

AFPC

2015-03

Grade

18-46-0

Sample

| | AOAC Ref. | Method # | # of Labs. | Grand Median | Std Dev |
|---|------------|----------|------------|--------------|---------|
| AMMONIACAL NITROGEN | | | | | |
| Ammoniacal Nitrogen, Other | | 001.99 | 8 | 17.56 | 0.15 |
| Method Group 001.XX PCT | | | 8 | 17.56 | 0.18 |
| TOTAL NITROGEN | | | | | |
| Total Nitrogen, Modified Comprehensive | 978.02 | 010.11 | 3 | 17.81 | 0.00 |
| Total Nitrogen, Salicylic | 955.04d | 010.12 | 1 | 17.94 | 0.00 |
| Total Nitrogen, Combustion | 993.13 | 010.60 | 21 | 17.79 | 0.15 |
| Total Nitrogen, Other | | 010.99 | 8 | 17.75 | 0.06 |
| Method Group 010.XX PCT | | | 33 | 17.79 | 0.11 |
| TOTAL PHOSPHATE | | | | | |
| Total Phosphate, Gravimetric Quimociac | | 020.10 | 1 | 46.54 | 0.00 |
| Total Phosphate, Spectrometric | 978.02 | 020.20 | 18 | 46.26 | 0.19 |
| Total Phosphate, Alka. Quimociac | 955.04d | 020.30 | 1 | 46.57 | 0.00 |
| Total Phosphate, ICP | 970.03 | 020.40 | 5 | 46.21 | 0.07 |
| Method Group 020.XX PCT | | | 25 | 46.26 | 0.25 |
| INSOLUBLE PHOSPHATE | | | | | |
| Insoluble Phosphate, Spectrometric | 963.03C(b) | 030.20 | 7 | 0.13 | 0.05 |
| Insoluble Phosphate, Alka. Quimociac | 963.03C(c) | 030.30 | 1 | 0.08 | 0.00 |
| Insoluble Phosphate, Automated | 978.01 | 030.40 | 2 | 0.14 | 0.02 |
| Insoluble Phosphate, Other | | 030.99 | 2 | 0.06 | 0.00 |
| Method Group 030.XX PCT | | | 12 | 0.11 | 0.09 |
| INDIRECT AVAILABLE PHOSPHATE | | | | | |
| Indirect Available Phosphate, Spectrometric | 960.02 | 040.20 | 9 | 46.25 | 0.12 |
| Indirect Available Phosphate, Automated | 960.02 | 040.40 | 1 | 46.32 | 0.00 |
| Indirect Available Phosphate, Other | | 040.99 | 3 | 46.16 | 0.03 |
| Method Group 040.XX PCT | | | 13 | 46.19 | 0.14 |
| DIRECT AVAILABLE PHOSPHATE | | | | | |
| Direct Available Phosphate, Gravimetric Quimociac | 960.03E | 041.10 | 3 | 46.17 | 0.23 |
| Direct Available Phosphate, Automated | 978.01 | 041.40 | 2 | 45.83 | 0.10 |
| Direct Available Phosphate, ICP | | 041.50 | 4 | 45.87 | 0.33 |
| Direct Available Phosphate, EDTA Extract | 993.01 | 041.60 | 4 | 46.42 | 0.39 |
| Method Group 041.XX PCT | | | 13 | 46.00 | 0.42 |
| WATER SOLUBLE PHOSPHATE | | | | | |
| Water Soluble Phosphate, Spectrometric | 970.01 | 048.20 | 11 | 42.12 | 0.33 |
| Water Soluble Phosphate, Alka. Quimociac | 964.04 | 048.30 | 1 | 40.30 | 0.00 |
| Water Soluble Phosphate, Other | | 048.99 | 5 | 42.55 | 0.49 |
| Method Group 048.XX PCT | | | 17 | 42.12 | 0.56 |
| SOLUBLE POTASH AS K₂O | | | | | |
| Soluble Potash, ICP(Oxalate) | | 050.50 | 3 | 0.21 | 0.02 |
| Soluble Potash, ICP(Citrate) | | 050.51 | 3 | 0.21 | 0.03 |
| Soluble Potash, Other | | 050.99 | 9 | 0.21 | 0.02 |
| Method Group 050.XX PCT | | | 15 | 0.21 | 0.03 |
| FREE WATER | | | | | |
| Free Water, Vacuum Oven | 965.08B | 060.00 | 11 | 2.49 | 0.07 |
| Free Water, Vacuum Desiccate | 965.08A | 060.10 | 2 | 3.84 | 0.02 |
| Free Water, Other | | 060.99 | 3 | 2.41 | 0.01 |
| Method Group 060.XX PCT | | | 16 | 2.48 | 0.13 |
| ACID SOLUBLE CALCIUM AS CaO | | | | | |
| Acid Soluble Calcium, Atomic Absorption | 945.04 | 101.00 | 1 | 0.11 | 0.00 |
| Acid Soluble Calcium, ICP | | 101.30 | 18 | 0.18 | 0.02 |
| Acid Soluble Calcium, Other | | 101.99 | 1 | 0.18 | 0.00 |
| Method Group 101.XX PCT | | | 20 | 0.18 | 0.03 |
| ACID SOLUBLE MAGNESIUM AS MgO | | | | | |
| Acid Soluble Magnesium, Atomic Absorption | 984.01 | 121.00 | 1 | 1.10 | 0.00 |
| Acid Soluble Magnesium, ICP | | 121.30 | 18 | 1.16 | 0.06 |
| Acid Soluble Magnesium, Other | | 121.99 | 1 | 1.15 | 0.00 |

| | | | | | | |
|---|---|-----------|--------|------|------|------|
| AFPC Check Sample 03-2015 | Method Group 121.XX PCT | | 20 | 1.15 | 0.08 | |
| SULFATE SULFUR (S) | | | | | | |
| | Sulfur, Gravimetric | 980.02(a) | 144.01 | 1 | 2.31 | 0.00 |
| | Sulfur, Spectrometric | | 144.70 | 2 | 2.27 | 0.00 |
| | Sulfur, Other | | 144.99 | 14 | 2.31 | 0.06 |
| | | | | 17 | 2.31 | 0.06 |
| Method Group 144.XX PCT | | | | | | |
| TOTAL SULFUR (S) | | | | | | |
| | Sulfur, Other | | 145.99 | 3 | 2.48 | 0.08 |
| | | | | 3 | 2.48 | 0.09 |
| Method Group 145.XX PCT | | | | | | |
| TOTAL ARSENIC | | | | | | |
| | Total Arsenic, ICP | 980.02(b) | 151.02 | 5 | 4 | 2.1 |
| | Total Arsenic, Other | | 151.99 | 2 | 7 | 0.2 |
| | | | | 7 | 6 | 3.5 |
| Method Group 151.XX PPM | | | | | | |
| ACID SOLUBLE BORON | | | | | | |
| | Acid Soluble Boron, Other | | 165.99 | 1 | 77 | 0.0 |
| | | | | 1 | 77 | 0.0 |
| Method Group 165.XX PPM | | | | | | |
| TOTAL CADMIUM | | | | | | |
| | Total Cadmium, ICP | | 181.30 | 8 | 16.2 | 1.0 |
| | Total Cadmium, Other | | 181.99 | 1 | 16.2 | 0.0 |
| | | | | 9 | 16.2 | 0.3 |
| Method Group 181.XX PPM | | | | | | |
| ALUMINUM AS Al₂O₃ | | | | | | |
| | ICP, % | | | 16 | 1.11 | 0.06 |
| | Water Soluble Chlorine, Other, % | | 190.99 | 3 | 1.15 | 0.02 |
| | | | | 19 | 1.11 | 0.06 |
| Method Group 190.XX PCT | | | | | | |
| TOTAL CHROMIUM | | | | | | |
| | Total Chromium, ICP | | 191.30 | 8 | 170 | 1.9 |
| | Total Chromium, Other | | 191.99 | 1 | 167 | 0.0 |
| | | | | 9 | 170 | 3.5 |
| Method Group 191.XX PPM | | | | | | |
| ACID SOLUBLE COBALT | | | | | | |
| | Acid Soluble Cobalt, ICP | | 202.30 | 7 | 3 | 0.3 |
| | Acid Soluble Cobalt, Other | | 202.99 | 1 | 2 | 0.0 |
| | | | | 8 | 3 | 0.4 |
| Method Group 202.XX PPM | | | | | | |
| ACID SOLUBLE COPPER | | | | | | |
| | Acid Soluble Copper, ICP | | 221.30 | 4 | 1.3 | 1.0 |
| | Acid Soluble Copper, Other | | 221.99 | 1 | 0.0 | 0.0 |
| | | | | 5 | 1.5 | 1.4 |
| Method Group 221.XX PPM | | | | | | |
| ACID SOLUBLE IRON AS Fe₂O₃ | | | | | | |
| | Acid Soluble Iron, ICP | | 241.30 | 17 | 1.07 | 0.02 |
| | Acid Soluble Iron, Other | | 241.99 | 2 | 1.08 | 0.01 |
| | | | | 20 | 1.07 | 0.03 |
| Method Group 241.XX PCT | | | | | | |
| TOTAL LEAD | | | | | | |
| | Total Lead, ICP | | 251.30 | 4 | 1 | 0.1 |
| | Total Lead, Other | | 251.99 | 1 | 0.3 | 0.0 |
| | | | | 5 | 1 | 0.3 |
| Method Group 251.XX PPM | | | | | | |
| ACID SOLUBLE MANGANESE | | | | | | |
| | Acid Soluble Manganese, Atomic Absorption | 972.02b | 261.11 | 1 | 202 | 0.0 |
| | Acid Soluble Manganese, ICP | 972.02a | 261.30 | 4 | 203 | 38.3 |
| | Acid Soluble Manganese, Other | | 261.99 | 5 | 199 | 13.1 |
| | | | | 10 | 203 | 6.7 |
| Method Group 261.XX PPM | | | | | | |
| TOTAL MERCURY | | | | | | |
| | Total Mercury, ICP | | 281.30 | 1 | 0.00 | 0.00 |
| | | | | 1 | 0.02 | 0.00 |
| Method Group 281.XX PPM | | | | | | |
| TOTAL MOLYBDENUM | | | | | | |
| | Total Molybdenum, ICP | | 289.30 | 8 | 7 | 1.0 |
| | Total Molybdenum, Other | | 289.99 | 1 | 9 | 0.0 |
| | | | | 9 | 7 | 1.0 |
| Method Group 289.XX PPM | | | | | | |
| TOTAL NICKEL | | | | | | |
| | Total Nickel, ICP | | 291.30 | 6 | 14 | 1.2 |
| | Total Nickel, icp | | 291.99 | 1 | 16 | 0.0 |
| | | | | 7 | 15 | 1.4 |
| Method Group 291.XX PPM | | | | | | |
| TOTAL SELENIUM | | | | | | |

| | | | | | |
|--------------------------------------|--------|--------|------|-------|------|
| Total Selenium, ICP | 301.30 | 2 | 0.0 | 0.0 | |
| Method Group 301.XX PPM | | 2 | 0.0 | 0.0 | |
| SODIUM AS Na₂O | | | | | |
| Sodium, Other | 311.99 | 11 | 0.27 | 0.01 | |
| Method Group 311.XX PCT | | 11 | 0.27 | 0.02 | |
| ACID SOLUBLE ZINC | | | | | |
| Acid Soluble Zinc, Atomic Absorption | 975.02 | 321.00 | 1 | 148.7 | 0.0 |
| Acid Soluble Zinc, ICP | | 321.30 | 6 | 149.0 | 23.2 |
| Acid Soluble Zinc, Other | | 321.99 | 2 | 149.3 | 0.6 |
| Method Group 321.XX PPM | | | 9 | 148.7 | 5.5 |
| FLUORIDE | | | | | |
| Volumetric | 325.10 | | 12 | 0.59 | 0.07 |
| Distilled/Electrode | 325.99 | | 4 | 0.56 | 0.07 |
| Method Group 325.XX PCT | | | 16 | 0.58 | 0.10 |

| 001.99 Ammoniacal Nitrogen | | |
|----------------------------|--------------|--------------|
| Lab | | Other |
| 79 | 17.69 | -0.877 |
| 24 | 17.64 | -0.546 |
| 34 | 17.64 | -0.546 |
| 24 | 17.62 | -0.414 |
| Median | 17.56 | 0.000 |
| 38 | 17.50 | 0.414 |
| 32 | 17.45 | 0.744 |
| 32 | 17.42 | 0.943 |
| Std Dev | 17.41 | 1.000 |
| 310 | 17.22 | 2.233 |

| 001.XX Ammoniacal Nitrogen | | |
|----------------------------|--------------|--------------|
| Lab | | Total Method |
| 79 | 17.69 | -0.877 |
| 24 | 17.64 | -0.546 |
| 34 | 17.64 | -0.546 |
| 24 | 17.62 | -0.414 |
| Median | 17.56 | 0.000 |
| 38 | 17.50 | 0.414 |
| 32 | 17.45 | 0.744 |
| 32 | 17.42 | 0.943 |
| Std Dev | 17.41 | 1.000 |
| 310 | 17.22 | 2.233 |

| 010.11 Total Nitrogen | | |
|-----------------------|--------------|------------------------|
| Lab | | Modified Comprehensive |
| 43 | 17.82 | -1.340 |
| Std Dev | 17.81 | -1.000 |
| 219 | 17.81 | 0.000 |
| Median | 17.81 | 0.000 |
| Std Dev | 17.81 | 1.000 |
| 43 | 17.81 | 1.340 |

| 010.12 Total Nitrogen | | |
|-----------------------|--------------|--------------|
| Lab | | Salicylic |
| 107 | 17.94 | 0.000 |
| Median | 17.94 | 0.000 |

| 010.60 Total Nitrogen | | |
|-----------------------|-------|------------|
| Lab | | Combustion |
| 24 | 18.05 | -1.775 |
| 24 | 18.00 | -1.440 |

| | | |
|----------------|--------------|---------------|
| 47 | 18.00 | -1.440 |
| 42 | 17.98 | -1.273 |
| Std Dev | 17.93 | -1.000 |
| 111 | 17.92 | -0.904 |
| 14 | 17.89 | -0.703 |
| 14 | 17.84 | -0.368 |
| 31 | 17.84 | -0.335 |
| 79 | 17.83 | -0.301 |
| 66 | 17.80 | -0.101 |
| 61 | 17.79 | 0.000 |
| Median | 17.79 | 0.000 |
| 80 | 17.75 | 0.234 |
| 61 | 17.75 | 0.268 |
| 9 | 17.74 | 0.301 |
| 219 | 17.73 | 0.402 |
| 49 | 17.69 | 0.637 |
| 77 | 17.67 | 0.770 |
| 110 | 17.65 | 0.904 |
| Std Dev | 17.64 | 1.000 |
| 99 | 17.58 | 1.373 |
| 103 | 17.57 | 1.474 |
| 137 | 17.45 | 2.278 |

| 010.99 Total Nitrogen | | |
|-----------------------|--------------|---------------|
| Lab | | Other |
| 275 | 17.83 | -1.222 |
| Std Dev | 17.82 | -1.000 |
| 9 | 17.82 | -0.985 |
| 275 | 17.79 | -0.591 |
| 23 | 17.76 | -0.039 |
| Median | 17.75 | 0.000 |
| 23 | 17.75 | 0.039 |
| 32 | 17.72 | 0.591 |
| 40 | 17.70 | 0.828 |
| Std Dev | 17.69 | 1.000 |
| 32 | 17.60 | 2.483 |

| 010.XX Total Nitrogen | | |
|-----------------------|-------|--------------|
| Lab | | Total Method |
| 24 | 18.05 | -2.903 |
| 24 | 18.00 | -2.345 |
| 47 | 18.00 | -2.345 |
| 42 | 17.98 | -2.066 |
| 107 | 17.94 | -1.675 |

| | | |
|----------------|--------------|---------------|
| 111 | 17.92 | -1.452 |
| 14 | 17.89 | -1.117 |
| Std Dev | 17.88 | -1.000 |
| 14 | 17.84 | -0.558 |
| 31 | 17.84 | -0.503 |
| 79 | 17.83 | -0.447 |
| 275 | 17.83 | -0.447 |
| 9 | 17.82 | -0.279 |
| 43 | 17.82 | -0.279 |
| 219 | 17.81 | -0.223 |
| 43 | 17.81 | -0.168 |
| 66 | 17.80 | -0.112 |
| 275 | 17.79 | 0.000 |
| Median | 17.79 | 0.000 |
| 61 | 17.79 | 0.056 |
| 23 | 17.76 | 0.391 |
| 23 | 17.75 | 0.447 |
| 80 | 17.75 | 0.447 |
| 61 | 17.75 | 0.503 |
| 9 | 17.74 | 0.558 |
| 219 | 17.73 | 0.726 |
| 32 | 17.72 | 0.837 |
| Std Dev | 17.70 | 1.000 |
| 40 | 17.70 | 1.005 |
| 49 | 17.69 | 1.117 |
| 77 | 17.67 | 1.340 |
| 110 | 17.65 | 1.563 |
| 32 | 17.60 | 2.177 |
| 99 | 17.58 | 2.345 |
| 103 | 17.57 | 2.513 |
| 137 | 17.45 | 3.852 |

| 020.10 Total Phosphate | | |
|------------------------|--------------|-----------------------|
| Lab | | Gravimetric Quimociac |
| 219 | 46.54 | 0.000 |
| Median | 46.54 | 0.000 |

| 020.20 Total Phosphate | | |
|------------------------|--------------|---------------|
| Lab | | Spectrometric |
| 110 | 48.91 | -13.912 |
| 99 | 46.68 | -2.168 |
| 61 | 46.51 | -1.301 |
| Std Dev | 46.45 | -1.000 |
| 9 | 46.45 | -0.985 |

| | | |
|---------------|--------------|--------------|
| 61 | 46.45 | -0.985 |
| 24 | 46.42 | -0.828 |
| 31 | 46.37 | -0.539 |
| 43 | 46.31 | -0.250 |
| 34 | 46.30 | -0.197 |
| Median | 46.26 | 0.000 |
| 14 | 46.23 | 0.197 |
| 32 | 46.23 | 0.197 |
| 14 | 46.22 | 0.223 |
| 24 | 46.21 | 0.276 |
| 32 | 46.18 | 0.434 |
| 79 | 46.18 | 0.434 |
| 43 | 46.17 | 0.512 |
| 23 | 46.10 | 0.854 |
| 23 | 46.08 | 0.959 |

| 020.30 Total Phosphate | | |
|------------------------|--------------|-----------------|
| Lab | | Alka. Quimociac |
| 111 | 46.57 | 0.000 |
| Median | 46.57 | 0.000 |

| 020.40 Total Phosphate | | |
|------------------------|--------------|---------------|
| Lab | | Automated |
| 9 | 46.49 | -4.020 |
| Std Dev | 46.28 | -1.000 |
| 310 | 46.26 | -0.776 |
| 111 | 46.21 | 0.000 |
| Median | 46.21 | 0.000 |
| 137 | 46.17 | 0.564 |
| 219 | 46.14 | 0.987 |

| 020.XX Total Phosphate | | |
|------------------------|--------------|---------------|
| Lab | | Total Method |
| 110 | 48.91 | -13.152 |
| 99 | 46.68 | -2.060 |
| 111 | 46.57 | -1.514 |
| 219 | 46.54 | -1.365 |
| 61 | 46.51 | -1.241 |
| 9 | 46.49 | -1.141 |
| Std Dev | 46.46 | -1.000 |
| 9 | 46.45 | -0.943 |
| 61 | 46.45 | -0.943 |
| 24 | 46.42 | -0.794 |
| 31 | 46.37 | -0.521 |

| | | |
|---------------|--------------|--------------|
| 43 | 46.31 | -0.248 |
| 34 | 46.30 | -0.199 |
| 310 | 46.26 | 0.000 |
| Median | 46.26 | 0.000 |
| 14 | 46.23 | 0.174 |
| 32 | 46.23 | 0.174 |
| 14 | 46.22 | 0.199 |
| 24 | 46.21 | 0.248 |
| 111 | 46.21 | 0.273 |
| 32 | 46.18 | 0.397 |
| 79 | 46.18 | 0.397 |
| 43 | 46.17 | 0.471 |
| 137 | 46.17 | 0.471 |
| 219 | 46.14 | 0.620 |
| 23 | 46.10 | 0.794 |
| 23 | 46.08 | 0.893 |

| 030.20 Insoluble Phosphate | | |
|----------------------------|---------------|---------------|
| Lab | Spectrometric | |
| 61 | 0.25 | -2.218 |
| 61 | 0.19 | -1.109 |
| Std Dev | 0.18 | -1.000 |
| 24 | 0.17 | -0.739 |
| 23 | 0.13 | 0.000 |
| Median | 0.13 | 0.000 |
| 24 | 0.11 | 0.370 |
| 23 | 0.11 | 0.462 |
| Std Dev | 0.08 | 1.000 |
| 79 | 0.07 | 1.109 |

| 030.30 Insoluble Phosphate | | |
|----------------------------|-----------------|--------------|
| Lab | Alka. Quimociac | |
| 31 | 0.08 | 0.000 |
| Median | 0.08 | 0.000 |

| 030.40 Insoluble Phosphate | | |
|----------------------------|-------------|---------------|
| Lab | Automated | |
| 9 | 0.18 | -1.340 |
| Std Dev | 0.17 | -1.000 |
| Median | 0.14 | 0.000 |
| Std Dev | 0.12 | 1.000 |
| 34 | 0.11 | 1.340 |

| 030.99 Insoluble Phosphate | | |
|----------------------------|-------------|---------------|
| Lab | Other | |
| 32 | 0.07 | -1.340 |
| Std Dev | 0.06 | -1.000 |
| Median | 0.06 | 0.000 |
| Std Dev | 0.06 | 1.000 |
| 32 | 0.06 | 1.340 |

| 030.XX Insoluble Phosphate | | |
|----------------------------|--------------|---------------|
| Lab | Total Method | |
| 61 | 0.25 | -1.924 |
| 61 | 0.19 | -1.099 |
| Std Dev | 0.18 | -1.000 |
| 9 | 0.18 | -0.893 |
| 24 | 0.17 | -0.825 |
| 23 | 0.13 | -0.275 |
| 24 | 0.11 | 0.000 |
| 34 | 0.11 | 0.000 |
| Median | 0.11 | 0.000 |
| 23 | 0.11 | 0.069 |
| 31 | 0.08 | 0.481 |
| 79 | 0.07 | 0.550 |
| 32 | 0.07 | 0.618 |
| 32 | 0.06 | 0.687 |

| 040.20 Indirect Available Phosphate | | |
|-------------------------------------|---------------|--------------|
| Lab | Spectrometric | |
| 31 | 46.30 | -0.352 |
| 9 | 46.28 | -0.184 |
| 61 | 46.26 | -0.059 |
| 61 | 46.26 | -0.059 |
| 24 | 46.25 | 0.000 |
| Median | 46.25 | 0.000 |
| Std Dev | 46.13 | 1.000 |
| 79 | 46.11 | 1.198 |
| 24 | 46.10 | 1.281 |
| 23 | 45.98 | 2.328 |
| 23 | 45.97 | 2.370 |

| 040.40 Indirect Available Phosphate | | |
|-------------------------------------|--------------|--------------|
| Lab | Automated | |
| 9 | 46.32 | 0.000 |
| Median | 46.32 | 0.000 |

| 040.99 Indirect Available Phosphate | | |
|-------------------------------------|--------------|---------------|
| Lab | Other | |
| 34 | 46.19 | -1.149 |
| Std Dev | 46.19 | -1.000 |
| 32 | 46.16 | 0.000 |
| Median | 46.16 | 0.000 |
| Std Dev | 46.13 | 1.000 |
| 32 | 46.12 | 1.531 |

| 040.XX Indirect Available Phosphate | | |
|-------------------------------------|--------------|---------------|
| Lab | Total Method | |
| 9 | 46.32 | -1.117 |
| Std Dev | 46.30 | -1.000 |
| 31 | 46.30 | -0.938 |
| 9 | 46.28 | -0.759 |
| 61 | 46.26 | -0.625 |
| 61 | 46.26 | -0.625 |
| 24 | 46.25 | -0.563 |
| 34 | 46.19 | 0.000 |
| Median | 46.19 | 0.000 |
| 32 | 46.16 | 0.268 |
| 32 | 46.12 | 0.625 |
| 79 | 46.11 | 0.715 |
| 24 | 46.10 | 0.804 |
| Std Dev | 46.08 | 1.000 |
| 23 | 45.98 | 1.921 |
| 23 | 45.97 | 1.965 |

| 041.10 Direct Available Phosphate | | |
|-----------------------------------|-----------------------|--------------|
| Lab | Gravimetric Quimociac | |
| 219 | 46.22 | -0.196 |
| 47 | 46.17 | 0.000 |
| Median | 46.17 | 0.000 |
| Std Dev | 45.94 | 1.000 |
| 107 | 45.60 | 2.484 |

| 041.40 Direct Available Phosphate | | |
|-----------------------------------|--------------|---------------|
| Lab | Automated | |
| 49 | 45.97 | -1.340 |
| Std Dev | 45.93 | -1.000 |
| Median | 45.83 | 0.000 |
| Std Dev | 45.72 | 1.000 |
| 103 | 45.69 | 1.340 |

| 041.50 Direct Available Phosphate | | |
|-----------------------------------|--------------|---------------|
| Lab | ICP | |
| 42 | 46.65 | -2.368 |
| Std Dev | 46.20 | -1.000 |
| 47 | 46.00 | -0.373 |
| Median | 45.87 | 0.000 |
| 80 | 45.75 | 0.373 |
| 66 | 45.63 | 0.754 |

| 041.60 Direct Available Phosphate | | |
|-----------------------------------|--------------|--------------|
| Lab | EDTA Extract | |
| 29 | 46.76 | -0.880 |
| 77 | 46.62 | -0.509 |
| Median | 46.42 | 0.000 |
| 219 | 46.22 | 0.509 |
| Std Dev | 46.02 | 1.000 |
| 137 | 45.86 | 1.425 |

| 041.XX Direct Available Phosphate | | |
|-----------------------------------|--------------|---------------|
| Lab | Total Method | |
| 29 | 46.76 | -2.207 |
| 42 | 46.65 | -1.888 |
| 77 | 46.62 | -1.787 |
| Std Dev | 46.34 | -1.000 |
| 219 | 46.22 | -0.634 |
| 219 | 46.22 | -0.634 |
| 47 | 46.17 | -0.504 |
| 47 | 46.00 | 0.000 |
| Median | 46.00 | 0.000 |
| 49 | 45.97 | 0.086 |
| 137 | 45.86 | 0.403 |
| 80 | 45.75 | 0.706 |
| 103 | 45.69 | 0.879 |
| Std Dev | 45.65 | 1.000 |
| 66 | 45.63 | 1.066 |
| 107 | 45.60 | 1.138 |

| 048.20 Water Soluble Phosphate | | |
|--------------------------------|---------------|---------------|
| Lab | Spectrometric | |
| 9 | 42.82 | -2.096 |
| 14 | 42.55 | -1.288 |
| 14 | 42.49 | -1.093 |
| Std Dev | 42.45 | -1.000 |
| 31 | 42.28 | -0.464 |

| | | |
|----------------|--------------|--------------|
| 23 | 42.14 | -0.060 |
| 23 | 42.12 | 0.000 |
| Median | 42.12 | 0.000 |
| 24 | 41.96 | 0.479 |
| 24 | 41.94 | 0.539 |
| 79 | 41.93 | 0.584 |
| Std Dev | 41.79 | 1.000 |
| 61 | 41.62 | 1.512 |
| 61 | 41.54 | 1.737 |

| 048.30 | | Water Soluble Phosphate |
|---------------|--------------|-------------------------|
| Lab | | Alka. Quimociac |
| 111 | 40.30 | 0.000 |
| Median | 40.30 | 0.000 |

| 048.99 | | Water Soluble Phosphate |
|----------------|--------------|-------------------------|
| Lab | | Other |
| 9 | 42.63 | -0.165 |
| 32 | 42.61 | -0.134 |
| 32 | 42.55 | 0.000 |
| Median | 42.55 | 0.000 |
| Std Dev | 42.06 | 1.000 |
| 34 | 41.96 | 1.206 |
| 111 | 40.42 | 4.381 |

| 048.XX | | Water Soluble Phosphate |
|----------------|--------------|-------------------------|
| Lab | | Total Method |
| 9 | 42.82 | -1.513 |
| 9 | 42.63 | -1.091 |
| 32 | 42.61 | -1.059 |
| Std Dev | 42.58 | -1.000 |
| 14 | 42.55 | -0.929 |
| 32 | 42.55 | -0.919 |
| 14 | 42.49 | -0.789 |
| 31 | 42.28 | -0.335 |
| 23 | 42.14 | -0.043 |
| 23 | 42.12 | 0.000 |
| Median | 42.12 | 0.000 |
| 24 | 41.96 | 0.346 |
| 34 | 41.96 | 0.346 |
| 24 | 41.94 | 0.389 |
| 79 | 41.93 | 0.421 |
| Std Dev | 41.66 | 1.000 |
| 61 | 41.62 | 1.091 |

| | | |
|-----|-------|-------|
| 61 | 41.54 | 1.254 |
| 111 | 40.42 | 3.674 |
| 111 | 40.30 | 3.944 |

| 050.50 | | %K ₂ O | Soluble Potash |
|----------------|-------------|-------------------|----------------|
| Lab | | | ICP(Oxalate) |
| 99 | 0.26 | | -2.233 |
| Std Dev | 0.23 | | -1.000 |
| 23 | 0.21 | | 0.000 |
| Median | 0.21 | | 0.000 |
| 23 | 0.20 | | 0.447 |

| 050.51 | | %K ₂ O | Soluble Potash |
|----------------|-------------|-------------------|----------------|
| Lab | | | ICP(Citrate) |
| 137 | 0.27 | | -2.297 |
| Std Dev | 0.24 | | -1.000 |
| 275 | 0.21 | | 0.000 |
| Median | 0.21 | | 0.000 |
| 275 | 0.20 | | 0.383 |

| 050.99 | | %K ₂ O | Soluble Potash |
|----------------|-------------|-------------------|----------------|
| Lab | | | Other |
| 80 | 0.30 | | -4.824 |
| 111 | 0.26 | | -2.412 |
| 31 | 0.24 | | -1.340 |
| Std Dev | 0.23 | | -1.000 |
| 43 | 0.21 | | -0.114 |
| 24 | 0.21 | | 0.000 |
| 61 | 0.21 | | 0.000 |
| 61 | 0.21 | | 0.000 |
| Median | 0.21 | | 0.000 |
| 43 | 0.20 | | 0.306 |
| 24 | 0.20 | | 0.536 |

| 050.XX | | %K ₂ O | Soluble Potash |
|----------------|-------------|-------------------|----------------|
| Lab | | | Total Method |
| 80 | 0.30 | | -3.186 |
| 137 | 0.27 | | -2.124 |
| 99 | 0.26 | | -1.770 |
| 111 | 0.26 | | -1.593 |
| Std Dev | 0.24 | | -1.000 |
| 31 | 0.24 | | -0.885 |
| 43 | 0.21 | | -0.075 |
| 23 | 0.21 | | 0.000 |

| | | |
|---------------|-------------|--------------|
| 24 | 0.21 | 0.000 |
| 61 | 0.21 | 0.000 |
| 61 | 0.21 | 0.000 |
| 275 | 0.21 | 0.000 |
| Median | 0.21 | 0.000 |
| 43 | 0.20 | 0.202 |
| 23 | 0.20 | 0.354 |
| 24 | 0.20 | 0.354 |
| 275 | 0.20 | 0.354 |

| 060.00 | | Free Water |
|----------------|-------------|---------------|
| Lab | | Vacuum Oven |
| 32 | 2.76 | -4.020 |
| 32 | 2.65 | -2.382 |
| Std Dev | 2.56 | -1.000 |
| 79 | 2.54 | -0.744 |
| 31 | 2.54 | -0.670 |
| 111 | 2.50 | -0.074 |
| 34 | 2.49 | 0.000 |
| Median | 2.49 | 0.000 |
| 24 | 2.46 | 0.447 |
| 23 | 2.45 | 0.596 |
| 23 | 2.45 | 0.670 |
| Std Dev | 2.42 | 1.000 |
| 24 | 2.41 | 1.191 |
| 9 | 2.36 | 1.936 |

| 060.10 | | Free Water |
|----------------|-------------|------------------|
| Lab | | Vacuum Desiccate |
| 61 | 3.87 | -1.340 |
| Std Dev | 3.86 | -1.000 |
| Median | 3.84 | 0.000 |
| Std Dev | 3.81 | 1.000 |
| 61 | 3.81 | 1.340 |

| 060.99 | | Free Water |
|----------------|-------------|---------------|
| Lab | | Other |
| 14 | 2.43 | -1.531 |
| Std Dev | 2.42 | -1.000 |
| 9 | 2.41 | 0.000 |
| Median | 2.41 | 0.000 |
| Std Dev | 2.40 | 1.000 |
| 14 | 2.40 | 1.149 |

| 060.XX | | Free Water |
|----------------|-------------|---------------|
| Lab | | Total Method |
| 61 | 3.87 | -13.071 |
| 61 | 3.81 | -12.507 |
| 32 | 2.76 | -2.680 |
| 32 | 2.65 | -1.646 |
| Std Dev | 2.58 | -1.000 |
| 79 | 2.54 | -0.611 |
| 31 | 2.54 | -0.564 |
| 111 | 2.50 | -0.188 |
| 34 | 2.49 | -0.141 |
| Median | 2.48 | 0.000 |
| 24 | 2.46 | 0.141 |
| 23 | 2.45 | 0.235 |
| 23 | 2.45 | 0.282 |
| 14 | 2.43 | 0.423 |
| 9 | 2.41 | 0.611 |
| 24 | 2.41 | 0.611 |
| 14 | 2.40 | 0.752 |
| Std Dev | 2.37 | 1.000 |
| 9 | 2.36 | 1.081 |

| 101.00 | | Acid Soluble Calcium |
|---------------|-------------|----------------------|
| Lab | %CaO | Atomic Absorption |
| 219 | 0.11 | 0.000 |
| Median | 0.11 | 0.000 |

| 101.30 | | Acid Soluble Calcium |
|----------------|-------------|----------------------|
| Lab | %CaO | ICP |
| 61 | 0.24 | -2.563 |
| 275 | 0.23 | -2.330 |
| 32 | 0.21 | -1.398 |
| Std Dev | 0.20 | -1.000 |
| 275 | 0.20 | -0.932 |
| 32 | 0.20 | -0.699 |
| 61 | 0.20 | -0.699 |
| 24 | 0.19 | -0.466 |
| 31 | 0.18 | -0.163 |
| 24 | 0.18 | 0.000 |
| 34 | 0.18 | 0.000 |
| Median | 0.18 | 0.000 |
| 14 | 0.18 | 0.233 |
| 23 | 0.17 | 0.466 |
| 23 | 0.17 | 0.466 |

| | | |
|---------|------|-------|
| 14 | 0.17 | 0.699 |
| Std Dev | 0.16 | 1.000 |
| 9 | 0.16 | 1.165 |
| 111 | 0.16 | 1.165 |
| 43 | 0.15 | 1.379 |
| 43 | 0.15 | 1.519 |

| | | |
|--------|----------------------|-------|
| 101.99 | Acid Soluble Calcium | |
| Lab | %CaO | Other |
| 9 | 0.18 | 0.000 |
| Median | 0.18 | 0.000 |

| | | |
|---------|----------------------|--------------|
| 101.XX | Acid Soluble Calcium | |
| Lab | %CaO | Total Method |
| 61 | 0.24 | -2.371 |
| 275 | 0.23 | -2.165 |
| 32 | 0.21 | -1.340 |
| Std Dev | 0.20 | -1.000 |
| 275 | 0.20 | -0.928 |
| 32 | 0.20 | -0.722 |
| 61 | 0.20 | -0.722 |
| 24 | 0.19 | -0.515 |
| 31 | 0.18 | -0.247 |
| 24 | 0.18 | -0.103 |
| 34 | 0.18 | -0.103 |
| Median | 0.18 | 0.000 |

| | | |
|---------|------|-------|
| 9 | 0.18 | 0.103 |
| 14 | 0.18 | 0.103 |
| 23 | 0.17 | 0.309 |
| 23 | 0.17 | 0.309 |
| 14 | 0.17 | 0.515 |
| 9 | 0.16 | 0.928 |
| 111 | 0.16 | 0.928 |
| Std Dev | 0.15 | 1.000 |
| 43 | 0.15 | 1.117 |
| 43 | 0.15 | 1.241 |
| 219 | 0.11 | 2.742 |

| | | |
|--------|------------------------|-------------------|
| 121.00 | Acid Soluble Magnesium | |
| Lab | %MgO | Atomic Absorption |
| 219 | 1.10 | 0.000 |
| Median | 1.10 | 0.000 |

| | | |
|---------|------------------------|--------|
| 121.30 | Acid Soluble Magnesium | |
| Lab | %MgO | ICP |
| 32 | 1.23 | -1.104 |
| Std Dev | 1.22 | -1.000 |
| 32 | 1.22 | -0.946 |
| 275 | 1.22 | -0.946 |
| 61 | 1.22 | -0.867 |
| 24 | 1.21 | -0.788 |
| 24 | 1.20 | -0.631 |
| 23 | 1.20 | -0.552 |
| 23 | 1.19 | -0.473 |
| 34 | 1.17 | -0.158 |
| Median | 1.16 | 0.000 |

| | | |
|---------|------|-------|
| 61 | 1.15 | 0.158 |
| 9 | 1.14 | 0.315 |
| 275 | 1.14 | 0.315 |
| 31 | 1.13 | 0.473 |
| 14 | 1.12 | 0.631 |
| 14 | 1.12 | 0.709 |
| Std Dev | 1.10 | 1.000 |
| 43 | 1.07 | 1.498 |
| 43 | 1.06 | 1.576 |
| 111 | 1.05 | 1.734 |

| | | |
|--------|------------------------|-------|
| 121.99 | Acid Soluble Magnesium | |
| Lab | %MgO | Other |
| 9 | 1.15 | 0.000 |
| Median | 1.15 | 0.000 |

| | | |
|---------|------------------------|--------------|
| 121.XX | Acid Soluble Magnesium | |
| Lab | %MgO | Total Method |
| 32 | 1.23 | -1.280 |
| 32 | 1.22 | -1.120 |
| 275 | 1.22 | -1.120 |
| 61 | 1.22 | -1.040 |
| Std Dev | 1.21 | -1.000 |
| 24 | 1.21 | -0.960 |
| 24 | 1.20 | -0.800 |
| 23 | 1.20 | -0.720 |
| 23 | 1.19 | -0.640 |
| 34 | 1.17 | -0.320 |
| 9 | 1.15 | 0.000 |
| 61 | 1.15 | 0.000 |
| Median | 1.15 | 0.000 |

| | | |
|---------|------|-------|
| 9 | 1.14 | 0.160 |
| 275 | 1.14 | 0.160 |
| 31 | 1.13 | 0.320 |
| 14 | 1.12 | 0.480 |
| 14 | 1.12 | 0.560 |
| 219 | 1.10 | 0.840 |
| Std Dev | 1.09 | 1.000 |
| 43 | 1.07 | 1.360 |
| 43 | 1.06 | 1.440 |
| 111 | 1.05 | 1.600 |

| | | |
|---------|--------------------|-------------|
| 144..01 | Sulfate Sulfur (S) | |
| Lab | | Gravimetric |
| 79 | 2.31 | 0.000 |
| Median | 2.31 | 0.000 |

| | | |
|---------|--------|---------------|
| 144.70 | Sulfur | |
| Lab | | Spectrometric |
| 14 | 2.27 | -1.340 |
| Std Dev | 2.27 | -1.000 |
| Median | 2.27 | 0.000 |
| Std Dev | 2.26 | 1.000 |
| 14 | 2.26 | 1.340 |

| | | |
|---------|--------------------|---------|
| 144.99 | Sulfate Sulfur (S) | |
| Lab | | Other |
| 275 | 6.73 | -80.264 |
| 275 | 6.71 | -79.900 |
| 32 | 2.43 | -2.044 |
| 32 | 2.37 | -1.045 |
| Std Dev | 2.37 | -1.000 |
| 23 | 2.34 | -0.409 |
| 24 | 2.32 | -0.136 |
| 23 | 2.32 | -0.045 |
| Median | 2.31 | 0.000 |

| | | |
|---------|------|-------|
| 9 | 2.31 | 0.045 |
| 24 | 2.31 | 0.045 |
| 34 | 2.31 | 0.045 |
| 9 | 2.28 | 0.591 |
| 31 | 2.27 | 0.772 |
| Std Dev | 2.26 | 1.000 |
| 61 | 2.25 | 1.136 |
| 61 | 2.25 | 1.226 |

| | | |
|---------|--------------------|--------------|
| 144.XX | Sulfate Sulfur (S) | |
| Lab | | Total Method |
| 275 | 6.73 | -91.120 |
| 275 | 6.71 | -90.708 |
| 32 | 2.43 | -2.371 |
| 32 | 2.37 | -1.237 |
| Std Dev | 2.36 | -1.000 |

| | | |
|---------|------|--------|
| 23 | 2.34 | -0.515 |
| 24 | 2.32 | -0.206 |
| 23 | 2.32 | -0.103 |
| 9 | 2.31 | 0.000 |
| 24 | 2.31 | 0.000 |
| 34 | 2.31 | 0.000 |
| Median | 2.31 | 0.000 |
| 79 | 2.31 | 0.103 |
| 9 | 2.28 | 0.618 |
| 14 | 2.27 | 0.825 |
| 31 | 2.27 | 0.825 |
| Std Dev | 2.26 | 1.000 |
| 14 | 2.26 | 1.031 |
| 61 | 2.25 | 1.237 |
| 61 | 2.25 | 1.340 |

| | | |
|---------|------------------|--------|
| 145.99 | Total Sulfur (S) | |
| Lab | | Other |
| 43 | 2.50 | -0.196 |
| 43 | 2.48 | 0.000 |
| Median | 2.48 | 0.000 |
| Std Dev | 2.40 | 1.000 |
| 111 | 2.29 | 2.484 |

| | | |
|---------|------------------|--------------|
| 145.XX | Total Sulfur (S) | |
| Lab | | Total Method |
| 43 | 2.50 | -0.196 |
| 43 | 2.48 | 0.000 |
| Median | 2.48 | 0.000 |
| Std Dev | 2.40 | 1.000 |
| 111 | 2.29 | 2.484 |

| | | |
|---------|---------------|--------|
| 151.30 | Total Arsenic | |
| Lab | | ICP |
| 24 | 7.92 | -2.154 |
| 31 | 5.75 | -1.096 |
| Std Dev | 5.55 | -1.000 |

| | | |
|--------|------|-------|
| 43 | 3.50 | 0.000 |
| Median | 3.50 | 0.000 |
| 43 | 3.00 | 0.244 |
| 61 | 1.60 | 0.926 |

| 151.99 | | Total Arsenic |
|---------|------|---------------|
| Lab | | Other |
| 275 | 7.40 | -1.340 |
| Std Dev | 7.32 | -1.000 |
| Median | 7.10 | 0.000 |
| Std Dev | 6.88 | 1.000 |
| 275 | 6.80 | 1.340 |

| 151.XX | | Total Arsenic |
|---------|------|---------------|
| Lab | | Total Method |
| 24 | 7.92 | -0.755 |
| 275 | 7.40 | -0.574 |
| 275 | 6.80 | -0.365 |
| 31 | 5.75 | 0.000 |
| Median | 5.75 | 0.000 |
| 43 | 3.50 | 0.783 |
| 43 | 3.00 | 0.957 |
| Std Dev | 2.88 | 1.000 |
| 61 | 1.60 | 1.444 |

| 165.99 | | Acid Soluble Boron |
|--------|-------|--------------------|
| Lab | PPM | Other |
| 24 | 76.60 | 0.000 |
| Median | 76.60 | 0.000 |

| 65.XX, ppm | | Acid Soluble Boron |
|------------|-------|--------------------|
| Lab | PPM | Total Method |
| 24 | 76.60 | 0.000 |
| Median | 76.60 | 0.000 |

| 181.30 | | Total Cadmium |
|---------|-------|---------------|
| Lab | PPM | ICP |
| 43 | 18.00 | -1.818 |
| 43 | 17.54 | -1.370 |
| Std Dev | 17.16 | -1.000 |
| 275 | 16.30 | -0.148 |
| 275 | 16.30 | -0.148 |
| Median | 16.15 | 0.000 |
| 61 | 16.00 | 0.148 |

| | | |
|---------|-------|-------|
| 61 | 16.00 | 0.148 |
| Std Dev | 15.14 | 1.000 |
| 111 | 13.00 | 3.104 |
| 31 | 11.80 | 4.286 |

| 181.99 | | Total Cadmium |
|--------|-------|---------------|
| Lab | | Other |
| 24 | 16.20 | 0.000 |
| Median | 16.20 | 0.000 |

| 181.XX | | Total Cadmium |
|---------|-------|---------------|
| Lab | PPM | Total Method |
| 43 | 18.00 | -8.018 |
| 43 | 17.54 | -5.985 |
| Std Dev | 16.42 | -1.000 |
| 275 | 16.30 | -0.447 |
| 275 | 16.30 | -0.447 |
| 24 | 16.20 | 0.000 |
| Median | 16.20 | 0.000 |
| 61 | 16.00 | 0.893 |
| 61 | 16.00 | 0.893 |
| Std Dev | 15.98 | 1.000 |
| 111 | 13.00 | 14.293 |
| 31 | 11.80 | 19.653 |

| 190.00 | | Aluminum |
|---------|---------------------------------|----------|
| Lab | %Al ₂ O ₃ | ICP |
| 275 | 1.21 | -1.675 |
| 14 | 1.20 | -1.508 |
| 14 | 1.20 | -1.424 |
| 32 | 1.19 | -1.340 |
| 32 | 1.18 | -1.089 |
| Std Dev | 1.17 | -1.000 |
| 9 | 1.16 | -0.837 |
| 43 | 1.12 | -0.084 |
| 24 | 1.11 | 0.000 |
| 24 | 1.11 | 0.000 |
| 275 | 1.11 | 0.000 |
| Median | 1.11 | 0.000 |
| 43 | 1.11 | 0.084 |
| 23 | 1.10 | 0.168 |
| 23 | 1.10 | 0.251 |
| 61 | 1.08 | 0.586 |
| 61 | 1.07 | 0.754 |

| | | |
|---------|------|-------|
| Std Dev | 1.05 | 1.000 |
| 111 | 0.75 | 6.114 |

| 190.99 | | Aluminum |
|---------|---------------------------------|-------------------|
| Lab | %Al ₂ O ₃ | Atomic Absorption |
| 9 | 1.17 | -0.975 |
| 31 | 1.15 | 0.000 |
| Median | 1.15 | 0.000 |
| Std Dev | 1.12 | 1.000 |
| 34 | 1.11 | 1.705 |

| 190.XX | | Aluminum |
|---------|---------------------------------|--------------|
| Lab | %Al ₂ O ₃ | Total Method |
| 275 | 1.21 | -1.985 |
| 14 | 1.20 | -1.787 |
| 14 | 1.20 | -1.687 |
| 32 | 1.19 | -1.588 |
| 32 | 1.18 | -1.290 |
| 9 | 1.17 | -1.092 |
| Std Dev | 1.16 | -1.000 |
| 9 | 1.16 | -0.993 |
| 31 | 1.15 | -0.695 |
| 43 | 1.12 | -0.099 |
| 24 | 1.11 | 0.000 |
| 24 | 1.11 | 0.000 |
| 34 | 1.11 | 0.000 |
| 275 | 1.11 | 0.000 |
| Median | 1.11 | 0.000 |
| 43 | 1.11 | 0.099 |
| 23 | 1.10 | 0.199 |
| 23 | 1.10 | 0.298 |
| 61 | 1.08 | 0.695 |
| 61 | 1.07 | 0.893 |
| Std Dev | 1.06 | 1.000 |
| 111 | 0.75 | 7.246 |

| 191.30 | | Total Chromium |
|---------|--------|----------------|
| Lab | | ICP |
| 43 | 174.50 | -2.187 |
| 31 | 173.85 | -1.840 |
| Std Dev | 172.28 | -1.000 |
| 275 | 170.90 | -0.267 |
| 61 | 170.50 | -0.053 |
| Median | 170.40 | 0.000 |

| | | |
|---------|--------|--------|
| 275 | 170.30 | 0.053 |
| 43 | 170.00 | 0.213 |
| Std Dev | 168.53 | 1.000 |
| 61 | 166.50 | 2.080 |
| 111 | 1.57 | 90.043 |

| 191.99 | | Total Chromium |
|--------|--------|----------------|
| Lab | PPM | Other |
| 24 | 167.00 | 0.000 |
| Median | 167.00 | 0.000 |

| 191.XX | | Total Chromium |
|---------|--------|----------------|
| Lab | PPM | Total Method |
| 43 | 174.50 | -1.443 |
| 31 | 173.85 | -1.220 |
| Std Dev | 173.21 | -1.000 |
| 275 | 170.90 | -0.206 |
| 61 | 170.50 | -0.069 |
| 275 | 170.30 | 0.000 |
| Median | 170.30 | 0.000 |
| 43 | 170.00 | 0.103 |
| Std Dev | 167.39 | 1.000 |
| 24 | 167.00 | 1.134 |
| 61 | 166.50 | 1.306 |
| 111 | 1.57 | 57.974 |

| 202.30 | | Acid Soluble Cobalt |
|--------|-----|---------------------|
| Lab | PPM | ICP |
| 43 | | |

| 202.99 | | Acid Soluble Cobalt |
|--------|------|---------------------|
| Lab | | Other |
| 24 | 2.11 | 0.000 |
| Median | 2.11 | 0.000 |

| 202.XX | | Acid Soluble Cobalt |
|---------|------|---------------------|
| Lab | PPM | Total Method |
| 43 | 3.00 | -1.286 |
| 43 | 3.00 | -1.286 |
| Std Dev | 2.91 | -1.000 |
| 61 | 2.75 | -0.511 |
| 61 | 2.60 | -0.046 |
| Median | 2.59 | 0.000 |
| 275 | 2.57 | 0.046 |
| 275 | 2.47 | 0.356 |

| | | |
|---------|------|-------|
| Std Dev | 2.26 | 1.000 |
| 24 | 2.11 | 1.472 |
| 31 | 1.79 | 2.479 |

| | | |
|--------|---------------------|-------|
| 221.00 | Acid Soluble Copper | |
| Lab | Atomic Absorption | |
| 219 | 1.10 | 0.000 |
| Median | 1.10 | 0.000 |

| | | |
|---------|---------------------|--------|
| 221.30 | Acid Soluble Copper | |
| Lab | PPM | ICP |
| 61 | <0.4 | 0.000 |
| 111 | 5.00 | -3.655 |
| Std Dev | 2.28 | -1.000 |
| 61 | 1.50 | -0.244 |
| Median | 1.25 | 0.000 |
| 43 | 1.00 | 0.244 |
| 43 | 1.00 | 0.244 |

| | | |
|--------|---------------------|-------|
| 221.99 | Acid Soluble Copper | |
| Lab | Other | |
| 24 | 2.51 | 0.000 |
| Median | 2.51 | 0.000 |

| | | |
|---------|---------------------|--------------|
| 221.XX | Acid Soluble Copper | |
| Lab | PPM | Total Method |
| 61 | <0.4 | 0.000 |
| 111 | 5.00 | -3.106 |
| Std Dev | 2.63 | -1.000 |
| 24 | 2.51 | -0.896 |
| 61 | 1.50 | 0.000 |
| Median | 1.50 | 0.000 |
| 43 | 1.00 | 0.444 |
| 43 | 1.00 | 0.444 |

| | | |
|---------|---------------------------------|--------|
| 241.30 | Acid Soluble Iron | |
| Lab | %Fe ₂ O ₃ | ICP |
| 32 | 1.16 | -4.824 |
| 32 | 1.15 | -4.020 |
| 24 | 1.09 | -1.072 |
| 31 | 1.09 | -1.072 |
| Std Dev | 1.09 | -1.000 |
| 24 | 1.08 | -0.536 |
| 275 | 1.08 | -0.536 |

| | | |
|--------|------|--------|
| 14 | 1.08 | -0.268 |
| 23 | 1.07 | 0.000 |
| 23 | 1.07 | 0.000 |
| Median | 1.07 | 0.000 |

| | | |
|---------|------|-------|
| 14 | 1.07 | 0.268 |
| 9 | 1.06 | 0.536 |
| 111 | 1.06 | 0.536 |
| 61 | 1.06 | 0.804 |
| Std Dev | 1.05 | 1.000 |
| 61 | 1.05 | 1.340 |
| 43 | 1.02 | 2.680 |
| 43 | 1.02 | 2.948 |
| 275 | 0.99 | 4.288 |

| | | |
|---------|---------------------------------|--------|
| 241.99 | Acid Soluble Iron | |
| Lab | %Fe ₂ O ₃ | Other |
| 34 | 1.10 | -1.340 |
| Std Dev | 1.10 | -1.000 |
| Median | 1.08 | 0.000 |
| Std Dev | 1.07 | 1.000 |
| 9 | 1.07 | 1.340 |

| | | |
|---------|---------------------------------|--------------|
| 241.XX | Acid Soluble Iron | |
| Lab | %Fe ₂ O ₃ | Total Method |
| 32 | 1.16 | -3.859 |
| 32 | 1.15 | -3.216 |
| 219 | 1.10 | -1.308 |
| 34 | 1.10 | -1.286 |
| Std Dev | 1.09 | -1.000 |
| 24 | 1.09 | -0.858 |
| 31 | 1.09 | -0.858 |
| 24 | 1.08 | -0.429 |
| 275 | 1.08 | -0.429 |
| 14 | 1.08 | -0.214 |
| 23 | 1.07 | 0.000 |
| 23 | 1.07 | 0.000 |
| Median | 1.07 | 0.000 |

| | | |
|---------|------|-------|
| 9 | 1.07 | 0.214 |
| 14 | 1.07 | 0.214 |
| 9 | 1.06 | 0.429 |
| 111 | 1.06 | 0.429 |
| 61 | 1.06 | 0.643 |
| Std Dev | 1.05 | 1.000 |
| 61 | 1.05 | 1.072 |

| | | |
|-----|------|-------|
| 43 | 1.02 | 2.144 |
| 43 | 1.02 | 2.358 |
| 275 | 0.99 | 3.430 |

| | | |
|--------|------------|--------|
| 251.30 | Total Lead | |
| Lab | PPM | ICP |
| 61 | <1.8 | 0.000 |
| 61 | <1.8 | 0.000 |
| 43 | 1.00 | -0.564 |
| 43 | 1.00 | -0.564 |
| Median | 0.92 | 0.000 |
| 275 | 0.84 | 0.564 |
| 275 | 0.72 | 1.411 |

| | | |
|--------|------------|-------|
| 251.99 | Total Lead | |
| Lab | Other | |
| 24 | 0.27 | 0.000 |
| Median | 0.27 | 0.000 |

| | | |
|--------|------------|--------------|
| 251.XX | Total Lead | |
| Lab | PPM | Total Method |
| 61 | <1.8 | 0.000 |
| 61 | <1.8 | 0.000 |
| 43 | 1.00 | -0.766 |
| 43 | 1.00 | -0.766 |
| 275 | 0.84 | 0.000 |
| Median | 0.84 | 0.000 |
| 275 | 0.72 | 0.574 |
| 24 | 0.27 | 2.728 |

| | | |
|--------|------------------------|-------|
| 261.11 | Acid Soluble Manganese | |
| Lab | Atomic Absorption | |
| 219 | 202.45 | 0.000 |
| Median | 202.45 | 0.000 |

| | | |
|---------|------------------------|--------|
| 261.30 | Acid Soluble Manganese | |
| Lab | ICP | |
| 31 | 207.05 | -0.106 |
| 275 | 203.00 | 0.000 |
| 275 | 203.00 | 0.000 |
| Median | 203.00 | 0.000 |
| Std Dev | 164.69 | 1.000 |
| 111 | 1.69 | 5.254 |

| | | |
|---------|------------------------|--------|
| 261.99 | Acid Soluble Manganese | |
| Lab | PPM | Other |
| 43 | 221.50 | -1.723 |
| 43 | 216.00 | -1.302 |
| Std Dev | 212.06 | -1.000 |
| 24 | 199.00 | 0.000 |
| Median | 199.00 | 0.000 |
| 61 | 198.50 | 0.038 |
| 61 | 195.50 | 0.268 |

| | | |
|---------|------------------------|--------------|
| 261.XX | Acid Soluble Manganese | |
| Lab | PPM | Total Method |
| 43 | 221.50 | -3.394 |
| 43 | 216.00 | -2.400 |
| Std Dev | 208.26 | -1.000 |
| 31 | 207.05 | -0.782 |
| 275 | 203.00 | -0.050 |
| 275 | 203.00 | -0.050 |
| Median | 202.73 | 0.000 |
| 219 | 202.45 | 0.050 |
| 24 | 199.00 | 0.673 |
| 61 | 198.50 | 0.764 |
| Std Dev | 197.19 | 1.000 |
| 61 | 195.50 | 1.306 |
| 111 | 1.69 | 36.343 |

| | | |
|--------|---------------|-------|
| 281.30 | Total Mercury | |
| Lab | PPM | ICP |
| 24 | 0.02 | 0.000 |
| Median | 0.02 | 0.000 |

| | | |
|--------|---------------|--------------|
| 281.XX | Total Mercury | |
| Lab | PPM | Total Method |
| 24 | 0.02 | 0.000 |
| Median | 0.02 | 0.000 |

| | | |
|--------|------------------|-----|
| 289.30 | Total Molybdenum | |
| Lab | PPM | ICP |
| 61 | | |

| | | |
|--------|------------------|-------|
| 289.99 | Total Molybdenum | |
| Lab | PPM | Other |
| 24 | 8.55 | 0.000 |
| Median | 8.55 | 0.000 |

| 289.XX Total Molybdenum | | |
|-------------------------|------|--------------|
| Lab | PPM | Total Method |
| 61 | 9.00 | -2.095 |
| 24 | 8.55 | -1.547 |
| Std Dev | 8.10 | -1.000 |
| 43 | 7.60 | -0.390 |
| 43 | 7.50 | -0.268 |
| 275 | 7.28 | 0.000 |
| Median | 7.28 | 0.000 |
| 275 | 7.15 | 0.158 |
| 61 | 6.50 | 0.950 |
| Std Dev | 6.46 | 1.000 |
| 31 | 5.25 | 2.473 |
| 111 | 4.50 | 3.387 |

| 291.30 Total Nickel | | |
|---------------------|-----|-----|
| Lab | PPM | ICP |
| 43 | | |

| 291.99 Total Nickel | | |
|---------------------|-------|-------|
| Lab | PPM | Other |
| 24 | 15.70 | 0.000 |
| Median | 15.70 | 0.000 |

| 291.XX Total Nickel | | |
|---------------------|-----|--------------|
| Lab | PPM | Total Method |
| | | |

| 301.30 Total Selenium | | |
|-----------------------|------|--------|
| Lab | PPM | ICP |
| 24 | 0.06 | -1.340 |
| Std Dev | 0.05 | -1.000 |
| Median | 0.04 | 0.000 |
| Std Dev | 0.02 | 1.000 |
| 61 | 0.02 | 1.340 |

| 301.XX Total Selenium | | |
|-----------------------|------|--------------|
| Lab | PPM | Total Method |
| 24 | 0.06 | -1.340 |
| Std Dev | 0.05 | -1.000 |
| Median | 0.04 | 0.000 |
| Std Dev | 0.02 | 1.000 |
| 61 | 0.02 | 1.340 |

| 311.99 Sodium | | |
|---------------|--------------------|-------|
| Lab | %Na ₂ O | Other |
| | | |

| | | |
|---------|------|--------|
| 24 | 0.29 | -1.675 |
| 24 | 0.28 | -1.005 |
| Std Dev | 0.28 | -1.000 |
| 23 | 0.27 | -0.335 |
| 31 | 0.27 | -0.335 |
| 61 | 0.27 | 0.000 |
| 111 | 0.27 | 0.000 |
| Median | 0.27 | 0.000 |
| 23 | 0.26 | 0.335 |
| Std Dev | 0.25 | 1.000 |
| 61 | 0.25 | 1.005 |
| 275 | 0.25 | 1.005 |
| 43 | 0.24 | 1.379 |
| 43 | 0.24 | 1.559 |

| 311.XX Sodium | | |
|---------------|--------------------|--------------|
| Lab | %Na ₂ O | Total Method |
| 24 | 0.29 | -1.675 |
| 24 | 0.28 | -1.005 |
| Std Dev | 0.28 | -1.000 |
| 23 | 0.27 | -0.335 |
| 31 | 0.27 | -0.335 |
| 61 | 0.27 | 0.000 |
| 111 | 0.27 | 0.000 |
| Median | 0.27 | 0.000 |
| 23 | 0.26 | 0.335 |
| Std Dev | 0.25 | 1.000 |
| 61 | 0.25 | 1.005 |
| 275 | 0.25 | 1.005 |
| 43 | 0.24 | 1.379 |
| 43 | 0.24 | 1.559 |

| 321.00 Acid Soluble Zinc | | |
|--------------------------|--------|-------------------|
| Lab | PPM | Atomic Absorption |
| 219 | 148.70 | 0.000 |
| Median | 148.70 | 0.000 |

| 321.30 Acid Soluble Zinc | | |
|--------------------------|--------|--------|
| Lab | PPM | ICP |
| 111 | 196.50 | -2.050 |
| 31 | 183.40 | -1.485 |
| Std Dev | 172.17 | -1.000 |
| 24 | 152.00 | -0.129 |
| Median | 149.00 | 0.000 |

| | | |
|-----|--------|-------|
| 61 | 146.00 | 0.129 |
| 61 | 144.00 | 0.216 |
| 275 | 131.06 | 0.774 |

| 321.99 Acid Soluble Zinc | | |
|--------------------------|--------|--------|
| Lab | PPM | Other |
| 43 | 150.00 | -1.340 |
| Std Dev | 149.81 | -1.000 |
| Median | 149.25 | 0.000 |
| Std Dev | 148.69 | 1.000 |
| 43 | 148.50 | 1.340 |

| 321.XX Acid Soluble Zinc | | |
|--------------------------|--------|--------------|
| Lab | PPM | Total Method |
| 111 | 196.50 | -10.675 |
| 31 | 183.40 | -7.750 |
| Std Dev | 153.18 | -1.000 |
| 24 | 152.00 | -0.737 |
| 43 | 150.00 | -0.290 |
| 219 | 148.70 | 0.000 |
| Median | 148.70 | 0.000 |
| 43 | 148.50 | 0.045 |
| 61 | 146.00 | 0.603 |
| Std Dev | 144.22 | 1.000 |
| 61 | 144.00 | 1.050 |
| 275 | 131.06 | 3.940 |

| 325.10 Fluoride | | |
|-----------------|------|-----------|
| Lab | % | Electrode |
| 111 | 2.04 | -21.078 |
| 32 | 0.73 | -2.101 |
| 32 | 0.71 | -1.738 |
| 23 | 0.62 | -0.507 |
| 23 | 0.62 | -0.435 |
| 79 | 0.59 | -0.072 |
| Median | 0.59 | 0.000 |
| 24 | 0.58 | 0.072 |
| 31 | 0.57 | 0.217 |
| 24 | 0.57 | 0.217 |
| 9 | 0.49 | 1.449 |
| 14 | 0.48 | 1.528 |
| 14 | 0.48 | 1.586 |

| 325.99 Fluoride | | |
|-----------------|------|--------|
| Lab | % | Other |
| 61 | 0.68 | -1.699 |
| 61 | 0.59 | -0.340 |
| Median | 0.56 | 0.000 |
| 34 | 0.54 | 0.340 |
| 9 | 0.46 | 1.623 |

| 325.XX Fluoride | | |
|-----------------|------|--------------|
| Lab | % | Total Method |
| 111 | 2.04 | -18.168 |
| 32 | 0.73 | -1.839 |
| 32 | 0.71 | -1.527 |
| 61 | 0.68 | -1.153 |
| 23 | 0.62 | -0.467 |
| 23 | 0.62 | -0.405 |
| 79 | 0.59 | -0.093 |
| 61 | 0.59 | -0.031 |
| Median | 0.58 | 0.000 |
| 24 | 0.58 | 0.031 |
| 31 | 0.57 | 0.156 |
| 24 | 0.57 | 0.156 |
| 34 | 0.54 | 0.530 |
| 9 | 0.49 | 1.215 |
| 14 | 0.48 | 1.284 |
| 14 | 0.48 | 1.334 |
| 9 | 0.46 | 1.589 |