

## AFPC

## Sample

2010-06

Grade

11-52-0

|   | AOAC Ref.  | Method # | # of Labs. | Grand Median | Std Dev |
|---|------------|----------|------------|--------------|---------|
| <b>AMMONIACAL NITROGEN</b>                  |            |          |            |              |         |
| Ammoniacal Nitrogen, Other                  |            | 001.99   | 8          | 11.36        | 0.06    |
| Method Group 001.XX PCT                     |            |          | 8          | 11.36        | 0.07    |
| <b>TOTAL NITROGEN</b>                       |            |          |            |              |         |
| Total Nitrogen, Combustion                  | 993.13     | 010.60   | 6          | 11.34        | 0.06    |
| Total Nitrogen, Other                       |            | 010.99   | 1          | 11.28        | 0.00    |
| Method Group 010.XX PCT                     |            |          | 7          | 11.34        | 0.07    |
| <b>TOTAL PHOSPHATE</b>                      |            |          |            |              |         |
| Total Phosphate, Spectrometric              | 978.02     | 020.20   | 12         | 53.23        | 0.15    |
| Total Phosphate, ICP, Lithium               | 970.02     | 020.50   | 1          | 53.59        | 0.00    |
| Method Group 020.XX PCT                     |            |          | 13         | 53.24        | 0.23    |
| <b>INSOLUBLE PHOSPHATE</b>                  |            |          |            |              |         |
| Insoluble Phosphate, Spectrometric          | 963.03C(b) | 030.20   | 9          | 0.57         | 0.06    |
| Insoluble Phosphate, Alka. Quimociac        | 963.03C(c) | 030.30   | 1          | 0.58         | 0.00    |
| Insoluble Phosphate, Automated              | 978.01     | 030.40   | 1          | 0.57         | 0.00    |
| Insoluble Phosphate, ICP                    |            | 030.50   | 1          | 0.46         | 0.00    |
| Method Group 030.XX PCT                     |            |          | 12         | 0.57         | 0.08    |
| <b>INDIRECT AVAILABLE PHOSPHATE</b>         |            |          |            |              |         |
| Indirect Available Phosphate, Spectrometric | 960.02     | 040.20   | 9          | 52.66        | 0.16    |
| Indirect Available Phosphate, ICP           |            | 040.50   | 1          | 53.00        | 0.00    |
| Indirect Available Phosphate, Other         |            | 040.99   | 1          | 52.90        | 0.00    |
| Method Group 040.XX PCT                     |            |          | 11         | 52.72        | 0.23    |
| <b>DIRECT AVAILABLE PHOSPHATE</b>           |            |          |            |              |         |
| Direct Available Phosphate, Automated       | 978.01     | 041.40   | 2          | 52.54        | 0.01    |
| Method Group 041.XX PCT                     |            |          | 2          | 52.54        | 0.01    |
| <b>WATER SOLUBLE PHOSPHATE</b>              |            |          |            |              |         |
| Water Soluble Phosphate, Spectrometric      | 970.01     | 048.20   | 10         | 48.11        | 0.43    |
| Water Soluble Phosphate, Other              |            | 048.99   | 2          | 48.14        | 0.10    |

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|--|-----------|--------|----|-------|------|
| Method Group 048.XX PCT                        |           |        | 12 | 48.11 | 0.36 |
| <b>SOLUBLE POTASH AS K<sub>2</sub>O</b>        |           |        |    |       |      |
| Soluble Potash, ICP(Oxalate)                   | 050.50    |        | 2  | 0.19  | 0.00 |
| Soluble Potash, Other                          | 050.99    |        | 4  | 0.20  | 0.02 |
| Method Group 050.XX PCT                        |           |        | 6  | 0.19  | 0.02 |
| <b>FREE WATER</b>                              |           |        |    |       |      |
| Free Water, Vacuum Oven                        | 965.08B   | 060.00 | 10 | 0.48  | 0.23 |
| Free Water, Vacuum Desiccate                   | 965.08A   | 060.10 | 2  | 0.47  | 0.04 |
| Method Group 060.XX PCT                        |           |        | 12 | 0.48  | 0.16 |
| <b>ACID SOLUBLE CALCIUM AS CaO</b>             |           |        |    |       |      |
| Acid Soluble Calcium, ICP                      |           | 101.30 | 12 | 0.28  | 0.02 |
| Method Group 101.XX PCT                        |           |        | 12 | 0.28  | 0.02 |
| <b>ACID SOLUBLE MAGNESIUM AS MgO</b>           |           |        |    |       |      |
| Acid Soluble Magnesium, ICP                    |           | 121.30 | 12 | 1.04  | 0.04 |
| Method Group 121.XX PCT                        |           |        | 12 | 1.04  | 0.05 |
| <b>SULFATE SULFUR (S)</b>                      |           |        |    |       |      |
| Sulfur, Gravimetric                            | 980.02(a) | 144.01 | 2  | 1.73  | 0.02 |
| Sulfur, Spectrometric                          |           | 144.70 | 2  | 1.66  | 0.00 |
| Sulfur, Other                                  |           | 144.99 | 8  | 1.61  | 0.04 |
| Method Group 144.XX PCT                        |           |        | 12 | 1.64  | 0.05 |
| <b>TOTAL ARSENIC</b>                           |           |        |    |       |      |
| Total Arsenic, ICP                             | 980.02(b) | 151.02 | 3  | 15    | 1.6  |
| Method Group 151.XX PPM                        |           |        | 3  | 15    | 2.0  |
| <b>ACID SOLUBLE BORON</b>                      |           |        |    |       |      |
| Acid Soluble Boron, Other                      |           | 165.99 | 1  | 35    | 0.0  |
| Method Group 165.XX PPM                        |           |        | 1  | 35    | 0.0  |
| <b>TOTAL CADMIUM</b>                           |           |        |    |       |      |
| Total Cadmium, ICP                             |           | 181.30 | 3  | 3     | 0.2  |
| Total Cadmium, Other                           |           | 181.99 | 1  | 3     | 0.0  |
| Method Group 181.XX PPM                        |           |        | 4  | 3     | 0.3  |
| <b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b> |           |        |    |       |      |
| ICP, %   |           |        | 11 | 1.67  | 0.05 |
| Water Soluble Chlorine, Other, %               |           | 190.99 | 1  | 1.69  | 0.00 |

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|---|----------------|----|------|------|
| Method Group 190.XX PCT                                 |                | 12 | 1.67 | 0.04 |
| <b>TOTAL CHROMIUM</b>                                   |                |    |      |      |
| Total Chromium, ICP                                     | 191.30         | 4  | 86   | 1.5  |
| Total Chromium, Other                                   | 191.99         | 1  | 84   | 0.0  |
| Method Group 191.XX PPM                                 |                | 5  | 86   | 1.8  |
| <b>ACID SOLUBLE COBALT</b>                              |                |    |      |      |
| Acid Soluble Cobalt, ICP                                | 202.30         | 3  | 3    | 0.0  |
| Acid Soluble Cobalt, Other                              | 202.99         | 1  | 3    | 0.0  |
| Method Group 202.XX PPM                                 |                | 4  | 3    | 0.1  |
| <b>ACID SOLUBLE COPPER</b>                              |                |    |      |      |
| Acid Soluble Copper, ICP                                | 221.30         | 2  | 2    | 0.2  |
| Acid Soluble Copper, Other                              | 221.99         | 1  | 0    | 0.0  |
| Method Group 221.XX PPM                                 |                | 3  | 2    | 0.7  |
| <b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b> |                |    |      |      |
| Acid Soluble Iron, ICP                                  | 241.30         | 12 | 1.31 | 0.03 |
| Method Group 241.XX PCT                                 |                | 12 | 1.31 | 0.04 |
| <b>TOTAL LEAD</b>                                       |                |    |      |      |
| Total Lead, ICP   | 251.30         | 2  | 1    | 0.0  |
| Total Lead, Other                                       | 251.99         | 1  | 1    | 0.0  |
| Method Group 251.XX PPM                                 |                | 3  | 1    | 0.0  |
| <b>ACID SOLUBLE MANGANESE</b>                           |                |    |      |      |
| Acid Soluble Manganese, ICP                             | 972.02a 261.30 | 2  | 373  | 2.2  |
| Acid Soluble Manganese, Other                           | 261.99         | 3  | 359  | 7.5  |
| Method Group 261.XX PPM                                 |                | 5  | 367  | 10.0 |
| <b>TOTAL MOLYBDENUM</b>                                 |                |    |      |      |
| Total Molybdenum, ICP                                   | 289.30         | 3  | 15   | 0.0  |
| Total Molybdenum, Other                                 | 289.99         | 1  | 15   | 0.0  |
| Method Group 289.XX PPM                                 |                | 4  | 15   | 0.1  |
| <b>TOTAL NICKEL</b>                                     |                |    |      |      |
| Total Nickel, ICP                                       | 291.30         | 3  | 13   | 0.4  |
| Total Nickel, Other                                     | 291.99         | 1  | 15   | 0.0  |
| Method Group 291.XX PPM                                 |                | 4  | 13   | 0.9  |
| <b>SODIUM AS Na<sub>2</sub>O</b>                        |                |    |      |      |

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|---------------------------|--------|--------|----|------|------|
| Sodium, Atomic Absorbtion | 983.04 | 311.00 | 1  | 0.26 | 0.00 |
| Sodium, Other             |        | 311.99 | 5  | 0.25 | 0.03 |
| Method Group 311.XX PCT   |        |        | 6  | 0.25 | 0.03 |
| <b>ACID SOLUBLE ZINC</b>  |        |        |    |      |      |
| Acid Soluble Zinc, ICP    |        | 321.30 | 3  | 81.5 | 2.1  |
| Method Group 321.XX %     |        |        | 3  | 81.5 | 2.6  |
| <b>FLUORIDE</b>           |        |        |    |      |      |
| Volumetric                |        | 325.10 | 9  | 1.77 | 0.04 |
| Distilled/Electrode       |        | 325.99 | 3  | 1.76 | 0.18 |
| Method Group 325.XX PCT   |        |        | 12 | 1.76 | 0.05 |