

# AFPC

## Sample

**2010-12**

**Grade**

**10-49-0**

|   | AOAC Ref.  | Method # | # of Labs. | Grand Median | Std Dev |
|---|------------|----------|------------|--------------|---------|
| <b>AMMONIACAL NITROGEN</b>                  |            |          |            |              |         |
| Ammoniacal Nitrogen, MgO distillation       | 920.03     | 001.10   | 1          | 10.51        | 0.00    |
| Ammoniacal Nitrogen, Other                  |            | 001.99   | 13         | 10.34        | 0.10    |
| Method Group 001.XX PCT                     |            |          | 14         | 10.34        | 0.11    |
| <b>NITRATE NITROGEN</b>                     |            |          |            |              |         |
| Nitrate Nitrogen, Other                     |            | 002.99   | 1          |              | 0.00    |
| Method Group 002.XX PCT                     |            |          | 1          | 0.00         | 0.00    |
| <b>TOTAL NITROGEN</b>                       |            |          |            |              |         |
| Total Nitrogen, Modified Comprehensive      | 978.02     | 010.11   | 2          | 10.44        | 0.02    |
| Total Nitrogen, Salicylic                   | 955.04d    | 010.12   | 1          | 10.44        | 0.00    |
| Total Nitrogen, Combustion                  | 993.13     | 010.60   | 23         | 10.42        | 0.09    |
| Total Nitrogen, Other                       |            | 010.99   | 3          | 10.52        | 0.13    |
| Method Group 010.XX PCT                     |            |          | 29         | 10.43        | 0.11    |
| <b>TOTAL PHOSPHATE</b>                      |            |          |            |              |         |
| Total Phosphate, Gravimetric Quimociac      |            | 020.10   | 2          | 50.41        | 0.68    |
| Total Phosphate, Spectrometric              | 978.02     | 020.20   | 19         | 49.47        | 0.31    |
| Total Phosphate, Other                      | 993.13     | 020.99   | 2          | 48.98        | 0.06    |
| Method Group 020.XX PCT                     |            |          | 23         | 49.47        | 0.48    |
| <b>INSOLUBLE PHOSPHATE</b>                  |            |          |            |              |         |
| Insoluble Phosphate, Spectrometric          | 963.03C(b) | 030.20   | 14         | 0.06         | 0.04    |
| Insoluble Phosphate, Alka. Quimociac        | 963.03C(c) | 030.30   | 1          | 0.02         | 0.00    |
| Insoluble Phosphate, Automated              | 978.01     | 030.40   | 1          | 0.02         | 0.00    |
| Method Group 030.XX PCT                     |            |          | 16         | 0.05         | 0.06    |
| <b>INDIRECT AVAILABLE PHOSPHATE</b>         |            |          |            |              |         |
| Indirect Available Phosphate, Spectrometric | 960.02     | 040.20   | 14         | 49.43        | 0.29    |
| Indirect Available Phosphate, Other         |            | 040.99   | 1          | 49.56        | 0.00    |
| Method Group 040.XX PCT                     |            |          | 15         | 49.48        | 0.30    |

## DIRECT AVAILABLE PHOSPHATE

AFPC Check Sample  
12-2010

|   |         |        |    |       |      |
|---|---------|--------|----|-------|------|
| Direct Available Phosphate, Gravimetric Quimociac | 960.03E | 041.10 | 4  | 49.53 | 0.53 |
| Direct Available Phosphate, Automated             | 978.01  | 041.40 | 3  | 50.13 | 0.58 |
| Direct Available Phosphate, ICP                   |         | 041.50 | 5  | 49.04 | 0.14 |
| Direct Available Phosphate, EDTA Extract          | 993.01  | 041.60 | 4  | 48.89 | 0.32 |
| Method Group 041.XX PCT                           |         |        | 16 | 49.40 | 1.07 |

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**WATER SOLUBLE PHOSPHATE**

|  |        |        |    |       |      |
|--|--------|--------|----|-------|------|
| Water Soluble Phosphate, Spectrometric | 970.01 | 048.20 | 15 | 43.85 | 0.45 |
| Water Soluble Phosphate, Other         |        | 048.99 | 1  | 43.67 | 0.00 |
| Method Group 048.XX PCT                |        |        | 16 | 43.84 | 0.47 |

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**SOLUBLE POTASH AS K<sub>2</sub>O**

|                              |  |        |   |      |      |
|------------------------------|--|--------|---|------|------|
| Soluble Potash, ICP(Oxalate) |  | 050.50 | 2 | 0.19 | 0.00 |
| Soluble Potash, Other        |  | 050.99 | 7 | 0.19 | 0.01 |
| Method Group 050.XX PCT      |  |        | 9 | 0.19 | 0.00 |

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**FREE WATER**

|                              |         |        |    |      |      |
|------------------------------|---------|--------|----|------|------|
| Free Water, Vacuum Oven      | 965.08B | 060.00 | 16 | 0.84 | 0.08 |
| Free Water, Vacuum Desiccate | 965.08A | 060.10 | 2  | 0.97 | 0.08 |
| Method Group 060.XX PCT      |         |        | 18 | 0.85 | 0.13 |

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**ACID SOLUBLE CALCIUM AS CaO**

|                           |  |        |    |      |      |
|---------------------------|--|--------|----|------|------|
| Acid Soluble Calcium, ICP |  | 101.30 | 16 | 1.75 | 0.09 |
| Method Group 101.XX PCT   |  |        | 16 | 1.75 | 0.11 |

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**ACID SOLUBLE MAGNESIUM AS MgO**

|                             |  |        |    |      |      |
|-----------------------------|--|--------|----|------|------|
| Acid Soluble Magnesium, ICP |  | 121.30 | 16 | 1.77 | 0.13 |
| Method Group 121.XX PCT     |  |        | 16 | 1.77 | 0.16 |

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**SULFATE SULFUR (S)**

|                         |           |        |    |      |      |
|-------------------------|-----------|--------|----|------|------|
| Sulfur, Gravimetric     | 980.02(a) | 144.01 | 2  | 1.72 | 0.02 |
| Sulfur, Spectrometric   |           | 144.70 | 2  | 1.74 | 0.00 |
| Sulfur, Other           |           | 144.99 | 8  | 1.70 | 0.05 |
| Method Group 144.XX PCT |           |        | 12 | 1.72 | 0.05 |

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**TOTAL SULFUR (S)**

|                         |  |        |   |      |      |
|-------------------------|--|--------|---|------|------|
| Sulfur, Other           |  | 145.99 | 5 | 1.61 | 0.12 |
| Method Group 145.XX PCT |  |        | 5 | 1.61 | 0.15 |

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**TOTAL ARSENIC**

|                    |           |        |   |   |     |
|--------------------|-----------|--------|---|---|-----|
| Total Arsenic, ICP | 980.02(b) | 151.02 | 5 | 8 | 1.8 |
|--------------------|-----------|--------|---|---|-----|

|   |                |    |      |      |
|---|----------------|----|------|------|
| Method Group 151.XX PPM                                 |                | 5  | 8    | 2.2  |
| <b>ACID SOLUBLE BORON</b>                               |                |    |      |      |
| Acid Soluble Boron, Other                               | 165.99         | 2  | 31   | 1.8  |
| Method Group 165.XX PPM                                 |                | 2  | 31   | 2.1  |
| <b>TOTAL CADMIUM</b>                                    |                |    |      |      |
| Total Cadmium, ICP                                      | 181.30         | 6  | 5    | 2.0  |
| Total Cadmium, Other                                    | 181.99         | 1  | 6    | 0.0  |
| Method Group 181.XX PPM                                 |                | 7  | 5    | 2.0  |
| <b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>          |                |    |      |      |
| ICP, %  |                | 14 | 2.84 | 0.24 |
| Water Soluble Chlorine, Other, %                        | 190.99         | 1  | 2.99 | 0.00 |
| Method Group 190.XX PCT                                 |                | 15 | 2.84 | 0.22 |
| <b>TOTAL CHROMIUM</b>                                   |                |    |      |      |
| Total Chromium, ICP                                     | 191.30         | 7  | 91   | 4.9  |
| Total Chromium, Other                                   | 191.99         | 1  | 91   | 0.0  |
| Method Group 191.XX PPM                                 |                | 8  | 91   | 5.5  |
| <b>ACID SOLUBLE COBALT</b>                              |                |    |      |      |
| Acid Soluble Cobalt, ICP                                | 202.30         | 5  | 3    | 0.4  |
| Acid Soluble Cobalt, Other                              | 202.99         | 1  | 3    | 0.0  |
| Method Group 202.XX PPM                                 |                | 6  | 3    | 0.4  |
| <b>ACID SOLUBLE COPPER</b>                              |                |    |      |      |
| Acid Soluble Copper, ICP                                | 221.30         | 3  | 0    | 0.4  |
| Acid Soluble Copper, Other                              | 221.99         | 1  | 0    | 0.0  |
| Method Group 221.XX PPM                                 |                | 4  | 1    | 0.6  |
| <b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b> |                |    |      |      |
| Acid Soluble Iron, ICP                                  | 241.30         | 16 | 1.80 | 0.05 |
| Method Group 241.XX PCT                                 |                | 16 | 1.80 | 0.06 |
| <b>TOTAL LEAD</b>                                       |                |    |      |      |
| Total Lead, ICP   | 251.30         | 5  | 10   | 0.8  |
| Total Lead, Other                                       | 251.99         | 1  | 9    | 0.0  |
| Method Group 251.XX PPM                                 |                | 6  | 10   | 1.0  |
| <b>ACID SOLUBLE MANGANESE</b>                           |                |    |      |      |
| Acid Soluble Manganese, ICP                             | 972.02a 261.30 | 4  | 408  | 36.2 |

|                                  |        |        |     |      |      |
|----------------------------------|--------|--------|-----|------|------|
| Acid Soluble Manganese, Other    | 261.99 | 5      | 415 | 20.5 |      |
| Method Group 261.XX PPM          |        | 9      | 415 | 26.4 |      |
| <b>TOTAL MOLYBDENUM</b>          |        |        |     |      |      |
| Total Molybdenum, ICP            | 289.30 | 5      | 17  | 0.3  |      |
| Total Molybdenum, Other          | 289.99 | 1      | 18  | 0.0  |      |
| Method Group 289.XX PPM          |        | 6      | 17  | 0.4  |      |
| <b>TOTAL NICKEL</b>              |        |        |     |      |      |
| Total Nickel, ICP                | 291.30 | 5      | 13  | 0.2  |      |
| Total Nickel, Other              | 291.99 | 1      | 15  | 0.0  |      |
| Method Group 291.XX PPM          |        | 6      | 13  | 0.8  |      |
| <b>TOTAL SELENIUM</b>            |        |        |     |      |      |
| Total Selenium, ICP              | 301.30 | 1      | 1   | 0.0  |      |
| Method Group 301.XX PPM          |        | 1      | 1   | 0.0  |      |
| <b>SODIUM AS Na<sub>2</sub>O</b> |        |        |     |      |      |
| Sodium, Atomic Absorbtion        | 983.04 | 311.00 | 1   | 0.40 | 0.00 |
| Sodium, Other                    |        | 311.99 | 8   | 0.36 | 0.05 |
| Method Group 311.XX PCT          |        |        | 9   | 0.39 | 0.06 |
| <b>ACID SOLUBLE ZINC</b>         |        |        |     |      |      |
| Acid Soluble Zinc, ICP           |        | 321.30 | 4   | 42.1 | 14.4 |
| Acid Soluble Zinc, Other         |        | 321.99 | 2   | 69.3 | 0.6  |
| Method Group 321.XX %            |        |        | 6   | 58.4 | 27.1 |
| <b>FLUORIDE</b>                  |        |        |     |      |      |
| Volumetric                       |        | 325.10 | 10  | 3.50 | 0.32 |
| Distilled/Electrode              |        | 325.99 | 3   | 3.74 | 0.50 |
| Method Group 325.XX PCT          |        |        | 13  | 3.61 | 0.45 |