

- Pass 1 Results for 80 Labs - - Pass 2 Results for 80 Labs -

| Method | AOAC Ref. | Method Code | No. of Labs | Grand Avg. | Std. Dev. | Average Range of Dups | No. of Labs | Grand Avg. | Std. Dev. | Average Range of Dups |
|---|-----------|-------------|-------------|------------|-----------|-----------------------|-------------|------------|-----------|-----------------------|
| Ammoniacal Nitrogen, MgO Distillation . | 920.03 | 001.10 | 7 | 4.21 | 0.17 | 0.03 | 7 | 4.21 | 0.17 | 0.03 |
| Ammoniacal Nitrogen, Other | | 001.99 | 10 | 4.20 | 0.11 | 0.04 | 9 | 4.22 | 0.09 | 0.02 |
| Method Group 001.XX PCT | | | 17 | 4.20 | 0.14 | 0.04 | 16 | 4.21 | 0.13 | 0.03 |
| Nitrate Nitrogen, Jones Modified | 930.02 | 002.20 | 4 | 4.34 | 0.62 | 0.19 | 4 | 4.34 | 0.62 | 0.19 |
| Nitrate Nitrogen, Other | | 002.99 | 7 | 4.18 | 0.29 | 0.14 | 7 | 4.18 | 0.29 | 0.14 |
| Method Group 002.XX PCT | | | 11 | 4.24 | 0.43 | 0.15 | 11 | 4.24 | 0.43 | 0.15 |
| Ammon & Nitrate N, Devarda | 892.01 | 009.10 | 6 | 7.60 | 1.52 | 0.06 | 6 | 7.60 | 1.52 | 0.06 |
| Ammon & Nitrate N, Other | | 009.99 | 1 | 8.28 | 0.07 | 0.10 | 1 | 8.28 | 0.07 | 0.10 |
| Method Group 009.XX PCT | | | 7 | 7.70 | 1.42 | 0.06 | 7 | 7.70 | 1.42 | 0.06 |
| Total Nitrogen, Modified Comprehensive | 978.02 | 010.11 | 5 | 8.10 | 0.18 | 0.09 | 4 | 8.15 | 0.15 | 0.02 |
| Total Nitrogen, Salicylic | 955.04D | 010.12 | 5 | 8.21 | 0.36 | 0.10 | 6 | 8.08 | 0.46 | 0.12 |
| Total Nitrogen, Comprehensive | 970.02 | 010.17 | 1 | 7.97 | 0.01 | 0.02 | 1 | 7.97 | 0.01 | 0.02 |
| Total Nitrogen, Combustion | | 010.60 | 52 | 8.32 | 0.20 | 0.08 | 50 | 8.32 | 0.20 | 0.07 |
| Total Nitrogen, Other | | 010.99 | 2 | 8.27 | 0.05 | 0.05 | 2 | 8.27 | 0.05 | 0.05 |
| Method Group 010.XX PCT | | | 65 | 8.29 | 0.22 | 0.08 | 62 | 8.30 | 0.22 | 0.06 |
| Total Phosphate, Grav Quimociac | 962.02 | 020.10 | 8 | 7.93 | 0.22 | 0.11 | 7 | 7.96 | 0.19 | 0.06 |
| Total Phosphate, Spectrometric | 958.01 | 020.20 | 14 | 7.97 | 0.16 | 0.05 | 14 | 7.97 | 0.16 | 0.05 |
| Total Phosphate, Automated | 978.01 | 020.40 | 8 | 7.86 | 0.11 | 0.06 | 8 | 7.86 | 0.11 | 0.06 |
| Total Phosphate, ICP | | 020.50 | 12 | 7.97 | 0.24 | 0.08 | 11 | 7.97 | 0.25 | 0.06 |
| Total Phosphate, Other | | 020.99 | 1 | 8.60 | 0.00 | 0.00 | 1 | 8.60 | 0.00 | 0.00 |
| Method Group 020.XX PCT | | | 43 | 7.96 | 0.22 | 0.07 | 41 | 7.96 | 0.21 | 0.06 |
| Insoluble Phosphate, Grav Quimociac ... | 963.03C | 030.10 | 1 | 0.01 | 0.00 | 0.00 | 1 | 0.01 | 0.00 | 0.00 |
| Insoluble Phosphate, Automated | 978.01 | 030.40 | 1 | 0.04 | 0.00 | 0.00 | 1 | 0.04 | 0.00 | 0.00 |
| Insoluble Phosphate, Other | | 030.99 | 1 | 0.08 | 0.01 | 0.01 | 1 | 0.08 | 0.01 | 0.01 |
| Method Group 030.XX PCT | | | 3 | 0.05 | 0.03 | 0.00 | 3 | 0.05 | 0.03 | 0.00 |
| InDir Available Phosphate, Grav Quim .. | 960.02 | 040.10 | 1 | 7.86 | 0.01 | 0.02 | 1 | 7.86 | 0.01 | 0.02 |
| InDir Available Phosphate, Automated .. | 960.02 | 040.40 | 1 | 7.86 | 0.04 | 0.05 | 1 | 7.86 | 0.04 | 0.05 |
| InDir Available Phosphate, ICP | | 040.50 | 1 | 7.60 | 0.02 | 0.03 | 1 | 7.60 | 0.02 | 0.03 |
| InDir Available Phosphate, Other | | 040.99 | 1 | 8.10 | 0.00 | 0.00 | 1 | 8.10 | 0.00 | 0.00 |
| Method Group 040.XX PCT | | | 4 | 7.85 | 0.19 | 0.03 | 4 | 7.85 | 0.19 | 0.03 |
| Dir Available Phosphate, Grav Quimociac | 960.03E | 041.10 | 11 | 7.81 | 0.09 | 0.06 | 11 | 7.81 | 0.09 | 0.06 |
| Dir Available Phosphate, Spectrometric | 960.03D | 041.20 | 2 | 7.97 | 0.27 | 0.30 | 2 | 7.97 | 0.27 | 0.30 |
| Dir Available Phosphate, Automated | 978.01 | 041.40 | 3 | 7.97 | 0.17 | 0.05 | 3 | 7.97 | 0.17 | 0.05 |
| Dir Available Phosphate, ICP | | 041.50 | 11 | 7.86 | 0.22 | 0.08 | 11 | 7.86 | 0.22 | 0.08 |
| Dir Available Phosphate, EDTA Extract . | 993.01 | 041.60 | 9 | 7.85 | 0.12 | 0.08 | 9 | 7.85 | 0.12 | 0.08 |
| Dir Available Phosphate, Other | | 041.99 | 3 | 7.75 | 0.06 | 0.03 | 3 | 7.75 | 0.06 | 0.03 |
| Method Group 041.XX PCT | | | 39 | 7.85 | 0.17 | 0.08 | 38 | 7.85 | 0.16 | 0.07 |
| Water Soluble Phosphate, Spectrometric | 970.01 | 048.20 | 1 | 6.96 | 0.03 | 0.04 | 1 | 6.96 | 0.03 | 0.04 |
| Water Soluble Phosphate, ICP | | 048.50 | 1 | 6.27 | 0.05 | 0.07 | 1 | 6.27 | 0.05 | 0.07 |

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|-------------------------------------|-----------|-------------|-------------|------------|-----------|-----------------------|-------------|------------|-----------|-----------------------|
| Water Soluble Phosphate, Other | | 048.99 | 1 | 6.13 | 0.00 | 0.00 | 1 | 6.13 | 0.00 | 0.00 |
| Method Group 048.XX PCT | | | 3 | 6.45 | 0.40 | 0.04 | 3 | 6.45 | 0.40 | 0.04 |
| Soluble Potash, STPB Oxalate | 958.02 | 050.00 | 11 | 24.27 | 0.30 | 0.12 | 10 | 24.33 | 0.24 | 0.08 |
| Soluble Potash, STPB Citrate | 969.04 | 050.10 | 1 | 24.58 | 0.04 | 0.06 | 1 | 24.58 | 0.04 | 0.06 |
| Soluble Potash, AA (Oxalate) | | 050.30 | 7 | 24.20 | 0.81 | 0.17 | 7 | 24.20 | 0.81 | 0.17 |
| Soluble Potash, AA (Citrate) | | 050.31 | 1 | 24.70 | 0.27 | 0.38 | 1 | 24.70 | 0.27 | 0.38 |
| Soluble Potash, ICP (Oxalate) | | 050.50 | 8 | 23.94 | 0.54 | 0.28 | 8 | 23.94 | 0.54 | 0.28 |
| Soluble Potash, ICP (Citrate) | | 050.51 | 11 | 24.32 | 0.67 | 0.27 | 10 | 24.29 | 0.67 | 0.17 |
| Soluble Potash, Flame (Oxalate) | 983.02(a) | 050.60 | 5 | 24.84 | 0.95 | 0.16 | 5 | 24.84 | 0.95 | 0.16 |
| Soluble Potash, Flame (Citrate) | 983.02(b) | 050.61 | 10 | 24.49 | 0.56 | 0.31 | 9 | 24.48 | 0.45 | 0.10 |
| Soluble Potash, Other | | 050.99 | 18 | 24.19 | 0.87 | 0.26 | 17 | 24.23 | 0.86 | 0.19 |
| Method Group 050.XX PCT | | | 72 | 24.29 | 0.71 | 0.23 | 69 | 24.30 | 0.69 | 0.17 |
| Free Water, Vacuum Oven | 965.08B | 060.00 | 5 | 0.52 | 0.12 | 0.05 | 5 | 0.52 | 0.12 | 0.05 |
| Free Water, Vacuum Desiccate | 965.08A | 060.10 | 1 | 0.18 | 0.01 | 0.02 | 1 | 0.18 | 0.01 | 0.02 |
| Free Water, Other | | 060.99 | 1 | 1.27 | 0.01 | 0.01 | 1 | 1.27 | 0.01 | 0.01 |
| Method Group 060.XX PCT | | | 7 | 0.58 | 0.33 | 0.04 | 7 | 0.58 | 0.33 | 0.04 |
| Acid Soluble Calcium, AA | 945.04 | 101.00 | 11 | 1.15 | 0.09 | 0.03 | 11 | 1.15 | 0.09 | 0.03 |
| Acid Soluble Calcium, ICP | | 101.30 | 28 | 1.17 | 0.09 | 0.03 | 26 | 1.17 | 0.09 | 0.02 |
| Acid Soluble Calcium, Titrimetric | 945.03 | 101.70 | 1 | 1.29 | 0.03 | 0.04 | 1 | 1.29 | 0.03 | 0.04 |
| Method Group 101.XX PCT | | | 40 | 1.17 | 0.09 | 0.03 | 38 | 1.17 | 0.09 | 0.02 |
| Acid Soluble Magnesium, AA | 984.01 | 121.00 | 13 | 2.52 | 0.15 | 0.07 | 13 | 2.52 | 0.15 | 0.07 |
| Acid Soluble Magnesium, ICP | | 121.30 | 32 | 2.52 | 0.14 | 0.07 | 30 | 2.52 | 0.14 | 0.05 |
| Acid Soluble Magnesium, Titrimetric | 964.01 | 121.70 | 1 | 2.67 | 0.04 | 0.06 | 1 | 2.67 | 0.04 | 0.06 |
| Acid Soluble Magnesium, Other | | 121.99 | 2 | 2.60 | 0.05 | 0.07 | 2 | 2.60 | 0.05 | 0.07 |
| Method Group 121.XX PCT | | | 49 | 2.52 | 0.15 | 0.08 | 47 | 2.53 | 0.14 | 0.06 |
| Water Soluble Magnesium, AA | | 131.00 | 2 | 2.09 | 0.06 | 0.05 | 2 | 2.09 | 0.06 | 0.05 |
| Water Soluble Magnesium, ICP | | 131.30 | 1 | 2.48 | 0.01 | 0.02 | 1 | 2.48 | 0.01 | 0.02 |
| Water Soluble Magnesium, Other | | 131.99 | 1 | 2.35 | 0.03 | 0.04 | 1 | 2.35 | 0.03 | 0.04 |
| Method Group 131.XX PCT | | | 4 | 2.25 | 0.19 | 0.04 | 4 | 2.25 | 0.19 | 0.04 |
| Sulfur, Gravimetric | 980.02a | 144.01 | 13 | 9.74 | 0.27 | 0.09 | 12 | 9.75 | 0.28 | 0.06 |
| Sulfur, Gravimetric | 980.02b | 144.02 | 1 | 9.75 | 0.08 | 0.11 | 1 | 9.75 | 0.08 | 0.11 |
| Sulfur, Other | | 144.99 | 26 | 9.43 | 0.48 | 0.23 | 23 | 9.44 | 0.42 | 0.12 |
| Method Group 144.XX PCT | | | 40 | 9.54 | 0.44 | 0.18 | 37 | 9.55 | 0.40 | 0.11 |
| Arsenic, ICP | | 151.30 | 6 | 3.24 | 3.19 | 0.22 | 5 | 3.22 | 3.52 | 0.07 |
| Arsenic, Other | | 151.99 | 1 | 1.84 | 0.02 | 0.03 | 1 | 1.84 | 0.02 | 0.03 |
| Method Group 151.XX PPM | | | 7 | 3.04 | 2.98 | 0.19 | 6 | 2.99 | 3.23 | 0.06 |
| Acid Soluble Boron, Spectrometric | 982.01 | 165.00 | 6 | 0.046 | 0.005 | 0.002 | 6 | 0.046 | 0.005 | 0.002 |
| Acid Soluble Boron, Other | | 165.99 | 21 | 0.047 | 0.004 | 0.002 | 20 | 0.046 | 0.004 | 0.001 |
| Method Group 165.XX PCT | | | 27 | 0.047 | 0.004 | 0.002 | 26 | 0.046 | 0.004 | 0.002 |

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|--|-----------|-------------|-------------|------------|-----------|-----------------------|-------------|------------|-----------|-----------------------|
| Water Soluble Boron, Other | | 171.99 | 1 | 0.045 | 0.001 | 0.001 | 1 | 0.045 | 0.001 | 0.001 |
| Cadmium, ICP | | 181.30 | 12 | 1.69 | 0.35 | 0.13 | 10 | 1.70 | 0.36 | 0.04 |
| Cadmium, Other | | 181.99 | 1 | 1.61 | 0.07 | 0.10 | 1 | 1.61 | 0.07 | 0.10 |
| Method Group 181.XX PPM | | | 13 | 1.68 | 0.34 | 0.13 | 11 | 1.69 | 0.35 | 0.05 |
| Water Soluble Chlorine, Titrimetric | 928.02 | 190.00 | 6 | 3.80 | 0.11 | 0.02 | 6 | 3.80 | 0.11 | 0.02 |
| Water Soluble Chlorine, Other | | 190.99 | 5 | 3.53 | 0.82 | 0.09 | 5 | 3.53 | 0.82 | 0.09 |
| Method Group 190.XX PCT | | | 12 | 3.75 | 0.60 | 0.11 | 11 | 3.68 | 0.56 | 0.05 |
| Chromium, ICP | | 191.30 | 13 | 90.51 | 10.21 | 3.57 | 12 | 91.64 | 9.52 | 2.54 |
| Method Group 191.XX PPM | | | 13 | 90.51 | 10.21 | 3.57 | 12 | 91.64 | 9.52 | 2.54 |
| Acid Soluble Cobalt, ICP | 965.11 | 202.30 | 16 | 29.45 | 12.55 | 2.39 | 15 | 30.48 | 12.22 | 1.90 |
| Acid Soluble Cobalt, Other | | 202.99 | 1 | 11.26 | 1.23 | 1.74 | 1 | 11.26 | 1.23 | 1.74 |
| Method Group 202.XX PPM | | | 17 | 28.38 | 12.92 | 2.35 | 16 | 29.28 | 12.73 | 1.89 |
| Acid Soluble Copper, Atomic Absorption | 975.01 | 221.00 | 2 | 0.0012 | 0.0002 | 0.0001 | 2 | 0.0012 | 0.0002 | 0.0001 |
| Acid Soluble Copper, ICP | | 221.30 | 18 | 0.0012 | 0.0006 | 0.0001 | 16 | 0.0011 | 0.0005 | 0.0001 |
| Acid Soluble Copper, Other | | 221.99 | 1 | 0.0009 | 0.0000 | 0.0000 | 1 | 0.0009 | 0.0000 | 0.0000 |
| Method Group 221.XX PCT | | | 21 | 0.0012 | 0.0006 | 0.0001 | 19 | 0.0011 | 0.0004 | 0.0001 |
| Acid Soluble Iron, Atomic Absorption | 980.01 | 241.00 | 11 | 0.26 | 0.02 | 0.01 | 11 | 0.26 | 0.02 | 0.01 |
| Acid Soluble Iron, ICP | | 241.30 | 34 | 0.26 | 0.02 | 0.01 | 32 | 0.26 | 0.02 | 0.01 |
| Method Group 241.XX PCT | | | 45 | 0.26 | 0.02 | 0.01 | 43 | 0.26 | 0.02 | 0.01 |
| Lead, ICP | | 251.30 | 9 | 2.12 | 0.59 | 0.13 | 9 | 2.12 | 0.59 | 0.13 |
| Lead, Other | | 251.99 | 1 | 1.47 | 0.02 | 0.03 | 1 | 1.47 | 0.02 | 0.03 |
| Method Group 251.XX PPM | | | 10 | 2.06 | 0.59 | 0.12 | 10 | 2.06 | 0.59 | 0.12 |
| Acid Soluble Manganese, AA | 972.02a | 261.00 | 9 | 0.266 | 0.018 | 0.010 | 9 | 0.266 | 0.018 | 0.010 |
| Acid Soluble Manganese, ICP | 972.02a | 261.30 | 32 | 0.263 | 0.017 | 0.012 | 30 | 0.263 | 0.017 | 0.009 |
| Acid Soluble Manganese, ICP | 972.02b | 261.31 | 1 | 0.281 | 0.001 | 0.002 | 1 | 0.281 | 0.001 | 0.002 |
| Acid Soluble Manganese, Other | | 261.99 | 3 | 0.259 | 0.041 | 0.011 | 3 | 0.259 | 0.041 | 0.011 |
| Method Group 261.XX PCT | | | 46 | 0.263 | 0.020 | 0.013 | 43 | 0.264 | 0.019 | 0.010 |
| Mercury, Atomic Absorption | | 281.00 | 1 | 0.01 | 0.00 | 0.00 | 1 | 0.01 | 0.00 | 0.00 |
| Mercury, ICP | | 281.30 | 2 | 4.47 | 5.16 | 0.07 | 2 | 4.47 | 5.16 | 0.07 |
| Method Group 281.XX PPM | | | 3 | 2.98 | 4.61 | 0.05 | 3 | 2.98 | 4.61 | 0.05 |
| Molybdenum, ICP | | 289.30 | 13 | 7.21 | 0.69 | 0.38 | 12 | 7.16 | 0.66 | 0.30 |
| Method Group 289.XX PPM | | | 13 | 7.21 | 0.69 | 0.38 | 12 | 7.16 | 0.66 | 0.30 |
| Nickel, ICP | | 291.30 | 15 | 37.33 | 4.69 | 1.81 | 14 | 37.85 | 4.27 | 1.36 |
| Method Group 291.XX PPM | | | 15 | 37.33 | 4.69 | 1.81 | 14 | 37.85 | 4.27 | 1.36 |
| Selenium, ICP | | 301.30 | 3 | 3.88 | 4.12 | 0.53 | 3 | 3.88 | 4.12 | 0.53 |
| Selenium, Other | | 301.99 | 1 | 0.44 | 0.03 | 0.04 | 1 | 0.44 | 0.03 | 0.04 |
| Method Group 301.XX PPM | | | 4 | 3.02 | 3.83 | 0.41 | 3 | 3.12 | 4.50 | 0.08 |
| Sodium, Other | | 311.99 | 7 | 1.25 | 0.08 | 0.04 | 7 | 1.25 | 0.08 | 0.04 |
| Acid Soluble Zinc, Atomic Absorption | 975.02 | 321.00 | 11 | 0.168 | 0.006 | 0.007 | 11 | 0.168 | 0.006 | 0.007 |

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|---------------------------------|------------------|--------------------|--------------------|-------------------|------------------|------------------------------|--------------------|-------------------|------------------|------------------------------|
| Acid Soluble Zinc, ICP | | 321.30 | 30 | 0.168 | 0.011 | 0.005 | 30 | 0.168 | 0.011 | 0.005 |
| Method Group 321.XX PCT | | | 41 | 0.168 | 0.010 | 0.005 | 41 | 0.168 | 0.010 | 0.005 |
| Water Soluble Zinc, ICP | | 325.30 | 2 | 0.162 | 0.024 | 0.012 | 2 | 0.162 | 0.024 | 0.012 |
| Water Soluble Zinc, Other | | 325.99 | 2 | 0.160 | 0.008 | 0.010 | 2 | 0.160 | 0.008 | 0.010 |
| Method Group 325.XX PCT | | | 4 | 0.161 | 0.016 | 0.011 | 4 | 0.161 | 0.016 | 0.011 |

Laboratory Averages & Accuracy Indexes

| Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | | | |
|----------------------------|----------|-------|----------------------------|----------|-------|------------------------------|----------|-------|-----------------------------|----------|--------|-----------------------|----------|-------|--------|-------|--|
| Meth: 001.10 PCT | | | Meth: 001.XX PCT | | | Meth: 002.XX PCT | | | Meth: 010.11 PCT | | | Meth: 010.60 PCT | | | | | |
| <u>Ammoniacal Nitrogen</u> | | | <u>Ammoniacal Nitrogen</u> | | | <u>Nitrate Nitrogen</u> | | | <u>Total Nitrogen</u> | | | <u>Total Nitrogen</u> | | | | | |
| <u>MgO Distillation</u> | | | | | | | | | <u>Modified Comprehensi</u> | | | <u>Combustion</u> | | | | | |
| 415 | 4.51 | 1.74 | 090 | 4.22 | .04 | 444 | 4.23 | -.06 | 105 | 8.32 | 1.21 | 247 | 8.48 | .81 | | | |
| 444 | 4.30 | .59 | Avg | 4.21 | | 419 | 4.13 | -.27 | 211 | 8.22 | .49 | 136 | 8.46 | .66 | | | |
| 232 | 4.24 | .21 | 456 | 4.19 | -.25 | 027 | 4.11 | -.29 | Avg | 8.15 | | 377 | 8.46 | .66 | | | |
| 090 | 4.22 | .08 | 419 | 4.15 | -.52 | 117 | 4.06 | -.49 | 416 | 8.08 X | -.46 | 296 | 8.45 | .61 | | | |
| Avg | 4.21 | | 027 | 4.10 | -.91 | 397 | 4.02 | -.51 | 460 | 7.97 | -1.26 | 095 | 8.43 | .60 | | | |
| 456 | 4.19 | -.15 | 420 | 4.07 | -1.16 | 029 | 4.00 | -.59 | 260 | 7.91 R | -1.98 | 024 | 8.44 | .59 | | | |
| 470 | 4.04 | -.99 | 470 | 4.04 | -1.38 | 232 | 4.00 | -.61 | 114 | 1.94 s | -42.17 | 275 | 8.43 | .59 | | | |
| 230 | 3.96 | -1.44 | 368 | 4.01 R | -1.67 | 470 | 3.97 | -.61 | | | | 035 | 8.38 | .54 | | | |
| | | | 230 | 3.96 | -1.98 | 393 | 3.97 X | -.62 | | | | 049 | 8.41 | .49 | | | |
| | | | | | | | | | Meth: 010.12 PCT | | | 291 | 8.41 | .44 | | | |
| Meth: 001.99 PCT | | | Meth: 002.20 PCT | | | Meth: 009.10 PCT | | | Total Nitrogen | | | 292 | 8.41 | .43 | | | |
| <u>Ammoniacal Nitrogen</u> | | | <u>Nitrate Nitrogen</u> | | | <u>Ammon & Nitrate N</u> | | | <u>Salicylic</u> | | | 444 | 8.38 | .38 | | | |
| <u>Other</u> | | | <u>Jones Modified</u> | | | <u>Devarda</u> | | | 254 | 8.75 | 1.45 | 055 | 8.38 | .28 | | | |
| 393 | 4.77 s | 6.00 | 230 | 5.33 | 1.61 | 444 | 8.53 | .61 | 351 | 8.25 | .38 | 041 | 8.38 | .25 | | | |
| 300 | 4.30 | .83 | Avg | 4.34 | | 397 | 8.30 | .46 | 117 | 8.20 | .32 | 451 | 8.34 | .18 | | | |
| 371 | 4.30 | .82 | 117 | 4.06 | -.49 | 090 | 8.23 | .41 | 185 | 8.20 | .30 | 231 | 8.33 | .15 | | | |
| 096 | 4.30 | .82 | 029 | 4.00 | -.57 | 169 | 8.21 | .40 | Avg | 8.21 | | 009 | 8.34 | .09 | | | |
| 397 | 4.28 | .65 | 470 | 3.97 | -.59 | 470 | 8.00 | .26 | 455 | 7.68 | -.87 | 037 | 8.33 | .08 | | | |
| 105 | 4.27 | .54 | | | | Avg | 7.60 | | 415 | 7.38 S | -1.52 | Avg | 8.32 | | | | |
| 169 | 4.24 | .24 | Meth: 002.99 PCT | | | 117 | 4.37 | -2.13 | Meth: 010.17 PCT | | | 420 | 8.32 | -.05 | | | |
| Avg | 4.22 | | <u>Nitrate Nitrogen</u> | | | Meth: 009.99 PCT | | | Total Nitrogen | | | 402 | 8.31 | -.10 | | | |
| 419 | 4.15 | -.83 | <u>Other</u> | | | <u>Ammon & Nitrate N</u> | | | <u>Comprehensive</u> | | | 324 | 8.31 | -.13 | | | |
| 027 | 4.10 | -1.39 | 137 | 7.86 s | 12.91 | <u>Other</u> | | | 470 | 7.97 | -.71 | 040 | 8.29 | -.20 | | | |
| 420 | 4.07 | -1.75 | 368 | 4.78 | 2.22 | 105 | 8.28 | -.71 | Meth: 010.60 PCT | | | 034 | 8.32 | -.21 | | | |
| 368 | 4.01 R | -2.49 | 444 | 4.23 | .19 | Meth: 009.XX PCT | | | Total Nitrogen | | | 177 | 8.27 | -.28 | | | |
| | | | Avg | 4.18 | | <u>Ammon & Nitrate N</u> | | | <u>Combustion</u> | | | 325 | 8.26 | -.33 | | | |
| Meth: 001.XX PCT | | | 027 | 4.11 | -.23 | 444 | | | 8.53 | .58 | 029 | 32.43 s | 122.22 | 233 | 8.22 | -.54 | |
| <u>Ammoniacal Nitrogen</u> | | | 419 | 4.13 | -.24 | 397 | | | 8.30 | .42 | 354 | 18.60 s | 52.09 | 027 | 8.22 | -.55 | |
| 393 | 4.77 s | 4.20 | 397 | 4.02 | -.57 | 105 | | | 8.28 | .41 | 043 | 8.80 | 2.42 | 419 | 8.29 | -.59 | |
| 415 | 4.51 | 2.23 | 393 | 3.97 X | -.75 | 090 | | | 8.23 | .37 | 428 | 8.79 | 2.37 | 232 | 8.20 | -.70 | |
| 444 | 4.30 | .72 | 232 | 4.00 | -.75 | 169 | | | 8.21 | .36 | 393 | 8.78 | 2.31 | 307 | 8.20 | -.75 | |
| 300 | 4.30 | .63 | Meth: 002.XX PCT | | | 470 | | | 8.00 | .21 | 131 | 8.57 | 1.22 | 423 | 8.19 | -.78 | |
| 371 | 4.30 | .62 | <u>Nitrate Nitrogen</u> | | | Avg | | | 7.70 | | 007 | 8.50 | 1.02 | 390 | 8.28 R | -.89 | |
| 096 | 4.30 | .62 | 137 | 7.86 s | 8.39 | 117 | | | 4.37 | -2.35 | 073 | 8.51 | .94 | 450 | 8.15 | -.92 | |
| 397 | 4.28 | .50 | 230 | 5.33 | 2.56 | 230 | | | 8.50 | .88 | 230 | 8.50 | .88 | 443 | 8.10 | -1.14 | |
| 105 | 4.27 | .42 | 368 | 4.78 | 1.34 | 096 | | | 8.48 | .81 | 102 | 8.09 | -1.17 | | | | |
| 232 | 4.24 | .22 | Avg | 4.24 | | | | | | | | | | | | | |
| 169 | 4.24 | .21 | | | | | | | | | | | | | | | |

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

| Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index |
|-----------------------|----------|--------|-----------------------|----------|-------|------------------------|----------|--------|------------------------|----------|--------|------------------------|----------|-------|
| Meth: 010.60 PCT | | | Meth: 010.XX PCT | | | Meth: 010.XX PCT | | | Meth: 020.20 PCT | | | Meth: 020.50 PCT | | |
| <u>Total Nitrogen</u> | | | <u>Total Nitrogen</u> | | | <u>Total Nitrogen</u> | | | <u>Total Phosphate</u> | | | <u>Total Phosphate</u> | | |
| <u>Combustion</u> | | | | | | | | | <u>Spectrometric</u> | | | <u>ICP</u> | | |
| 368 | 8.08 | -1.29 | 275 | 8.43 | .66 | 416 | 8.08 X | -1.01 | 232 | 8.06 | .54 | 389 | 7.88 | -.39 |
| 023 | 8.07 | -1.32 | 035 | 8.38 | .57 | 368 | 8.08 | -1.05 | 415 | 8.06 | .53 | 390 | 7.91 | -.47 |
| 157 | 8.06 | -1.40 | 049 | 8.41 | .56 | 023 | 8.07 | -1.08 | 234 | 8.00 | .40 | 157 | 7.96 R | -.60 |
| 086 | 8.09 R | -1.57 | 291 | 8.41 | .53 | 157 | 8.06 | -1.15 | 371 | 7.99 | .20 | 444 | 7.69 | -1.12 |
| 018 | 8.01 | -1.60 | 292 | 8.41 | .52 | 018 | 8.01 | -1.33 | 406 | 7.98 | .17 | 451 | 7.44 | -2.11 |
| 406 | 8.00 | -1.67 | 444 | 8.38 | .45 | 086 | 8.09 R | -1.34 | Avg | 7.97 | | 432 | 7.20 S | -3.15 |
| 042 | 8.00 | -1.72 | 055 | 8.38 | .38 | 406 | 8.00 | -1.40 | 419 | 7.89 | -.52 | 307 | 6.95 s | -4.26 |
| 389 | 7.97 | -1.83 | 041 | 8.38 | .36 | 042 | 8.00 | -1.45 | 450 | 7.90 | -.55 | | | |
| 360 | 7.49 s | -4.26 | 451 | 8.34 | .24 | 470 | 7.97 | -1.52 | 416 | 7.88 X | -.59 | Meth: 020.99 PCT | | |
| | | | 034 | 8.32 | .21 | 389 | 7.97 | -1.54 | 169 | 7.77 | -1.29 | <u>Total Phosphate</u> | | |
| | | | 231 | 8.33 | .21 | 460 | 7.97 | -1.55 | 420 | 7.57 | -2.46 | <u>Other</u> | | |
| | | | 009 | 8.34 | .19 | 260 | 7.91 R | -1.96 | 324 | 3.45 s | -27.81 | 137 | 8.60 | .00 |
| Meth: 010.99 PCT | | | 037 | 8.33 | .17 | 455 | 7.68 | -2.88 | Meth: 020.40 PCT | | | 322 | 8.74 S | .00 |
| <u>Total Nitrogen</u> | | | 105 | 8.32 | .13 | 030 | 7.92 s | -3.75 | <u>Total Phosphate</u> | | | 443 | 10.41 S | .00 |
| <u>Other</u> | | | 420 | 8.32 | .10 | 360 | 7.49 s | -3.77 | <u>Automated</u> | | | 455 | 8.78 S | .00 |
| 300 | 8.30 | .81 | 300 | 8.30 | .09 | 415 | 7.38 s | -4.27 | 456 | 8.07 | 1.89 | Meth: 020.50 PCT | | |
| Avg | 8.27 | | 324 | 8.31 | .08 | 114 | 1.94 s | -29.47 | 470 | 7.94 | .73 | <u>Total Phosphate</u> | | |
| 105 | 8.23 | -.92 | 402 | 8.31 | .04 | Meth: 020.10 PCT | | | 096 | 7.90 | .37 | <u>Total Phosphate</u> | | |
| 030 | 7.92 S | -15.92 | Avg | 8.30 | | <u>Total Phosphate</u> | | | 095 | 7.88 | .17 | 443 10.41 s 11.73 | | |
| Meth: 010.XX PCT | | | 040 | 8.29 | -.06 | <u>Grav Quimociac</u> | | | Avg | 7.86 | | 455 8.78 s 3.80 | | |
| <u>Total Nitrogen</u> | | | 177 | 8.27 | -.12 | 114 | 8.33 | 1.89 | 105 | 7.85 | -.31 | 322 8.74 s 3.63 | | |
| 029 | 32.43 s | 111.79 | 325 | 8.26 | -.18 | 444 | 8.15 | 1.01 | 035 | 7.78 | -.95 | 137 8.60 2.98 | | |
| 354 | 18.60 s | 47.72 | 351 | 8.25 | -.22 | Avg | 7.96 | | 247 | 7.76 | -.99 | 247 8.36 1.86 | | |
| 043 | 8.80 | 2.34 | 234 | 8.25 | -.24 | 470 | 7.89 | -.41 | 042 | 7.75 | -1.13 | 114 8.33 1.71 | | |
| 428 | 8.79 | 2.29 | 105 | 8.23 | -.34 | 117 | 7.89 | -.43 | Meth: 020.50 PCT | | | 086 8.20 1.11 | | |
| 393 | 8.78 | 2.24 | 211 | 8.22 | -.36 | 090 | 7.87 | -.49 | <u>Total Phosphate</u> | | | 428 8.17 .97 | | |
| 254 | 8.75 | 2.10 | 233 | 8.22 | -.37 | 105 | 7.84 | -.64 | <u>ICP</u> | | | 444 8.15 .91 | | |
| 131 | 8.57 | 1.24 | 027 | 8.22 | -.38 | 041 | 7.79 | -.95 | 247 | 8.36 | 1.56 | 460 8.15 .90 | | |
| 007 | 8.50 | 1.05 | 419 | 8.29 | -.51 | 157 | 7.73 R | -1.76 | 086 | 8.20 | .92 | 393 8.15 .85 | | |
| 073 | 8.51 | .99 | 232 | 8.20 | -.52 | Meth: 020.20 PCT | | | 292 | 8.12 | .71 | 402 8.10 .65 | | |
| 230 | 8.50 | .93 | 185 | 8.20 | -.53 | <u>Total Phosphate</u> | | | 402 | 8.10 | .63 | 231 8.10 .63 | | |
| 096 | 8.48 | .87 | 307 | 8.20 | -.58 | <u>Spectrometric</u> | | | 423 | 8.09 | .58 | 423 8.09 .58 | | |
| 247 | 8.48 | .87 | 117 | 8.20 | -.58 | 428 | 8.17 | 1.21 | 368 | 7.98 | .06 | 456 8.07 .50 | | |
| 136 | 8.46 | .74 | 423 | 8.19 | -.60 | 460 | 8.15 | 1.12 | Avg | 7.97 | | 232 8.06 .45 | | |
| 377 | 8.46 | .73 | 450 | 8.15 | -.72 | 292 | 8.12 | .87 | 231 | 7.88 | -.39 | 415 8.06 .45 | | |
| 296 | 8.45 | .69 | 390 | 8.28 R | -.79 | 231 | 8.10 | .77 | | | | | | |
| 024 | 8.44 | .67 | 443 | 8.10 | -.91 | | | | | | | | | |
| 095 | 8.43 | .67 | 102 | 8.09 | -.94 | | | | | | | | | |

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

| Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index |
|----------------------------|----------|--------|-----------------------------|----------|-------|-----------------------------|----------|-------|-----------------------------|----------|-------|-----------------------------|----------|-------|
| Meth: 020.XX PCT | | | Meth: 030.40 PCT | | | Meth: 040.XX PCT | | | Meth: 041.50 PCT | | | Meth: 041.XX PCT | | |
| <u>Total Phosphate</u> | | | <u>Insoluble Phosphate</u> | | | <u>InDir Available Phos</u> | | | <u>Dir Available Phosph</u> | | | <u>Dir Available Phosph</u> | | |
| 234 | 8.00 | .33 | Automated | | | 247 | 8.10 | 1.29 | ICP | | | 254 | 8.45 s | 3.67 |
| 371 | 7.99 | .18 | 096 | 0.04 | .00 | 096 | 7.86 | .13 | 009 | 8.25 | 1.74 | 009 | 8.25 | 2.45 |
| 406 | 7.98 | .15 | Meth: 030.99 PCT | | | 090 | 7.86 | .07 | 007 | 8.18 | 1.47 | 007 | 8.18 | 2.08 |
| 368 | 7.98 | .09 | <u>Insoluble Phosphate</u> | | | Avg | 7.85 | | 055 | 8.02 | .72 | 027 | 8.16 | 1.87 |
| Avg | 7.96 | | <u>Other</u> | | | 423 | 7.60 | -1.35 | 360 | 8.00 | .66 | 030 | 8.13 | 1.78 |
| 470 | 7.94 | -.22 | 247 | 0.08 | .71 | Meth: 041.10 PCT | | | 393 | 7.91 | .22 | 055 | 8.02 | 1.06 |
| 096 | 7.90 | -.35 | Meth: 030.XX PCT | | | <u>Dir Available Phosph</u> | | | Avg | 7.86 | | 034 | 7.97 | .99 |
| 419 | 7.89 | -.35 | <u>Insoluble Phosphate</u> | | | <u>Grav Quimociac</u> | | | 291 | 7.78 | -.40 | 360 | 8.00 | .97 |
| 470 | 7.89 | -.38 | 247 | 0.08 | 1.19 | 254 | 8.45 s | 6.83 | 354 | 7.71 | -.69 | 029 | 7.99 | .89 |
| 450 | 7.90 | -.38 | Avg | 0.05 | | 136 | 7.97 | 1.73 | 043 | 7.71 | -.72 | 018 | 7.92 | .85 |
| 117 | 7.89 | -.40 | 096 | 0.04 | -.15 | 086 | 7.89 | .97 | 325 | 7.68 | -.81 | 136 | 7.97 | .73 |
| 416 | 7.88 X | -.41 | 090 | 0.01 | -1.03 | 040 | 7.87 | .92 | 023 | 7.63 | -1.04 | 397 | 7.95 | .60 |
| 095 | 7.88 | -.43 | Meth: 040.10 PCT | | | 185 | 7.84 | .39 | 377 | 7.61 | -1.19 | 040 | 7.87 | .39 |
| 389 | 7.88 | -.44 | <u>InDir Available Phos</u> | | | Avg | 7.81 | | Meth: 041.60 PCT | | | 393 | 7.91 | .37 |
| 231 | 7.88 | -.44 | <u>Grav Quim</u> | | | 211 | 7.80 | -.08 | <u>Dir Available Phosph</u> | | | 086 | 7.89 | .34 |
| 090 | 7.87 | -.45 | 090 | 7.86 | .71 | 105 | 7.79 | -.24 | <u>EDTA Extract</u> | | | 351 | 7.85 | .26 |
| 390 | 7.91 | -.54 | Meth: 040.40 PCT | | | 177 | 7.80 | -.26 | 034 | 7.97 | 1.40 | 296 | 7.86 | .04 |
| 105 | 7.85 | -.55 | <u>InDir Available Phos</u> | | | 049 | 7.79 | -.28 | 018 | 7.92 | 1.20 | Avg | 7.85 | |
| 105 | 7.84 | -.58 | <u>Automated</u> | | | 131 | 7.79 | -.28 | 397 | 7.95 | .84 | 177 | 7.83 | -.14 |
| 157 | 7.96 R | -.70 | 096 | 7.86 | -.71 | 102 | 7.67 | -1.59 | 296 | 7.86 | .06 | 185 | 7.84 | -.18 |
| 041 | 7.79 | -.87 | Meth: 040.50 PCT | | | 260 | 7.68 | -1.66 | Avg | 7.85 | | 073 | 7.82 | -.30 |
| 035 | 7.78 | -.93 | <u>InDir Available Phos</u> | | | Meth: 041.20 PCT | | | 043 | 7.85 | -.09 | 211 | 7.80 | -.31 |
| 169 | 7.77 | -.94 | <u>Automated</u> | | | <u>Dir Available Phosph</u> | | | 177 | 7.83 | -.21 | 177 | 7.80 | -.32 |
| 247 | 7.76 | -.98 | Meth: 040.99 PCT | | | <u>Spectrometric</u> | | | 351 | 7.85 | -.36 | 105 | 7.79 | -.39 |
| 042 | 7.75 | -1.03 | <u>InDir Available Phos</u> | | | 030 | 8.13 | .67 | 073 | 7.82 | -.43 | 049 | 7.79 | -.39 |
| 444 | 7.69 | -1.30 | <u>ICP</u> | | | Avg | 7.97 | | 024 | 7.62 | -2.01 | 131 | 7.79 | -.39 |
| 157 | 7.73 R | -1.61 | 423 | 7.60 | -.71 | 419 | 7.81 | -1.03 | Meth: 041.99 PCT | | | 131 | 7.79 | -.41 |
| 420 | 7.57 | -1.83 | Meth: 040.99 PCT | | | Meth: 041.40 PCT | | | <u>Dir Available Phosph</u> | | | 105 | 7.78 | -.43 |
| 451 | 7.44 | -2.46 | <u>InDir Available Phos</u> | | | <u>Dir Available Phosph</u> | | | <u>Other</u> | | | 095 | 7.78 | -.47 |
| 432 | 7.20 s | -3.69 | <u>Other</u> | | | <u>Automated</u> | | | 131 | | | 7.79 | -.48 | |
| 307 | 6.95 s | -5.00 | 247 | 8.10 | .00 | 027 | 8.16 | 1.06 | 105 | | | 7.78 | -.88 | |
| 324 | 3.45 s | -21.18 | Meth: 030.10 PCT | | | 029 | | | Avg | | | 043 | 7.71 | -.93 |
| <u>Insoluble Phosphate</u> | | | Meth: 030.10 PCT | | | Avg | | | 230 | | | 325 | 7.68 | -1.04 |
| <u>Grav Quimociac</u> | | | Meth: 030.10 PCT | | | 095 | | | 7.67 | | | 230 | 7.67 | -1.12 |
| 090 | 0.01 | .00 | Meth: 030.10 PCT | | | Avg | | | -1.31 | | | 102 | 7.67 | -1.16 |
| | | | Meth: 030.10 PCT | | | 095 | | | 7.68 | | | 260 | 7.68 | -1.18 |
| | | | Meth: 030.10 PCT | | | Avg | | | -1.35 | | | 023 | 7.63 | -1.35 |
| | | | Meth: 030.10 PCT | | | 095 | | | 7.78 | | | | | |

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

| Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index |
|-----------------------------|----------|-------|----------------------|----------|-------|------------------------|----------|-------|------------------------|----------|-------|-----------------------|----------|-------|
| Meth: 041.XX PCT | | | Meth: 050.00 PCT | | | Meth: 050.50 PCT | | | Meth: 050.61 PCT | | | Meth: 050.XX PCT | | |
| <u>Dir Available Phosph</u> | | | Soluble Potash | | | Soluble Potash | | | Soluble Potash | | | <u>Soluble Potash</u> | | |
| 419 | 7.81 R | -1.40 | <u>STPB Oxalate</u> | | | <u>ICP (Oxalate)</u> | | | <u>Flame (Citrate)</u> | | | 027 | 25.94 | 2.39 |
| 024 | 7.62 | -1.41 | 090 | 24.09 | -1.01 | 324 | 23.80 | -.45 | 456 | 24.87 | .88 | 393 | 25.77 | 2.12 |
| 377 | 7.61 | -1.57 | 049 | 23.98 | -1.52 | 419 | 23.22 | -1.36 | 095 | 24.81 | .75 | 157 | 25.75 | 2.10 |
| Meth: 048.20 PCT | | | 102 | | | 444 | | | Avg | | | 406 | | |
| Water Soluble Phosph | | | 230 | | | 390 | | | 029 | | | 030 | | |
| <u>Spectrometric</u> | | | 5.37 s | | | 22.15 s | | | 24.45 | | | 24.64 R | | |
| 420 | 6.96 | -.71 | Meth: 050.10 PCT | | | Meth: 050.51 PCT | | | 041 | | | 322 | | |
| Meth: 048.50 PCT | | | Soluble Potash | | | Soluble Potash | | | 024 | | | 131 | | |
| Water Soluble Phosph | | | <u>STPB Citrate</u> | | | <u>ICP (Citrate)</u> | | | 018 | | | 450 | | |
| <u>ICP</u> | | | 117 | 24.58 | .71 | 393 | 25.77 | 2.21 | 034 | | | 432 | | |
| 393 | 6.27 | -.71 | Meth: 050.30 PCT | | | 432 | | | 035 | | | 456 | | |
| Meth: 048.99 PCT | | | Soluble Potash | | | 007 | | | Meth: 050.99 PCT | | | 177 | | |
| Water Soluble Phosph | | | <u>AA (Oxalate)</u> | | | 009 | | | Soluble Potash | | | 095 | | |
| <u>Other</u> | | | 157 | 25.75 | 1.91 | 389 | | | <u>Other</u> | | | 009 | | |
| 247 | 6.13 | .00 | 040 | 24.58 | .48 | 023 | | | 027 | | | 254 | | |
| Meth: 048.XX PCT | | | 043 | 24.23 | .15 | Avg | | | 322 | | | 470 | | |
| Water Soluble Phosph | | | 185 | 24.25 | .09 | 043 | | | 450 | | | 007 | | |
| <u>Water Soluble Phosph</u> | | | Avg | | | 377 | | | 177 | | | 009 | | |
| 420 | 6.96 | 1.27 | 234 | 23.90 | -.37 | 291 | | | 086 | | | 389 | | |
| Avg | 6.45 | | 073 | 23.61 | -.74 | 096 | | | 275 | | | 040 | | |
| 393 | 6.27 | -.48 | 351 | 23.09 | -1.38 | 423 | | | 260 | | | 157 | | |
| 247 | 6.13 | -.81 | 428 | 19.90 s | -5.39 | Meth: 050.60 PCT | | | 360 | | | 117 | | |
| Meth: 050.00 PCT | | | Meth: 050.31 PCT | | | Soluble Potash | | | 131 | | | 416 | | |
| Soluble Potash | | | Soluble Potash | | | <u>Flame (Oxalate)</u> | | | 232 | | | 470 | | |
| <u>STPB Oxalate</u> | | | <u>AA (Citrate)</u> | | | 415 | | | Avg | | | 275 | | |
| 009 | 24.80 | 1.99 | 254 | 24.70 | -.71 | 402 | | | 402 | | | 360 | | |
| 416 | 24.54 X | .89 | Meth: 050.50 PCT | | | 169 | | | 455 | | | 260 | | |
| 470 | 24.52 | .82 | Soluble Potash | | | 406 | | | 137 | | | 029 | | |
| 114 | 24.34 | .28 | <u>ICP (Oxalate)</u> | | | Avg | | | 368 | | | 131 | | |
| Avg | 24.33 | | 354 | 24.40 | .87 | 470 | | | 325 | | | 354 | | |
| 231 | 24.29 | -.17 | 157 | 24.30 | .87 | 443 | | | 307 | | | 023 | | |
| 211 | 24.27 | -.23 | 292 | 24.37 | .79 | 460 | | | 042 | | | 041 | | |
| 055 | 24.24 | -.36 | 420 | 24.21 | .51 | Meth: 050.61 PCT | | | 451 | | | 232 | | |
| 397 | 24.20 | -.67 | 055 | 24.18 | .45 | Soluble Potash | | | 22.42 | | | 024 | | |
| Meth: 050.61 PCT | | | Avg | | | <u>Flame (Citrate)</u> | | | Meth: 050.XX PCT | | | 292 | | |
| Soluble Potash | | | 23.94 | | | 030 | | | <u>Soluble Potash</u> | | | 114 | | |
| Avg | | | 23.94 | | | 131 | | | 415 | | | Avg | | |
| 23.94 | | | 23.94 | | | 25.28 | | | 29.33 s | | | 231 | | |
| 23.94 | | | 23.94 | | | 1.78 | | | 24.11 | | | 211 | | |
| 23.94 | | | 23.94 | | | 1.78 | | | 23.71 | | | 24.27 | | |
| 23.94 | | | 23.94 | | | 1.78 | | | -.61 | | | -.02 | | |
| 23.94 | | | 23.94 | | | 1.78 | | | -.73 | | | -.04 | | |
| 23.94 | | | 23.94 | | | 1.78 | | | -1.15 | | | | | |
| 23.94 | | | 23.94 | | | 1.78 | | | -1.18 | | | | | |
| 23.94 | | | 23.94 | | | 1.78 | | | -1.31 | | | | | |
| 23.94 | | | 23.94 | | | 1.78 | | | -2.11 | | | | | |
| 23.94 | | | 23.94 | | | 1.78 | | | 10.24 | | | | | |
| 23.94 | | | 23.94 | | | 1.78 | | | 2.64 | | | | | |

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

| Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index |
|-----------------------|----------|--------|-----------------------------|----------|--------|-----------------------------|----------|-------|-----------------------------|----------|-------|-----------------------------|----------|-------|
| Meth: 050.XX PCT | | | Meth: 060.00 PCT | | | Meth: 101.00 PCT | | | Meth: 101.30 PCT | | | Meth: 101.XX PCT | | |
| <u>Soluble Potash</u> | | | <u>Free Water</u> | | | <u>Acid Soluble Calcium</u> | | | <u>Acid Soluble Calcium</u> | | | <u>Acid Soluble Calcium</u> | | |
| 055 | 24.24 | -.08 | <u>Vacuum Oven</u> | | | <u>AA</u> | | | <u>ICP</u> | | | 037 | 1.24 | .71 |
| 043 | 24.29 | -.09 | 247 | 0.68 | 1.30 | 055 | 1.22 | .76 | 035 | 1.12 | -.62 | 055 | 1.22 | .52 |
| 185 | 24.25 | -.10 | 096 | 0.60 | .69 | 296 | 1.21 | .64 | 102 | 1.12 | -.62 | 360 | 1.22 | .48 |
| 018 | 24.25 | -.10 | Avg | 0.52 | | 028 | 1.16 | .07 | 095 | 1.11 | -.65 | 131 | 1.22 | .45 |
| 420 | 24.21 | -.16 | 416 | 0.52 X | -.02 | Avg | 1.15 | | 157 | 1.11 | -.68 | 247 | 1.21 | .45 |
| 055 | 24.18 | -.19 | 007 | 0.41 | -.97 | 351 | 1.14 | -.22 | 307 | 1.16 R | -.87 | 296 | 1.21 | .39 |
| 043 | 24.23 | -.20 | 456 | 0.39 | -1.18 | 043 | 1.13 | -.41 | 291 | 1.09 | -.91 | 009 | 1.21 | .39 |
| 397 | 24.20 | -.20 | Meth: 060.10 PCT | | | 157 | 1.10 | -.68 | 232 | 1.09 | -.94 | 423 | 1.20 | .23 |
| 034 | 24.18 | -.20 | <u>Free Water</u> | | | 029 | 1.03 | -1.44 | 023 | 1.05 | -1.34 | 390 | 1.18 | .23 |
| 402 | 24.12 | -.26 | <u>Vacuum Desiccate</u> | | | 095 | 0.97 | -1.96 | 230 | 0.96 | -2.36 | 027 | 1.19 | .19 |
| 455 | 24.11 | -.28 | 419 | 0.18 | .71 | Meth: 101.30 PCT | | | 041 | 0.71 s | -5.29 | Avg | 1.17 | |
| 090 | 24.09 | -.31 | Meth: 060.99 PCT | | | <u>Acid Soluble Calcium</u> | | | Meth: 101.70 PCT | | | 354 | 1.17 | -.12 |
| 086 | 24.28 | -.38 | <u>Free Water</u> | | | <u>ICP</u> | | | <u>Acid Soluble Calcium</u> | | | 419 | 1.16 | -.17 |
| 377 | 24.02 | -.42 | <u>Other</u> | | | 049 | 2.97 s | 20.44 | <u>Titrimetric</u> | | | 090 | 1.16 | -.20 |
| 049 | 23.98 | -.48 | 443 | 2.95 S | 238.45 | 117 | 1.95 s | 8.89 | 415 | 1.29 | -.71 | 028 | 1.16 | -.23 |
| 443 | 24.02 | -.53 | Avg | 1.27 | | 432 | 1.51 s | 4.16 | Meth: 101.99 PCT | | | 368 | 1.15 | -.26 |
| 234 | 23.90 | -.57 | 420 | 1.27 | -.71 | 324 | 1.44 s | 3.82 | <u>Acid Soluble Calcium</u> | | | 351 | 1.14 | -.45 |
| 291 | 23.84 | -.66 | Meth: 060.XX PCT | | | 433 | 1.43 | 2.96 | <u>Other</u> | | | 086 | 1.13 | -.54 |
| 460 | 23.77 | -.76 | <u>Free Water</u> | | | 450 | 1.32 R | 1.74 | 137 | 1.51 S | .00 | 043 | 1.13 | -.60 |
| 324 | 23.80 | -.77 | 443 | 2.95 s | 7.16 | 231 | 1.29 | 1.35 | Meth: 101.XX PCT | | | 389 | 1.13 | -.62 |
| 137 | 23.71 | -.85 | 420 | 1.27 | 2.08 | 114 | 1.26 | .98 | <u>Acid Soluble Calcium</u> | | | 035 | 1.12 | -.67 |
| 035 | 23.69 | -.88 | 247 | 0.68 | .30 | 096 | 1.24 | .81 | 049 | 2.97 s | 19.94 | 102 | 1.12 | -.67 |
| 102 | 23.69 | -.94 | 096 | 0.60 | .08 | 037 | 1.24 | .79 | 117 | 1.95 s | 8.63 | 095 | 1.11 | -.70 |
| 368 | 23.61 | -1.00 | Avg | 0.58 | | 360 | 1.22 | .55 | 432 | 1.51 s | 4.02 | 157 | 1.10 | -.93 |
| 073 | 23.61 | -1.01 | 416 | 0.52 X | -.18 | 131 | 1.22 | .52 | 137 | 1.51 s | 3.73 | 291 | 1.09 | -.95 |
| 096 | 23.57 | -1.05 | 007 | 0.41 | -.52 | 247 | 1.21 | .52 | 324 | 1.44 s | 3.69 | 232 | 1.09 | -.98 |
| 423 | 23.35 | -1.38 | 456 | 0.39 | -.60 | 009 | 1.21 | .46 | 433 | 1.43 | 2.84 | 023 | 1.05 | -1.38 |
| 325 | 23.25 | -1.53 | 419 | 0.18 | -1.19 | 423 | 1.20 | .30 | 450 | 1.32 | 1.64 | 029 | 1.03 R | -1.71 |
| 307 | 23.50 R | -1.53 | Meth: 101.00 PCT | | | 390 | 1.18 | .26 | 415 | 1.29 | 1.30 | 095 | 0.97 | -2.25 |
| 419 | 23.22 | -1.57 | <u>Acid Soluble Calcium</u> | | | 027 | 1.19 | .26 | 231 | 1.29 | 1.26 | 230 | 0.96 | -2.37 |
| 042 | 23.10 | -1.73 | <u>AA</u> | | | Avg | 1.17 | | 415 | 1.29 | 1.30 | 041 | 0.71 s | -5.24 |
| 351 | 23.09 | -1.76 | 073 | 1.25 | 1.02 | 354 | 1.17 | -.07 | 231 | 1.29 | 1.26 | Meth: 121.00 PCT | | |
| 444 | 23.05 | -1.82 | 105 | 1.24 | .96 | 419 | 1.16 | -.10 | 114 | 1.26 | .89 | <u>Acid Soluble Magnesi</u> | | |
| 451 | 22.42 | -2.72 | 177 | 1.24 | .96 | 090 | 1.16 | -.15 | 073 | 1.25 | .78 | <u>AA</u> | | |
| 390 | 22.15 s | -3.28 | Meth: 101.00 PCT | | | 368 | 1.15 | -.21 | 105 | 1.24 | .74 | 169 | | |
| 428 | 19.90 s | -6.47 | <u>Acid Soluble Calcium</u> | | | 086 | 1.13 | -.49 | 096 | 1.24 | .73 | 4.01 s 10.21 | | |
| 230 | 5.37 s | -27.34 | <u>AA</u> | | | 389 | 1.13 | -.58 | 177 | 1.24 | .72 | | | |

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

| Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index |
|----------------------|----------|-------|----------------------|----------|-------|----------------------|----------|-------|----------------------|----------|-------|--------------------|----------|-------|
| Meth: 121.00 PCT | | | Meth: 121.30 PCT | | | Meth: 121.XX PCT | | | Meth: 121.XX PCT | | | Meth: 144.01 PCT | | |
| Acid Soluble Magnesi | | | Acid Soluble Magnesi | | | Acid Soluble Magnesi | | | Acid Soluble Magnesi | | | Sulfur | | |
| <u>AA</u> | | | <u>ICP</u> | | | <u>ICP</u> | | | <u>AA</u> | | | <u>Gravimetric</u> | | |
| 073 | 2.87 | 2.40 | 390 | 2.52 | .14 | 073 | 2.87 | 2.45 | 095 | 2.40 | -.96 | 055 | 10.31 | 2.00 |
| 105 | 2.64 | .88 | 291 | 2.52 | .07 | 041 | 2.87 | 2.45 | 023 | 2.38 | -1.12 | 043 | 10.09 | 1.22 |
| 028 | 2.63 | .85 | 231 | 2.53 | .05 | 247 | 2.81 | 2.02 | 086 | 2.36 | -1.15 | 296 | 9.92 | .67 |
| 177 | 2.59 | .53 | Avg | 2.52 | | 415 | 2.67 | 1.03 | 351 | 2.36 | -1.18 | 102 | 9.85 X | .35 |
| 397 | 2.53 | .22 | 420 | 2.49 | -.24 | 432 | 2.63 | .94 | 157 | 2.38 | -1.19 | 105 | 9.80 | .31 |
| Avg | 2.52 | | 419 | 2.47 | -.38 | 009 | 2.65 | .93 | 232 | 2.36 | -1.21 | Avg | 9.75 | |
| 095 | 2.50 | -.19 | 157 | 2.43 | -.71 | 114 | 2.65 | .91 | 102 | 2.43 R | -1.22 | 029 | 9.73 | -.11 |
| 296 | 2.50 | -.19 | 307 | 2.47 R | -.84 | 105 | 2.64 | .88 | 029 | 2.34 | -1.43 | 040 | 9.73 | -.23 |
| 040 | 2.49 | -.22 | 095 | 2.40 | -.91 | 028 | 2.63 | .85 | 090 | 2.31 | -1.57 | 324 | 9.68 | -.30 |
| 043 | 2.48 | -.34 | 023 | 2.38 | -1.07 | 234 | 2.62 | .73 | 035 | 2.30 | -1.64 | 114 | 9.65 | -.41 |
| 055 | 2.46 | -.63 | 086 | 2.36 | -1.09 | 027 | 2.61 | .62 | 230 | 2.22 | -2.20 | 028 | 9.60 | -.56 |
| 351 | 2.36 | -1.11 | 232 | 2.36 | -1.15 | 177 | 2.59 | .52 | 389 | 2.25 R | -2.64 | 397 | 9.62 R | -.84 |
| 157 | 2.38 | -1.12 | 102 | 2.43 R | -1.18 | 450 | 2.58 | .44 | Meth: 131.00 PCT | | | 095 | 9.48 | -.97 |
| 029 | 2.34 | -1.34 | 090 | 2.31 | -1.51 | 368 | 2.59 | .44 | Water Soluble Magnes | | | 444 | 9.22 | -1.94 |
| Meth: 121.30 PCT | | | 035 | 2.30 | -1.57 | 360 | 2.58 | .40 | <u>AA</u> | | | Meth: 144.02 PCT | | |
| Acid Soluble Magnesi | | | 230 | 2.22 | -2.13 | 460 | 2.58 | .40 | 030 | | | Sulfur | | |
| <u>ICP</u> | | | 389 | 2.25 s | -2.57 | 096 | 2.58 | .39 | Avg | | | <u>Gravimetric</u> | | |
| 049 | 5.92 s | 23.75 | Meth: 121.70 PCT | | | 354 | 2.54 | .36 | 029 | | | 292 | | |
| 117 | 3.87 s | 10.15 | Acid Soluble Magnesi | | | 131 | 2.56 | .33 | Meth: 131.30 PCT | | | 9.75 | | |
| 041 | 2.87 | 2.45 | <u>Titrimetric</u> | | | 037 | 2.56 | .29 | Water Soluble Magnes | | | -.71 | | |
| 247 | 2.81 | 2.02 | 415 | | | 397 | 2.53 | .22 | <u>ICP</u> | | | Meth: 144.99 PCT | | |
| 009 | 2.65 | .96 | 415 | | | 433 | 2.55 | .20 | 027 | | | Sulfur | | |
| 432 | 2.63 | .95 | Meth: 121.99 PCT | | | 423 | 2.54 | .13 | Meth: 131.99 PCT | | | <u>Other</u> | | |
| 114 | 2.65 | .93 | Acid Soluble Magnesi | | | Avg | 2.53 | | Water Soluble Magnes | | | 169 | | |
| 324 | 2.52 | .70 | <u>Other</u> | | | 231 | 2.53 | -.04 | <u>Other</u> | | | 11.17 s | | |
| 027 | 2.61 | .65 | 137 | | | 291 | 2.52 | -.08 | 230 | | | 9.96 R | | |
| 450 | 2.58 | .47 | 234 | | | 390 | 2.52 | -.15 | 360 | | | 10.11 | | |
| 368 | 2.59 | .47 | Avg | | | 095 | 2.50 | -.22 | 137 | | | 10.05 | | |
| 360 | 2.58 | .43 | 460 | | | 296 | 2.50 | -.23 | 291 | | | 10.03 | | |
| 096 | 2.58 | .42 | 2.60 | | | 444 | 2.53 | -.25 | 307 | | | 9.62 R | | |
| 354 | 2.54 | .37 | 2.58 | | | 040 | 2.49 | -.26 | 157 | | | 9.77 | | |
| 131 | 2.56 | .35 | Meth: 121.XX PCT | | | 420 | 2.49 | -.29 | Meth: 131.XX PCT | | | .78 | | |
| 037 | 2.56 | .31 | Acid Soluble Magnesi | | | 043 | 2.48 | -.38 | Water Soluble Magnes | | | 049 | | |
| 444 | 2.53 | .25 | 049 | | | 419 | 2.47 | -.43 | 027 | | | 9.73 | | |
| 433 | 2.55 | .24 | 5.92 s | | | 055 | 2.46 | -.68 | 230 | | | 9.72 | | |
| 423 | 2.54 | .16 | 137 | | | 324 | 2.52 | -.71 | Avg | | | .67 | | |
| | | | 4.28 s | | | 157 | 2.43 | -.75 | 030 | | | .55 | | |
| | | | 12.47 | | | 307 | 2.47 | -.87 | 029 | | | .51 | | |
| | | | 10.56 | | | | | | 275 | | | 9.56 | | |
| | | | 10.28 | | | | | | 354 | | | 9.55 X | | |
| | | | | | | | | | | | | .25 | | |
| | | | | | | | | | | | | .21 | | |

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

| Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index |
|-----------------------------|----------|--------|-----------------------------|----------|-------|----------------------------|----------|-------|----------------------------|----------|-------|----------------------------|----------|-------|
| <u>Meth: 181.99 PPM</u> | | | <u>Meth: 190.99 PCT</u> | | | <u>Meth: 191.30 PPM</u> | | | <u>Meth: 202.30 PPM</u> | | | <u>Meth: 221.00 PCT</u> | | |
| <u>Cadmium</u> | | | <u>Water Soluble Chlori</u> | | | <u>Chromium</u> | | | <u>Acid Soluble Cobalt</u> | | | <u>Acid Soluble Copper</u> | | |
| <u>Other</u> | | | <u>Other</u> | | | <u>ICP</u> | | | <u>ICP</u> | | | <u>Atomic Absorption</u> | | |
| 231 | 1.61 | .71 | 460 | 3.82 | .36 | 232 | 78.05 | -1.44 | 390 | 32.85 | .20 | 043 | 0.0014 | .90 |
| | | | 397 | 3.80 | .33 | 419 | 77.00 R | -1.75 | Avg | 30.48 | | Avg | 0.0012 | |
| | | | Avg | 3.53 | | | | | 247 | 25.50 | -.41 | 095 | 0.0011 | -.83 |
| <u>Meth: 181.XX PPM</u> | | | <u>Meth: 190.XX PCT</u> | | | <u>Meth: 191.99 PPM</u> | | | <u>Meth: 202.99 PPM</u> | | | <u>Meth: 221.30 PCT</u> | | |
| <u>Cadmium</u> | | | <u>Water Soluble Chlori</u> | | | <u>Chromium</u> | | | <u>Acid Soluble Cobalt</u> | | | <u>Acid Soluble Copper</u> | | |
| 393 | 2.58 | 2.57 | 230 | 4.56 R | 1.72 | 231 | 42.09 S | .00 | 368 | 25.65 | -.50 | <u>ICP</u> | | |
| 035 | 2.10 | 1.19 | 419 | 4.20 | .92 | | | | 102 | 21.72 | -.72 | 324 | 0.0095 s | 18.80 |
| 086 | 1.71 | .09 | 389 | 3.90 | .39 | | | | 049 | 21.57 | -.73 | 402 | 0.0029 A | 3.88 |
| Avg | 1.69 | | 055 | 3.90 | .39 | | | | 027 | 15.07 | -1.26 | 354 | 0.0020 | 2.00 |
| 247 | 1.63 | -.18 | 360 | 3.83 | .31 | | | | 419 | 14.06 R | -1.40 | 393 | 0.0020 | 1.93 |
| 419 | 1.60 | -.25 | 029 | 3.83 | .26 | | | | 232 | 0.00 | -2.49 | 086 | 0.0013 R | .71 |
| 009 | 1.61 | -.27 | 460 | 3.82 | .26 | | | | | | | 035 | 0.0013 | .51 |
| 231 | 1.61 | -.27 | 397 | 3.80 | .23 | | | | | | | 433 | 0.0013 | .50 |
| 390 | 1.48 | -.60 | 102 | 3.81 | .23 | | | | | | | 049 | 0.0012 | .24 |
| 102 | 1.47 | -.62 | 028 | 3.80 | .21 | | | | | | | 096 | 0.0011 | .22 |
| 232 | 1.63 R | -.70 | Avg | 3.68 | | | | | | | | 095 | 0.0011 | .02 |
| 230 | 1.41 | -.81 | 043 | 3.60 | -.15 | | | | | | | Avg | 0.0011 | |
| 450 | 1.38 | -.90 | 368 | 2.02 | -2.99 | | | | | | | 247 | 0.0011 | -.14 |
| 368 | 1.65 R | -1.01 | 444 | 0.00 s | -6.60 | | | | | | | 102 | 0.0010 | -.20 |
| | | | | | | | | | | | | 450 | 0.0010 | -.20 |
| <u>Meth: 190.00 PCT</u> | | | <u>Meth: 191.30 PPM</u> | | | <u>Meth: 202.30 PPM</u> | | | <u>Meth: 202.XX PPM</u> | | | <u>Meth: 221.99 PCT</u> | | |
| <u>Water Soluble Chlori</u> | | | <u>Chromium</u> | | | <u>Acid Soluble Cobalt</u> | | | <u>Acid Soluble Cobalt</u> | | | <u>Acid Soluble Copper</u> | | |
| <u>Titrimetric</u> | | | <u>ICP</u> | | | <u>ICP</u> | | | <u>Other</u> | | | <u>Other</u> | | |
| 230 | 4.56 s | 8.00 | 096 | 107.00 | 1.62 | 009 | 45.00 | 1.19 | 231 | 11.26 | -.71 | 009 | 45.00 | 1.24 |
| 055 | 3.90 | .90 | 450 | 104.00 | 1.30 | 450 | 43.00 | 1.02 | 450 | 43.00 | 1.08 | 450 | 43.00 | 1.08 |
| 389 | 3.90 | .90 | 086 | 102.68 | 1.28 | 096 | 42.50 | 1.05 | 086 | 40.07 | .88 | 086 | 40.07 | .88 |
| 029 | 3.83 | .24 | 035 | 95.90 | .45 | 086 | 40.07 | .82 | 035 | 39.60 | .81 | 035 | 39.60 | .81 |
| 102 | 3.81 | .05 | 009 | 94.25 | .31 | 037 | 35.35 | .48 | 393 | 37.03 | .61 | 393 | 37.03 | .61 |
| Avg | 3.80 | | 247 | 92.50 | .18 | 390 | 32.85 | .29 | 037 | 35.35 | .48 | 037 | 35.35 | .48 |
| 028 | 3.80 | -.17 | Avg | 91.64 | | 390 | 32.30 | .28 | 390 | 32.30 | .28 | 390 | 32.30 | .28 |
| 043 | 3.60 | -1.94 | 037 | 90.03 | -.18 | 230 | 32.30 | .28 | Avg | 29.28 | | 230 | 32.30 | .28 |
| 444 | 0.00 s | -35.95 | 086 | 40.07 | .82 | 247 | 25.50 | -.30 | 368 | 25.65 | -.41 | 247 | 25.50 | -.30 |
| | | | 009 | 94.25 | .31 | 368 | 25.65 | -.41 | 102 | 21.72 | -.60 | 368 | 25.65 | -.41 |
| | | | 247 | 92.50 | .18 | 102 | 21.72 | -.60 | 049 | 21.57 | -.61 | 102 | 21.72 | -.60 |
| | | | Avg | 91.64 | | 049 | 21.57 | -.61 | 027 | 15.07 | -1.12 | 049 | 21.57 | -.61 |
| | | | 037 | 90.03 | -.18 | 027 | 15.07 | -1.12 | 419 | 14.06 R | -1.25 | 027 | 15.07 | -1.12 |
| | | | 368 | 86.90 | -.53 | 419 | 14.06 R | -1.25 | 231 | 11.26 | -1.42 | 419 | 14.06 R | -1.25 |
| | | | 393 | 86.52 | -.54 | 231 | 11.26 | -1.42 | 232 | 0.00 | -2.30 | 231 | 11.26 | -1.42 |
| | | | 230 | 81.15 | -1.11 | 232 | 0.00 | -2.30 | | | | 232 | 0.00 | -2.30 |
| | | | 102 | 80.69 | -1.15 | 230 | 32.30 | .21 | | | | | | |
| | | | | | | | | | | | | | | |

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

| Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index | Lab | Average* | Index |
|----------------------------|----------|-------|--------------------------|----------|-------|--------------------------|----------|-------|--------------------------|----------|-------|-------------------------------|----------|-------|
| Meth: 221.XX PCT | | | Meth: 241.30 PCT | | | Meth: 241.99 PCT | | | Meth: 241.XX PCT | | | Meth: 251.99 PPM | | |
| <u>Acid Soluble Copper</u> | | | <u>Acid Soluble Iron</u> | | | <u>Acid Soluble Iron</u> | | | <u>Acid Soluble Iron</u> | | | <u>Lead</u> | | |
| 354 | 0.0020 | 2.14 | <u>ICP</u> | | | <u>Other</u> | | | 114 | 0.26 | -.08 | <u>Other</u> | | |
| 393 | 0.0020 | 2.07 | 049 | 0.37 s | 6.80 | 042 | 0.16 S | .00 | 433 | 0.26 | -.12 | 231 | 1.47 | .71 |
| 086 | 0.0013 R | .76 | 432 | 0.32 s | 4.31 | 137 | 0.33 S | .00 | 035 | 0.26 | -.19 | Meth: 251.XX PPM | | |
| 043 | 0.0014 | .62 | 324 | 0.30 R | 2.78 | Avg 0.00 | | | 090 | 0.26 | -.26 | <u>Lead</u> | | |
| 035 | 0.0013 | .54 | 354 | 0.29 | 1.63 | Meth: 241.XX PCT | | | 393 | 0.25 | -.49 | 393 | 2.82 | 1.29 |
| 433 | 0.0013 | .53 | 390 | 0.28 | 1.48 | <u>Acid Soluble Iron</u> | | | 423 | 0.25 | -.56 | 368 | 2.65 | 1.04 |
| 049 | 0.0012 | .25 | 055 | 0.28 | 1.26 | 030 | 0.52 s | 15.47 | 157 | 0.25 | -.69 | 419 | 2.65 | 1.04 |
| 096 | 0.0011 | .24 | 096 | 0.28 | 1.19 | 049 | 0.37 s | 6.24 | 105 | 0.25 | -.72 | 086 | 2.63 | .96 |
| 095 | 0.0011 | .01 | 247 | 0.28 | 1.19 | 432 | 0.32 s | 3.94 | 040 | 0.25 | -.81 | Avg 2.06 | | |
| 095 | 0.0011 | .01 | 360 | 0.28 | 1.10 | 137 | 0.33 s | 3.86 | 450 | 0.25 | -.86 | 450 | 2.00 | -.09 |
| Avg | 0.0011 | | 102 | 0.26 R | 1.01 | 043 | 0.31 | 2.60 | 117 | 0.25 | -.88 | 247 | 2.00 | -.09 |
| 247 | 0.0011 | -.16 | 444 | 0.28 | .93 | 324 | 0.30 R | 2.52 | 095 | 0.24 | -1.04 | 230 | 1.72 | -.62 |
| 102 | 0.0010 | -.22 | 041 | 0.27 | .84 | 354 | 0.29 | 1.46 | 291 | 0.24 | -1.21 | 390 | 1.51 | -.92 |
| 450 | 0.0010 | -.22 | 307 | 0.27 | .84 | 460 | 0.29 | 1.35 | 095 | 0.24 | -1.27 | 231 | 1.47 | -1.00 |
| 041 | 0.0010 | -.22 | 009 | 0.27 | .65 | 390 | 0.28 | 1.31 | 402 | 0.24 | -1.30 | 102 | 1.12 | -1.58 |
| 230 | 0.0010 | -.36 | 231 | 0.27 | .58 | 055 | 0.28 | 1.12 | 177 | 0.24 | -1.49 | Meth: 261.00 PCT | | |
| 231 | 0.0009 | -.46 | 027 | 0.27 | .49 | 351 | 0.28 | 1.10 | 230 | 0.23 | -1.92 | <u>Acid Soluble Manganese</u> | | |
| 232 | 0.0009 | -.59 | 086 | 0.26 | .44 | 096 | 0.28 | 1.04 | 232 | 0.22 | -2.11 | <u>AA</u> | | |
| 368 | 0.0009 | -.59 | 368 | 0.27 | .43 | 247 | 0.28 | 1.04 | 042 | 0.16 s | -5.72 | 043 | 0.293 | 1.46 |
| 419 | 0.0008 | -.82 | 419 | 0.27 | .41 | 360 | 0.28 | .96 | Meth: 251.30 PPM | | | 460 | 0.285 | 1.05 |
| 157 | 0.0000 | -2.59 | 433 | 0.26 | .13 | 102 | 0.26 R | .93 | <u>Lead</u> | | | 028 | 0.276 | .65 |
| Meth: 241.00 PCT | | | Avg 0.26 | | | 444 0.28 .81 | | | <u>ICP</u> | | | 351 | 0.268 | .33 |
| <u>Acid Soluble Iron</u> | | | 114 0.26 -.03 | | | 041 0.27 .74 | | | 393 | 2.82 | 1.19 | 095 | 0.270 | .26 |
| <u>Atomic Absorption</u> | | | 389 0.26 -.03 | | | 307 0.27 .74 | | | 368 | 2.65 | .93 | Avg 0.266 | | |
| 030 | 0.52 s | 12.72 | 035 | 0.26 | -.15 | 028 | 0.27 | .66 | 419 | 2.65 | .93 | 397 | 0.255 | -.67 |
| 043 | 0.31 | 2.03 | 090 | 0.26 | -.23 | 009 | 0.27 | .55 | 086 | 2.63 | .86 | 040 | 0.266 | -.68 |
| 460 | 0.29 | 1.00 | 393 | 0.25 | -.47 | 231 | 0.27 | .48 | Avg 2.12 | | | 296 | 0.248 | -1.02 |
| 351 | 0.28 | .79 | 423 | 0.25 | -.55 | 296 | 0.27 | .42 | 450 | 2.00 | -.21 | 177 | 0.236 | -1.65 |
| 028 | 0.27 | .48 | 157 | 0.25 | -.69 | 027 | 0.27 | .40 | 247 | 2.00 | -.21 | Meth: 261.11 PCT | | |
| 296 | 0.27 | .26 | 450 | 0.25 | -.89 | 086 | 0.26 | .38 | 230 | 1.72 | -.73 | <u>Acid Soluble Manganese</u> | | |
| 029 | 0.27 | .13 | 117 | 0.25 | -.90 | 368 | 0.27 | .34 | 390 | 1.51 | -1.04 | <u>AA</u> | | |
| Avg | 0.26 | | 023 | 0.25 | -1.00 | 419 | 0.27 | .34 | 102 | 1.12 | -1.70 | 029 | 0.217 S | .00 |
| 397 | 0.26 | -.20 | 095 | 0.24 | -1.07 | 029 | 0.27 | .28 | | | | | | |
| 105 | 0.25 | -.72 | 291 | 0.24 | -1.25 | 131 | 0.26 | .06 | | | | | | |
| 040 | 0.25 | -.80 | 402 | 0.24 | -1.35 | Avg 0.26 | | | | | | | | |
| 095 | 0.24 | -1.18 | 230 | 0.23 | -2.02 | 397 | 0.26 | -.08 | | | | | | |
| 177 | 0.24 | -1.37 | 232 | 0.22 | -2.22 | 389 | 0.26 | -.08 | | | | | | |

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Method Evaluation - Z Values Based on 1 Reports

| Method Code | Number Of Labs | Avg Bias of Labs | Std Dev of Biases | Std Dev Within Labs | Method Code | Number Of Labs | Avg Bias of Labs | Std Dev of Biases | Std Dev Within Labs |
|-------------|----------------|------------------|-------------------|---------------------|-------------|----------------|------------------|-------------------|---------------------|
| 001.10 | 7 | 0.00 | 1.03 | 0.12 | 060.XX | 8 | 0.89 | 2.71 | 0.10 |
| 001.99 | 11 | 0.33 | 2.20 | 0.33 | 101.00 | 11 | 0.00 | 0.99 | 0.24 |
| 001.XX | 18 | 0.15 | 1.43 | 0.20 | 101.30 | 33 | 0.98 | 4.12 | 0.54 |
| 002.20 | 4 | 0.00 | 1.06 | 0.17 | 101.XX | 44 | 0.77 | 3.56 | 0.49 |
| 002.99 | 8 | 1.61 | 4.65 | 0.30 | 121.00 | 14 | 0.73 | 2.88 | 0.30 |
| 002.XX | 12 | 0.70 | 2.60 | 0.22 | 121.30 | 35 | 0.87 | 4.40 | 0.76 |
| 009.10 | 6 | 0.00 | 1.05 | 0.02 | 121.99 | 3 | 12.07 | 20.91 | 0.59 |
| 009.XX | 7 | 0.00 | 1.04 | 0.03 | 121.XX | 51 | 1.09 | 4.30 | 0.66 |
| 010.11 | 6 | - 7.30 | 17.11 | 0.49 | 131.00 | 2 | 0.00 | 1.05 | 0.45 |
| 010.12 | 6 | 0.00 | 1.04 | 0.15 | 131.XX | 4 | 0.00 | 1.07 | 0.12 |
| 010.60 | 55 | 3.07 | 17.85 | 0.30 | 144.01 | 13 | - 0.04 | 0.98 | 0.23 |
| 010.99 | 3 | - 2.33 | 4.10 | 8.27 | 144.99 | 29 | - 0.23 | 1.91 | 0.47 |
| 010.XX | 70 | 1.68 | 15.01 | 0.49 | 144.XX | 42 | - 0.19 | 1.76 | 0.46 |
| 020.10 | 8 | - 0.15 | 1.04 | 0.48 | 151.30 | 6 | 0.00 | 0.95 | 0.06 |
| 020.20 | 15 | - 1.85 | 7.25 | 0.19 | 151.XX | 7 | 0.01 | 0.96 | 0.06 |
| 020.40 | 8 | 0.00 | 0.98 | 0.31 | 165.00 | 7 | - 0.527 | 1.679 | 1.530 |
| 020.50 | 14 | - 0.51 | 1.58 | 0.46 | 165.99 | 25 | 5.350 | 24.790 | 2.331 |
| 020.99 | 4 | 0.00 | 0.00 | 0.00 | 165.XX | 32 | 3.550 | 19.505 | 2.070 |
| 020.XX | 43 | - 0.25 | 4.00 | 0.59 | 181.30 | 12 | - 0.03 | 0.93 | 0.34 |
| 030.XX | 3 | 0.00 | 1.11 | 0.09 | 181.XX | 13 | - 0.02 | 0.93 | 0.35 |
| 040.XX | 4 | 0.00 | 1.08 | 0.08 | 190.00 | 8 | - 3.60 | 13.34 | 1.27 |
| 041.10 | 12 | 0.57 | 2.16 | 0.41 | 190.99 | 5 | 0.00 | 1.06 | 0.06 |
| 041.20 | 2 | 0.00 | 0.85 | 0.62 | 190.XX | 13 | - 0.39 | 2.13 | 0.20 |
| 041.40 | 3 | 0.00 | 1.10 | 0.16 | 191.30 | 13 | - 0.12 | 1.05 | 0.30 |
| 041.50 | 11 | 0.00 | 1.00 | 0.21 | 191.XX | 14 | - 0.48 | 1.69 | 0.29 |
| 041.60 | 9 | 0.00 | 0.89 | 0.50 | 202.30 | 16 | - 0.08 | 1.03 | 0.15 |
| 041.99 | 3 | 0.00 | 1.05 | 0.31 | 202.XX | 17 | - 0.07 | 1.02 | 0.14 |
| 041.XX | 36 | 0.13 | 1.15 | 0.38 | 221.00 | 2 | 0.0000 | 1.1785 | 0.2357 |
| 048.XX | 3 | 0.00 | 1.12 | 0.06 | 221.30 | 19 | 1.2047 | 4.4025 | 0.6558 |
| 050.00 | 12 | - 6.86 | 22.97 | 0.38 | 221.XX | 21 | 1.1695 | 4.5072 | 0.6710 |
| 050.30 | 8 | - 0.66 | 2.10 | 0.39 | 241.00 | 12 | 0.98 | 3.52 | 1.43 |
| 050.50 | 9 | - 0.37 | 1.44 | 0.54 | 241.30 | 36 | 0.35 | 1.58 | 0.60 |
| 050.51 | 11 | 0.04 | 0.97 | 0.31 | 241.99 | 2 | 0.00 | 0.00 | 0.00 |
| 050.60 | 6 | 0.79 | 2.15 | 2.15 | 241.XX | 49 | 0.51 | 2.62 | 0.98 |
| 050.61 | 10 | 0.04 | 0.97 | 0.79 | 251.30 | 9 | 0.00 | 1.02 | 0.15 |
| 050.99 | 18 | - 0.05 | 0.99 | 0.24 | 251.XX | 10 | 0.00 | 1.02 | 0.14 |
| 050.XX | 70 | - 0.46 | 3.61 | 0.94 | 261.00 | 9 | 0.000 | 0.971 | 0.327 |
| 060.00 | 5 | 0.00 | 1.01 | 0.28 | 261.30 | 34 | 0.326 | 2.298 | 1.164 |
| 060.99 | 2 | 119.15 | 168.50 | 6.02 | 261.99 | 3 | 0.000 | 1.088 | 0.211 |

Method Evaluation - Z Values Based on 1 Reports

| Method Code | Number Of Labs | Avg Bias of Labs | Std Dev of Biases | Std Dev Within Labs | Method Code | Number Of Labs | Avg Bias of Labs | Std Dev of Biases | Std Dev Within Labs |
|-------------|----------------|------------------|-------------------|---------------------|-------------|----------------|------------------|-------------------|---------------------|
| 261.XX | 47 | 0.151 | 1.833 | 0.955 | | | | | |
| 281.30 | 2 | 0.00 | 1.22 | 0.01 | | | | | |
| 281.XX | 3 | 0.00 | 1.12 | 0.01 | | | | | |
| 289.30 | 13 | 0.07 | 0.95 | 0.45 | | | | | |
| 289.XX | 14 | - 0.28 | 1.60 | 0.43 | | | | | |
| 291.30 | 15 | - 0.12 | 1.07 | 0.33 | | | | | |
| 291.XX | 16 | - 0.48 | 1.75 | 0.32 | | | | | |
| 301.30 | 3 | 0.00 | 1.11 | 0.10 | | | | | |
| 301.XX | 4 | - 0.02 | 0.91 | 0.08 | | | | | |
| 311.99 | 7 | 0.00 | 0.98 | 0.31 | | | | | |
| 311.XX | 7 | 0.00 | 0.98 | 0.31 | | | | | |
| 321.00 | 11 | 0.000 | 0.764 | 0.651 | | | | | |
| 321.30 | 33 | 0.592 | 2.245 | 1.640 | | | | | |
| 321.99 | 2 | 0.000 | 0.000 | 0.000 | | | | | |
| 321.XX | 45 | 0.459 | 2.547 | 1.579 | | | | | |
| 325.30 | 2 | 0.000 | 1.141 | 0.315 | | | | | |
| 325.99 | 2 | 0.000 | 0.865 | 0.613 | | | | | |
| 325.XX | 3 | 0.369 | 0.800 | 0.438 | | | | | |