



2001 North American Proficiency Testing Program

3rd Quarter Report October 29, 2001

Laboratory ID

| Water Analysis | Units | N | Median | MAD | Lab | Median | MAD | Lab | Median | MAD | Lab |
|-------------------------------|---------|----|--------|------|-----|--------|-------|-----|--------|------|-----|
| pH | Unit | 29 | 8.14 | 0.22 | | 7.46 | 0.15 | | 7.90 | 0.11 | |
| EC | dS/m | 29 | 0.39 | 0.03 | | 3.05 | 0.15 | | 0.77 | 0.03 | |
| Cations | | | | | | | | | | | |
| Ca ⁺² | mmolc/L | 29 | 2.89 | 0.20 | | 19.9 | 0.82 | | 3.21 | 0.19 | |
| Mg ⁺² | mmolc/L | 29 | 0.70 | 0.05 | | 0.96 | 0.05 | | 3.31 | 0.20 | |
| Na ⁺ | mmolc/L | 28 | 0.38 | 0.04 | | 9.10 | 0.30 | | 1.83 | 0.07 | |
| K ⁺ | mmolc/L | 28 | 0.29 | 0.02 | | 0.61 | 0.030 | | 0.09 | 0.01 | |
| Sum Cations | mmolc/L | 25 | 4.3 | 0.23 | | 30.6 | 1.10 | | 8.38 | 0.44 | |
| SAR | value | 23 | 0.3 | 0.04 | | 2.8 | 0.14 | | 1.0 | 0.04 | |
| Anions | | | | | | | | | | | |
| HCO ₃ ⁻ | mmolc/L | 26 | 3.52 | 0.48 | | 0.80 | 0.20 | | 2.36 | 0.21 | |
| Cl ⁻ | mmolc/L | 26 | 0.07 | 0.02 | | 21.8 | 1.04 | | 0.31 | 0.05 | |
| NO ₃ ⁻ | mmolc/L | 28 | 0.09 | 0.03 | | 0.96 | 0.10 | | 0.02 | 0.02 | |
| SO ₄ ⁻² | mmolc/L | 26 | 0.24 | 0.04 | | 7.60 | 0.45 | | 5.69 | 0.37 | |
| Sum Anions | mmolc/L | 23 | 4.1 | 0.57 | | 31.0 | 1.21 | | 8.42 | 0.54 | |
| Cation - Anions | mmolc/L | 23 | 0.37 | 0.01 | | -0.03 | 2.65 | | 0.15 | 1.35 | |
| Boron | mg/L | 26 | 0.04 | 0.01 | | 0.48 | 0.03 | | 0.12 | 0.01 | |
| Phosphorus | mg/L | 17 | 0.07 | 0.03 | | 1.10 | 0.09 | | 0.08 | 0.06 | |

1 - Values flagged exceed Warning Limits *** based on 2.5 x MAD (Median Absolute Deviation) and Control Limits ** based on 4 x MAD.