0.04	0.01		1.51	0.05	
Na ⁺	mmol/L	28	0.30	0.02		8.52	0.35		8.1	0.41	
K ⁺	mmol/L	30	0.09	0.007		0.05	0.010		0.68	0.042	
NH ₄ ⁺	mmol/L	11	0.010	0.003		0.010	0.000		0.26	0.05	
Sum Cations	mmol/L	22	2.21	0.10		9.0	0.28		14.7	0.60	
SAR	value	15	0.32	0.0		27.3	2.89		5.0	0.16	
Anions											
HCO ₃ ⁻	mmol/L	23	1.61	0.19		7.00	0.43		0.61	0.09	
Cl ⁻	mmol/L	26	0.09	0.0		1.44	0.06		8.57	0.43	
NO ₃ ⁻	mmol/L	27	0.08	0.01		0.03	0.01		1.44	0.18	
SO ₄ ⁻²	mmol/L	27	0.32	0.07		0.21	0.03		4.06	0.30	
Sum Anions	mmol/L	20	2.22	0.22		8.54	0.73		14.5	0.70	
Cation - Anions											
	mmol/L	20	0.29	0.21		0.67	0.52		0.96	0.76	
Boron											
	mg/L	18	0.01	0.003		0.27	0.03		0.60	0.030	
Phosphorus - Spec											
	mg/L	7	0.01	0.003		0.06	0.01		2.05	0.249	
Phosphorus - ICP											
	mg/L	14	0.07	0.04		0.10	0.04		1.96	0.24	
TKN											
	mg/L	5	0.90	0.85		0.40	0.16		8.0	4.6	
Nitrogen Combustion											
	mg/L	1	24.0	-		16.0	-		29.0	-	

1 - Values flagged exceed Warning Limits "***" 2.5 x MAD (Median Absolute Deviation) and Control Limits "***" 4 x MAD. "<" and "ND" values not recorded.