

2002 North American Proficiency Testing Program

2nd Quarter Report July 24, 2002

Laboratory ID

Water

Sample 2002-304

Sample 2002-305

Sample 2002-306

Analysis

Units *n* Median *MAD* Lab

Median *MAD* Lab

Median *MAD* Lab

pH Unit 31 7.60 0.19

7.90 0.14

8.50 0.10

EC dS/m 31 1.61 0.04

0.98 0.04

2.29 0.07

Cations

Ca⁺² mmol/L 29 4.22 0.20

4.40 0.19

0.35 0.03

Mg⁺² mmol/L 29 1.56 0.07

4.22 0.22

0.60 0.05

Na⁺ mmol/L 28 8.2 0.3

2.26 0.11

23.0 1.48

K⁺ mmol/L 29 0.68 0.03

0.08 0.010

1.53 0.10

NH₄⁺ mmol/L 15 0.00 0.02

0.00 0.02

0.01 0.02

Sum Cations mmol/L 24 14.9 0.54

11.0 0.46

26.1 0.67

SAR value 15 4.9 0.1

1.10 0.03

35.6 1.23

Anions

HCO₃⁻ mmol/L 27 0.70 0.17

2.75 0.19

22.68 1.08

Cl⁻ mmol/L 29 8.60 0.3

0.34 0.06

0.18 0.04

NO₃⁻ mmol/L 30 1.53 0.09

0.03 0.01

1.42 0.06

SO₄⁻² mmol/L 26 4.14 0.18

7.82 0.41

1.07 0.08

Sum Anions mmol/L 22 14.9 0.77

10.9 0.59

25.4 1.00

Cation - Anions

mmol/L 22 -0.20 0.91

0.20 0.55

0.89 2.64

Boron mg/L 26 0.67 0.03

0.15 0.02

0.04 0.010

Phosphorus - Spec mg/L 8 2.35 0.06

0.04 0.02

0.02 0.006

Phosphorus - ICP mg/L 18 2.33 0.13

0.06 0.04

0.05 0.05

TKN mg/L 4 13.3 9.10

1.25 0.65

18.1 9.9

Nitrogen Combustion mg/L 3 67.0 45.5

59.0 58.1

51.1 31.2

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