

## AFPC

Sample

2018-09

Grade

18-46-0

|   | AOAC Ref.  | Method # | # of Labs. | Grand Median | Std Dev |
|---|------------|----------|------------|--------------|---------|
| <b>AMMONIACAL NITROGEN</b>                        |            |          |            |              |         |
| Ammoniacal Nitrogen, MgO distillation             | 920.03     | 001.10   | 1          | 18.17        | 0.00    |
| Ammoniacal Nitrogen, Other                        |            | 001.99   | 10         | 18.19        | 0.13    |
| Method Group 001.XX PCT                           |            |          | 11         | 18.17        | 0.14    |
| <b>AMMON &amp; NITRATE N</b>                      |            |          |            |              |         |
| Ammon & Nitrate N, Other                          |            | 009.99   | 2          | 18.24        | 0.11    |
| Method Group 009.XX PCT                           |            |          | 2          | 18.24        | 0.13    |
| <b>TOTAL NITROGEN</b>                             |            |          |            |              |         |
| Total Nitrogen, Modified Comprehensive            | 978.02     | 010.11   | 3          | 18.25        | 0.03    |
| Total Nitrogen, Combustion                        | 993.13     | 010.60   | 20         | 18.20        | 0.14    |
| Total Nitrogen, Other                             |            | 010.99   | 6          | 18.31        | 0.04    |
| Method Group 010.XX PCT                           |            |          | 29         | 18.22        | 0.15    |
| <b>TOTAL PHOSPHATE</b>                            |            |          |            |              |         |
| Total Phosphate, Gravimetric Quimociac            |            | 020.10   | 1          | 46.74        | 0.00    |
| Total Phosphate, Spectrometric                    | 978.02     | 020.20   | 21         | 46.82        | 0.21    |
| Total Phosphate, ICP                              | 970.03     | 020.40   | 2          | 46.83        | 0.00    |
| Total Phosphate, Other                            | 993.13     | 020.99   | 1          | 46.41        | 0.00    |
| Method Group 020.XX PCT                           |            |          | 25         | 46.82        | 0.25    |
| <b>INSOLUBLE PHOSPHATE</b>                        |            |          |            |              |         |
| Insoluble Phosphate, Spectrometric                | 963.03C(b) | 030.20   | 10         | 0.04         | 0.03    |
| Insoluble Phosphate, Alka. Quimociac              | 963.03C(c) | 030.30   | 1          | 0.03         | 0.00    |
| Insoluble Phosphate, Automated                    | 978.01     | 030.40   | 3          | 0.04         | 0.01    |
| Method Group 030.XX PCT                           |            |          | 14         | 0.04         | 0.03    |
| <b>INDIRECT AVAILABLE PHOSPHATE</b>               |            |          |            |              |         |
| Indirect Available Phosphate, Spectrometric       | 960.02     | 040.20   | 13         | 46.78        | 0.29    |
| Indirect Available Phosphate, Other               |            | 040.99   | 2          | 47.55        | 0.57    |
| Method Group 040.XX PCT                           |            |          | 15         | 46.78        | 0.32    |
| <b>DIRECT AVAILABLE PHOSPHATE</b>                 |            |          |            |              |         |
| Direct Available Phosphate, Gravimetric Quimociac | 960.03E    | 041.10   | 3          | 46.70        | 0.37    |
| Direct Available Phosphate, Spectrometric         | 960.03D    | 041.20   | 3          | 46.39        | 0.23    |
| Direct Available Phosphate, ICP                   |            | 041.50   | 1          | 46.00        | 0.00    |
| Direct Available Phosphate, EDTA Extract          | 993.01     | 041.60   | 5          | 46.84        | 0.71    |
| Direct Available Phosphate, Other                 |            | 041.99   | 1          | 46.71        | 0.00    |
| Method Group 041.XX PCT                           |            |          | 13         | 46.70        | 0.41    |
| <b>WATER SOLUBLE PHOSPHATE</b>                    |            |          |            |              |         |
| Water Soluble Phosphate, Spectrometric            | 970.01     | 048.20   | 19         | 44.15        | 0.40    |
| Water Soluble Phosphate, Other                    |            | 048.99   | 2          | 43.89        | 0.28    |
| Method Group 048.XX PCT                           |            |          | 21         | 44.15        | 0.48    |
| <b>SOLUBLE POTASH AS K<sub>2</sub>O</b>           |            |          |            |              |         |
| Soluble Potash, Atomic Absorption(Citrate)        |            | 050.31   | 1          | 0.16         | 0.00    |
| Soluble Potash, ICP(Oxalate)                      |            | 050.50   | 2          | 0.17         | 0.00    |
| Soluble Potash, Other                             |            | 050.99   | 11         | 0.16         | 0.01    |
| Method Group 050.XX PCT                           |            |          | 14         | 0.16         | 0.01    |
| <b>FREE WATER</b>                                 |            |          |            |              |         |
| Free Water, Vacuum Oven                           | 965.08B    | 060.00   | 15         | 0.84         | 0.19    |
| Free Water, Other                                 |            | 060.99   | 6          | 1.15         | 0.32    |
| Method Group 060.XX PCT                           |            |          | 21         | 0.86         | 0.25    |
| <b>ACID SOLUBLE CALCIUM AS CaO</b>                |            |          |            |              |         |
| Acid Soluble Calcium, ICP                         |            | 101.30   | 16         | 0.35         | 0.03    |
| Method Group 101.XX PCT                           |            |          | 16         | 0.35         | 0.03    |
| <b>ACID SOLUBLE MAGNESIUM AS MgO</b>              |            |          |            |              |         |
| Acid Soluble Magnesium, ICP                       |            | 121.30   | 14         | 1.44         | 0.08    |
| Acid Soluble Magnesium, Other                     |            | 121.99   | 2          | 1.40         | 0.04    |
| Method Group 121.XX PCT                           |            |          | 16         | 1.44         | 0.10    |
| <b>WATER SOLUBLE MAGNESIUM</b>                    |            |          |            |              |         |

|   |           |        |      |      |      |
|---|-----------|--------|------|------|------|
| Water Soluble Magnesium, Other                          | 131.99    | 1      |      | 0.00 |      |
| Method Group 131.XX PCT                                 |           | 1      | 0.00 | 0.00 |      |
| <b>SULFATE SULFUR (S)</b>                               |           |        |      |      |      |
| Sulfur, Gravimetric                                     | 980.02(a) | 144.01 | 2    | 6.01 | 2.83 |
| Sulfur, Other   |           | 144.99 | 13   | 2.16 | 0.10 |
| Method Group 144.XX PCT                                 |           |        | 15   | 2.16 | 0.13 |
| <b>TOTAL SULFUR (S)</b>                                 |           |        |      |      |      |
| Sulfur, Other   |           | 145.99 | 3    | 2.19 | 0.0  |
| Method Group 145.XX PCT                                 |           |        | 3    | 2.19 | 0.0  |
| <b>TOTAL ARSENIC</b>                                    |           |        |      |      |      |
| Total Arsenic, ICP                                      | 980.02(b) | 151.02 | 7    | 1.5  | 1.6  |
| Method Group 151.XX PPM                                 |           |        | 7    | 1.5  | 1.9  |
| <b>ACID SOLUBLE BORON</b>                               |           |        |      |      |      |
| Acid Soluble Boron, Other                               |           | 165.99 | 2    | 76   | 4.9  |
| Method Group 165.XX PPM                                 |           |        | 2    | 76   | 5.9  |
| <b>WATER SOLUBLE BORON</b>                              |           |        |      |      |      |
| Water Soluble Boron, Other                              |           | 171.99 | 1    | 56   | 0.0  |
| Method Group 171.XX PPM                                 |           |        | 1    | 56   | 0.0  |
| <b>TOTAL CADMIUM</b>                                    |           |        |      |      |      |
| Total Cadmium, Atomic Absorbtion                        |           | 181.00 | 1    | 30   | 0.0  |
| Total Cadmium, ICP                                      |           | 181.30 | 9    | 34.2 | 1.6  |
| Total Cadmium, Other                                    |           | 181.99 | 1    | 38.4 | 0.0  |
| Method Group 181.XX PPM                                 |           |        | 11   | 34.2 | 2.3  |
| <b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>          |           |        |      |      |      |
| ICP, %  |           |        | 16   | 0.49 | 0.03 |
| Water Soluble Chlorine, Other, %                        |           | 190.99 | 2    | 0.45 | 0.02 |
| Method Group 190.XX PCT                                 |           |        | 18   | 0.49 | 0.04 |
| <b>TOTAL CHROMIUM</b>                                   |           |        |      |      |      |
| Total Chromium, Atomic Absorbtion                       |           | 191.00 | 1    | 182  | 0.0  |
| Total Chromium, ICP                                     |           | 191.30 | 7    | 218  | 4.4  |
| Total Chromium, Other                                   |           | 191.99 | 1    | 241  | 0.0  |
| Method Group 191.XX PPM                                 |           |        | 9    | 218  | 8.2  |
| <b>ACID SOLUBLE COBALT</b>                              |           |        |      |      |      |
| Acid Soluble Cobalt, ICP                                |           | 202.30 | 5    | 2    | 0.0  |
| Acid Soluble Cobalt, Other                              |           | 202.99 | 1    | 1    | 0.0  |
| Method Group 202.XX PPM                                 |           |        | 6    | 2    | 0.6  |
| <b>ACID SOLUBLE COPPER</b>                              |           |        |      |      |      |
| Acid Soluble Copper, Other                              |           | 221.99 | 1    | 0.9  | 0.0  |
| Method Group 221.XX PPM                                 |           |        | 5    | 0.8  | 0.3  |
| <b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b> |           |        |      |      |      |
| Acid Soluble Iron, ICP                                  |           | 241.30 | 17   | 0.71 | 0.02 |
| Acid Soluble Iron, Other                                |           | 241.99 | 1    | 0.61 | 0.00 |
| Method Group 241.XX PCT                                 |           |        | 18   | 0.71 | 0.03 |
| <b>TOTAL LEAD</b>                                       |           |        |      |      |      |
| Total Lead, ICP   |           | 251.30 | 7    | 0.9  | 1.0  |
| Total Lead, Other                                       |           | 251.99 | 1    | 0.5  | 0.0  |
| Method Group 251.XX PPM                                 |           |        | 8    | 0.8  | 1.0  |
| <b>ACID SOLUBLE MANGANESE</b>                           |           |        |      |      |      |
| Acid Soluble Manganese, ICP                             | 972.02a   | 261.30 | 3    | 52   | 3.9  |
| Acid Soluble Manganese, Other                           |           | 261.99 | 5    | 55   | 4.5  |
| Method Group 261.XX PPM                                 |           |        | 8    | 54   | 4.6  |
| <b>TOTAL MERCURY</b>                                    |           |        |      |      |      |
| Total Mercury, ICP                                      |           | 281.30 | 2    | 0.00 | 0.17 |
| Total Mercury, Other                                    |           | 281.99 | 1    | 0    | 0.00 |
| Method Group 281.XX PPM                                 |           |        | 3    | 0.02 | 0.21 |
| <b>TOTAL MOLYBDENUM</b>                                 |           |        |      |      |      |
| Total Molybdenum, ICP                                   |           | 289.30 | 7    | 3    | 1.1  |
| Total Molybdenum, Other                                 |           | 289.99 | 1    | 5    | 0.0  |
| Method Group 289.XX PPM                                 |           |        | 8    | 4    | 1.5  |
| <b>TOTAL NICKEL</b>                                     |           |        |      |      |      |

|                                  |               |    |       |      |
|----------------------------------|---------------|----|-------|------|
| Total Nickel, ICP                | 291.30        | 7  | 17.0  | 0.2  |
| Total Nickel, icp                | 291.99        | 1  | 18.8  | 0.0  |
| Method Group 291.XX PPM          |               | 8  | 17.0  | 0.1  |
| <b>TOTAL SELENIUM</b>            |               |    |       |      |
| Total Selenium, ICP              | 301.30        | 3  | 0.4   | 0.4  |
| Method Group 301.XX PPM          |               | 3  | 0.4   | 0.4  |
| <b>SODIUM AS Na<sub>2</sub>O</b> |               |    |       |      |
| Sodium, Atomic Absorbtion        | 983.04 311.00 | 1  | 0.22  | 0.00 |
| Sodium, Other                    | 311.99        | 12 | 0.21  | 0.02 |
| Method Group 311.XX PCT          |               | 13 | 0.21  | 0.02 |
| <b>ACID SOLUBLE ZINC</b>         |               |    |       |      |
| Acid Soluble Zinc, ICP           | 321.30        | 6  | 423.3 | 22.5 |
| Acid Soluble Zinc, Other         | 321.99        | 3  | 440.5 | 12.9 |
| Method Group 321.XX %            |               | 9  | 426.5 | 27.3 |
| <b>FLUORIDE</b>                  |               |    |       |      |
| Volumetric                       | 325.10        | 11 | 1.37  | 0.08 |
| Distilled/Electrode              | 325.99        | 3  | 1.40  | 0.01 |
| Method Group 325.XX PCT          |               | 14 | 1.39  | 0.08 |

AFPC Check Sample 09  
-2018

| 001.10 Ammoniacal Nitrogen |                  |              |
|----------------------------|------------------|--------------|
| Lab                        | MgO distillation |              |
| 31                         | 18.17            | 0.000        |
| <b>Median</b>              | <b>18.17</b>     | <b>0.000</b> |

| 001.99 Ammoniacal Nitrogen |              |               |
|----------------------------|--------------|---------------|
| Lab                        | Other        |               |
| 330                        | 19.46        | -10.050       |
| 275                        | 18.33        | -1.143        |
| 335                        | 18.32        | -1.025        |
| <b>Std Dev</b>             | <b>18.31</b> | <b>-1.000</b> |
| 275                        | 18.28        | -0.749        |
| 24                         | 18.20        | -0.118        |
| <b>Median</b>              | <b>18.19</b> | <b>0.000</b>  |
| 34                         | 18.17        | 0.118         |
| 24                         | 18.16        | 0.236         |
| 79                         | 18.13        | 0.434         |
| <b>Std Dev</b>             | <b>18.06</b> | <b>1.000</b>  |
| 140                        | 18.06        | 1.025         |
| 38                         | 17.68        | 4.020         |

| 001.XX Ammoniacal Nitrogen |              |               |
|----------------------------|--------------|---------------|
| Lab                        | Total Method |               |
| 330                        | 19.46        | -11.152       |
| 275                        | 18.33        | -1.383        |
| 335                        | 18.32        | -1.254        |
| <b>Std Dev</b>             | <b>18.29</b> | <b>-1.000</b> |
| 275                        | 18.28        | -0.951        |
| 24                         | 18.20        | -0.259        |
| 31                         | 18.17        | 0.000         |
| 34                         | 18.17        | 0.000         |
| <b>Median</b>              | <b>18.17</b> | <b>0.000</b>  |
| 24                         | 18.16        | 0.130         |
| 79                         | 18.13        | 0.346         |
| 140                        | 18.06        | 0.994         |
| <b>Std Dev</b>             | <b>18.05</b> | <b>1.000</b>  |
| 38                         | 17.68        | 4.279         |

| 009.99 Ammon & Nitrate N |              |               |
|--------------------------|--------------|---------------|
| Lab                      | Other        |               |
| 32                       | 18.38        | -1.340        |
| <b>Std Dev</b>           | <b>18.34</b> | <b>-1.000</b> |
| <b>Median</b>            | <b>18.24</b> | <b>0.000</b>  |
| <b>Std Dev</b>           | <b>18.13</b> | <b>1.000</b>  |

32 18.10 1.340

| 009.XX Ammon & Nitrate N |              |               |
|--------------------------|--------------|---------------|
| Lab                      | Total Method |               |
| 32                       | 18.38        | -1.340        |
| <b>Std Dev</b>           | <b>18.34</b> | <b>-1.000</b> |
| <b>Median</b>            | <b>18.24</b> | <b>0.000</b>  |
| <b>Std Dev</b>           | <b>18.13</b> | <b>1.000</b>  |
| 32                       | 18.10        | 1.340         |

| 010.11 Total Nitrogen |                        |              |
|-----------------------|------------------------|--------------|
| Lab                   | Modified Comprehensive |              |
| 43                    | 18.25                  | -0.179       |
| 219                   | 18.25                  | 0.000        |
| <b>Median</b>         | <b>18.25</b>           | <b>0.000</b> |
| <b>Std Dev</b>        | <b>18.22</b>           | <b>1.000</b> |
| 43                    | 18.18                  | 2.501        |

| 010.60 Total Nitrogen |              |               |
|-----------------------|--------------|---------------|
| Lab                   | Combustion   |               |
| 111                   | 19.06        | -6.043        |
| 49                    | 18.40        | -1.419        |
| <b>Std Dev</b>        | <b>18.34</b> | <b>-1.000</b> |
| 61                    | 18.31        | -0.753        |
| 63                    | 18.30        | -0.718        |
| 66                    | 18.30        | -0.718        |
| 79                    | 18.29        | -0.648        |
| 107                   | 18.28        | -0.543        |
| 47                    | 18.22        | -0.123        |
| 219                   | 18.21        | -0.053        |
| 24                    | 18.20        | -0.018        |
| <b>Median</b>         | <b>18.20</b> | <b>0.000</b>  |
| 24                    | 18.20        | 0.018         |
| 140                   | 18.20        | 0.018         |
| 61                    | 18.17        | 0.228         |
| 14                    | 18.14        | 0.438         |
| 31                    | 18.11        | 0.648         |
| 29                    | 18.09        | 0.753         |
| 103                   | 18.07        | 0.893         |
| 14                    | 18.06        | 0.963         |
| 77                    | 18.06        | 0.998         |
| <b>Std Dev</b>        | <b>18.05</b> | <b>1.000</b>  |
| 38                    | 18.05        | 1.033         |

| 010.99 Total Nitrogen |              |               |
|-----------------------|--------------|---------------|
| Lab                   | Other        |               |
| 330                   | 19.23        | -24.656       |
| <b>Std Dev</b>        | <b>18.34</b> | <b>-1.000</b> |
| 23                    | 18.32        | -0.402        |
| 335                   | 18.32        | -0.268        |
| <b>Median</b>         | <b>18.31</b> | <b>0.000</b>  |
| 23                    | 18.30        | 0.268         |
| <b>Std Dev</b>        | <b>18.27</b> | <b>1.000</b>  |
| 32                    | 18.26        | 1.206         |
| 32                    | 18.06        | 6.700         |

| 010.XX Total Nitrogen |              |               |
|-----------------------|--------------|---------------|
| Lab                   | Total Method |               |
| 330                   | 19.23        | -8.202        |
| 111                   | 19.06        | -6.862        |
| 49                    | 18.40        | -1.502        |
| <b>Std Dev</b>        | <b>18.34</b> | <b>-1.000</b> |
| 23                    | 18.32        | -0.853        |
| 335                   | 18.32        | -0.812        |
| 61                    | 18.31        | -0.731        |
| 63                    | 18.30        | -0.690        |
| 66                    | 18.30        | -0.690        |
| 23                    | 18.30        | -0.650        |
| 79                    | 18.29        | -0.609        |
| 107                   | 18.28        | -0.487        |
| 32                    | 18.26        | -0.365        |
| 43                    | 18.25        | -0.284        |
| 219                   | 18.25        | -0.244        |
| 47                    | 18.22        | 0.000         |
| <b>Median</b>         | <b>18.22</b> | <b>0.000</b>  |
| 219                   | 18.21        | 0.081         |
| 24                    | 18.20        | 0.122         |
| 24                    | 18.20        | 0.162         |
| 140                   | 18.20        | 0.162         |
| 43                    | 18.18        | 0.325         |
| 61                    | 18.17        | 0.406         |
| 14                    | 18.14        | 0.650         |
| 31                    | 18.11        | 0.893         |
| <b>Std Dev</b>        | <b>18.09</b> | <b>1.000</b>  |
| 29                    | 18.09        | 1.015         |
| 103                   | 18.07        | 1.178         |
| 14                    | 18.06        | 1.259         |
| 32                    | 18.06        | 1.299         |

77 18.06 1.299  
38 18.05 1.340

| 020.10 Total Phosphate |                       |              |
|------------------------|-----------------------|--------------|
| Lab                    | Gravimetric Quimociac |              |
| 219                    | 46.74                 | 0.000        |
| <b>Median</b>          | <b>46.74</b>          | <b>0.000</b> |

| 020.20 Total Phosphate |               |              |
|------------------------|---------------|--------------|
| Lab                    | Spectrometric |              |
| 275                    | 47.01         | -0.893       |
| 24                     | 46.96         | -0.658       |
| 24                     | 46.90         | -0.376       |
| 32                     | 46.90         | -0.376       |
| 23                     | 46.90         | -0.353       |
| 23                     | 46.88         | -0.259       |
| 111                    | 46.87         | -0.212       |
| 275                    | 46.86         | -0.188       |
| 32                     | 46.85         | -0.141       |
| 14                     | 46.83         | -0.024       |
| 34                     | 46.82         | 0.000        |
| <b>Median</b>          | <b>46.82</b>  | <b>0.000</b> |
| 31                     | 46.80         | 0.094        |
| 79                     | 46.76         | 0.306        |
| <b>Std Dev</b>         | <b>46.61</b>  | <b>1.000</b> |
| 14                     | 46.60         | 1.034        |
| 61                     | 46.60         | 1.034        |
| 140                    | 46.59         | 1.081        |
| 38                     | 46.50         | 1.505        |
| 43                     | 46.46         | 1.693        |
| 43                     | 46.39         | 2.045        |
| 335                    | 46.34         | 2.257        |
| 61                     | 46.30         | 2.445        |

| 020.40 Total Phosphate |              |               |
|------------------------|--------------|---------------|
| Lab                    | Automated    |               |
| 219                    | 46.84        | -1.340        |
| <b>Std Dev</b>         | <b>46.83</b> | <b>-1.000</b> |
| <b>Median</b>          | <b>46.83</b> | <b>0.000</b>  |
| <b>Std Dev</b>         | <b>46.83</b> | <b>1.000</b>  |
| 111                    | 46.83        | 1.340         |

| 020.99 Total Phosphate |       |  |
|------------------------|-------|--|
| Lab                    | Other |  |

AFPC Check Sample 09  
-2018

|        |       |       |
|--------|-------|-------|
| 330    | 46.41 | 0.000 |
| Median | 46.41 | 0.000 |

| 020.XX  |              | Total Phosphate |
|---------|--------------|-----------------|
| Lab     | Total Method |                 |
| 275     | 47.01        | -0.926          |
| 24      | 46.96        | -0.682          |
| 24      | 46.90        | -0.390          |
| 32      | 46.90        | -0.390          |
| 23      | 46.90        | -0.365          |
| 23      | 46.88        | -0.268          |
| 111     | 46.87        | -0.219          |
| 275     | 46.86        | -0.195          |
| 32      | 46.85        | -0.146          |
| 219     | 46.84        | -0.073          |
| 14      | 46.83        | -0.024          |
| 111     | 46.83        | -0.024          |
| 34      | 46.82        | 0.000           |
| Median  | 46.82        | 0.000           |
| 31      | 46.80        | 0.097           |
| 79      | 46.76        | 0.317           |
| 219     | 46.74        | 0.414           |
| Std Dev | 46.61        | 1.000           |
| 14      | 46.60        | 1.072           |
| 61      | 46.60        | 1.072           |
| 140     | 46.59        | 1.121           |
| 38      | 46.50        | 1.559           |
| 43      | 46.46        | 1.754           |
| 330     | 46.41        | 1.998           |
| 43      | 46.39        | 2.120           |
| 335     | 46.34        | 2.339           |
| 61      | 46.30        | 2.534           |

| 030.20  |               | Insoluble Phosphate |
|---------|---------------|---------------------|
| Lab     | Spectrometric |                     |
| 61      | 0.12          | -2.821              |
| 61      | 0.07          | -1.058              |
| 43      | 0.07          | -1.040              |
| Std Dev | 0.07          | -1.000              |
| 43      | 0.06          | -0.829              |
| 140     | 0.05          | -0.176              |
| Median  | 0.04          | 0.000               |
| 24      | 0.04          | 0.176               |
| 23      | 0.03          | 0.353               |

|    |      |       |
|----|------|-------|
| 23 | 0.03 | 0.353 |
| 24 | 0.03 | 0.353 |
| 79 | 0.03 | 0.529 |

| 030.30 |                 | Insoluble Phosphate |
|--------|-----------------|---------------------|
| Lab    | Alka. Quimociac |                     |
| 31     | 0.03            | 0.000               |
| Median | 0.03            | 0.000               |

| 030.40  |           | Insoluble Phosphate |
|---------|-----------|---------------------|
| Lab     | Automated |                     |
| 32      | 0.05      | -0.893              |
| 34      | 0.04      | 0.000               |
| Median  | 0.04      | 0.000               |
| Std Dev | 0.03      | 1.000               |
| 32      | 0.03      | 1.787               |

| 030.XX  |              | Insoluble Phosphate |
|---------|--------------|---------------------|
| Lab     | Total Method |                     |
| 61      | 0.12         | -3.829              |
| 61      | 0.07         | -1.508              |
| 43      | 0.07         | -1.485              |
| 43      | 0.06         | -1.207              |
| Std Dev | 0.06         | -1.000              |
| 32      | 0.05         | -0.348              |
| 140     | 0.05         | -0.348              |
| 34      | 0.04         | -0.116              |
| Median  | 0.04         | 0.000               |
| 24      | 0.04         | 0.116               |
| 32      | 0.03         | 0.348               |
| 23      | 0.03         | 0.348               |
| 23      | 0.03         | 0.348               |
| 24      | 0.03         | 0.348               |
| 31      | 0.03         | 0.580               |
| 79      | 0.03         | 0.580               |

| 040.20 |               | Indirect Available Phosphate |
|--------|---------------|------------------------------|
| Lab    | Spectrometric |                              |
| 24     | 46.93         | -0.522                       |
| 32     | 46.87         | -0.331                       |
| 24     | 46.87         | -0.331                       |
| 23     | 46.87         | -0.313                       |
| 23     | 46.85         | -0.244                       |
| 32     | 46.81         | -0.104                       |

|         |       |       |
|---------|-------|-------|
| 31      | 46.78 | 0.000 |
| Median  | 46.78 | 0.000 |
| 79      | 46.72 | 0.191 |
| 140     | 46.55 | 0.801 |
| Std Dev | 46.49 | 1.000 |
| 61      | 46.48 | 1.027 |
| 43      | 46.40 | 1.323 |
| 43      | 46.32 | 1.601 |
| 61      | 46.23 | 1.897 |

| 040.99  |       | Indirect Available Phosphate |
|---------|-------|------------------------------|
| Lab     | Other |                              |
| 63      | 48.31 | -1.340                       |
| Std Dev | 48.12 | -1.000                       |
| Median  | 47.55 | 0.000                        |
| Std Dev | 46.97 | 1.000                        |
| 34      | 46.78 | 1.340                        |

| 040.XX  |              | Indirect Available Phosphate |
|---------|--------------|------------------------------|
| Lab     | Total Method |                              |
| 63      | 48.31        | -5.775                       |
| Std Dev | 47.04        | -1.000                       |
| 24      | 46.93        | -0.547                       |
| 32      | 46.87        | -0.340                       |
| 24      | 46.87        | -0.340                       |
| 23      | 46.87        | -0.321                       |
| 23      | 46.85        | -0.245                       |
| 32      | 46.81        | -0.094                       |
| 34      | 46.78        | 0.000                        |
| Median  | 46.78        | 0.000                        |
| 31      | 46.78        | 0.019                        |
| 79      | 46.72        | 0.226                        |
| 140     | 46.55        | 0.887                        |
| Std Dev | 46.52        | 1.000                        |
| 61      | 46.48        | 1.132                        |
| 43      | 46.40        | 1.453                        |
| 43      | 46.32        | 1.755                        |
| 61      | 46.23        | 2.076                        |

| 041.10  |                       | Direct Available Phosphate |
|---------|-----------------------|----------------------------|
| Lab     | Gravimetric Quimociac |                            |
| 107     | 47.54                 | -2.249                     |
| Std Dev | 47.07                 | -1.000                     |
| 219     | 46.70                 | 0.000                      |

|        |       |       |
|--------|-------|-------|
| Median | 46.70 | 0.000 |
| 47     | 46.54 | 0.431 |

| 041.20  |               | Direct Available Phosphate |
|---------|---------------|----------------------------|
| Lab     | Spectrometric |                            |
| 47      | 46.78         | -1.713                     |
| Std Dev | 46.62         | -1.000                     |
| 275     | 46.39         | 0.000                      |
| Median  | 46.39         | 0.000                      |
| 275     | 46.17         | 0.967                      |

| 041.50 |       | Direct Available Phosphate |
|--------|-------|----------------------------|
| Lab    | ICP   |                            |
| 66     | 46.00 | 0.000                      |
| Median | 46.00 | 0.000                      |

| 041.60  |              | Direct Available Phosphate |
|---------|--------------|----------------------------|
| Lab     | EDTA Extract |                            |
| 49      | 47.71        | -1.234                     |
| 29      | 47.56        | -1.021                     |
| Std Dev | 47.55        | -1.000                     |
| 219     | 46.84        | 0.000                      |
| Median  | 46.84        | 0.000                      |
| 77      | 46.62        | 0.319                      |
| 103     | 46.36        | 0.688                      |

| 041.99 |       | Direct Available Phosphate |
|--------|-------|----------------------------|
| Lab    | Other |                            |
| 79     | 46.71 | 0.000                      |
| Median | 46.71 | 0.000                      |

| 041.XX  |              | Direct Available Phosphate |
|---------|--------------|----------------------------|
| Lab     | Total Method |                            |
| 49      | 47.71        | -3.008                     |
| 29      | 47.56        | -2.561                     |
| 107     | 47.54        | -2.486                     |
| Std Dev | 47.04        | -1.000                     |
| 219     | 46.84        | -0.417                     |
| 47      | 46.78        | -0.238                     |
| 79      | 46.71        | -0.015                     |
| 219     | 46.70        | 0.000                      |
| Median  | 46.70        | 0.000                      |
| 77      | 46.62        | 0.253                      |
| 47      | 46.54        | 0.476                      |

AFPC Check Sample 09  
-2018

|         |       |       |
|---------|-------|-------|
| 275     | 46.39 | 0.923 |
| Std Dev | 46.36 | 1.000 |
| 103     | 46.36 | 1.027 |
| 275     | 46.17 | 1.578 |
| 66      | 46.00 | 2.084 |

| 048.20 Water Soluble Phosphate Spectrometric |       |        |
|--|-------|--------|
| Lab  |       |        |
| 31   | 44.48 | -0.827 |
| 14   | 44.44 | -0.726 |
| 14   | 44.43 | -0.714 |
| 61   | 44.42 | -0.676 |
| 330  | 44.33 | -0.451 |
| 32   | 44.29 | -0.363 |
| 32   | 44.24 | -0.225 |
| 24   | 44.22 | -0.175 |
| 23   | 44.17 | -0.063 |
| 23   | 44.15 | 0.000  |
| Median                                       | 44.15 | 0.000  |
| 61   | 44.11 | 0.088  |
| 24   | 44.04 | 0.276  |
| 79   | 44.01 | 0.338  |
| 140  | 43.78 | 0.914  |
| 43   | 43.77 | 0.952  |
| Std Dev                                      | 43.75 | 1.000  |
| 43   | 43.62 | 1.327  |
| 111  | 43.50 | 1.628  |
| 275  | 42.96 | 2.968  |
| 275  | 42.66 | 3.719  |

| 048.99 Water Soluble Phosphate Other |       |        |
|--------------------------------------|-------|--------|
| Lab                                  |       |        |
| 34                                   | 44.26 | -1.340 |
| Std Dev                              | 44.16 | -1.000 |
| Median                               | 43.89 | 0.000  |
| Std Dev                              | 43.61 | 1.000  |
| 111                                  | 43.51 | 1.340  |

| 048.XX Water Soluble Phosphate Total Method |       |        |
|---|-------|--------|
| Lab   |       |        |
| 31  | 44.48 | -0.842 |
| 14  | 44.44 | -0.740 |
| 14  | 44.43 | -0.727 |
| 61  | 44.42 | -0.689 |

|         |       |        |
|---------|-------|--------|
| 330     | 44.33 | -0.459 |
| 32      | 44.29 | -0.370 |
| 34      | 44.26 | -0.294 |
| 32      | 44.24 | -0.230 |
| 24      | 44.22 | -0.179 |
| 23      | 44.17 | -0.064 |
| 23      | 44.15 | 0.000  |
| Median  | 44.15 | 0.000  |
| 61      | 44.11 | 0.089  |
| 24      | 44.04 | 0.281  |
| 79      | 44.01 | 0.345  |
| 140     | 43.78 | 0.932  |
| 43      | 43.77 | 0.970  |
| Std Dev | 43.75 | 1.000  |
| 43      | 43.62 | 1.353  |
| 111     | 43.51 | 1.621  |
| 111     | 43.50 | 1.659  |
| 275     | 42.96 | 3.025  |
| 275     | 42.66 | 3.790  |

| 050.31 Soluble Potash Atomic Absorption(Citrate) |      |       |
|--|------|-------|
| Lab  |      |       |
| 107  | 0.16 | 0.000 |
| Median   | 0.16 | 0.000 |

| 050.50 %K <sub>2</sub> O Soluble Potash ICP(Oxalate) |      |       |
|--|------|-------|
| Lab  |      |       |
| 23   | 0.17 | 0.000 |
| 23   | 0.17 | 0.000 |
| Median   | 0.17 | 0.000 |

| 050.99 Soluble Potash Other |                   |        |
|-----------------------------|-------------------|--------|
| Lab                         | %K <sub>2</sub> O |        |
| 111                         | 0.18              | -1.926 |
| Std Dev                     | 0.17              | -1.000 |
| 43                          | 0.17              | -0.875 |
| 43                          | 0.16              | -0.754 |
| 61                          | 0.16              | -0.385 |
| 24                          | 0.16              | 0.000  |
| 31                          | 0.16              | 0.000  |
| 61                          | 0.16              | 0.000  |
| Median                      | 0.16              | 0.000  |
| 24                          | 0.15              | 0.385  |
| Std Dev                     | 0.14              | 1.000  |

|     |      |       |
|-----|------|-------|
| 275 | 0.14 | 1.155 |
| 275 | 0.13 | 1.926 |
| 330 | 0.11 | 3.466 |

| 050.XX Soluble Potash Total Method |                   |        |
|------------------------------------|-------------------|--------|
| Lab                                | %K <sub>2</sub> O |        |
| 111                                | 0.18              | -2.276 |
| 23                                 | 0.17              | -1.366 |
| 23                                 | 0.17              | -1.366 |
| 43                                 | 0.17              | -1.034 |
| Std Dev                            | 0.17              | -1.000 |
| 43                                 | 0.16              | -0.892 |
| 61                                 | 0.16              | -0.455 |
| 24                                 | 0.16              | 0.000  |
| 31                                 | 0.16              | 0.000  |
| 61                                 | 0.16              | 0.000  |
| 107                                | 0.16              | 0.000  |
| Median                             | 0.16              | 0.000  |
| 24                                 | 0.15              | 0.455  |
| Std Dev                            | 0.14              | 1.000  |
| 275                                | 0.14              | 1.366  |
| 275                                | 0.13              | 2.276  |
| 330                                | 0.11              | 4.098  |

| 060.00 Free Water Vacuum Oven |      |        |
|-------------------------------|------|--------|
| Lab                           |      |        |
| 31                            | 1.11 | -1.417 |
| Std Dev                       | 1.03 | -1.000 |
| 79                            | 1.00 | -0.850 |
| 32                            | 0.97 | -0.696 |
| 24                            | 0.96 | -0.644 |
| 32                            | 0.89 | -0.283 |
| 24                            | 0.88 | -0.232 |
| 111                           | 0.86 | -0.103 |
| 140                           | 0.84 | 0.000  |
| Median                        | 0.84 | 0.000  |
| 34                            | 0.78 | 0.283  |
| 23                            | 0.74 | 0.515  |
| 23                            | 0.73 | 0.541  |
| Std Dev                       | 0.64 | 1.000  |
| 61                            | 0.60 | 1.211  |
| 43                            | 0.51 | 1.675  |
| 61                            | 0.51 | 1.701  |
| 43                            | 0.49 | 1.778  |

| 060.99 Free Water Other |      |         |
|-------------------------|------|---------|
| Lab                     |      |         |
| 47                      | 6.75 | -17.716 |
| Std Dev                 | 1.46 | -1.000  |
| 14                      | 1.29 | -0.451  |
| 14                      | 1.19 | -0.119  |
| Median                  | 1.15 | 0.000   |
| 330                     | 1.11 | 0.119   |
| Std Dev                 | 0.83 | 1.000   |
| 275                     | 0.75 | 1.257   |
| 275                     | 0.65 | 1.573   |

| 060.XX Free Water Total Method |      |         |
|--------------------------------|------|---------|
| Lab                            |      |         |
| 47                             | 6.75 | -29.257 |
| 14                             | 1.29 | -2.159  |
| 14                             | 1.19 | -1.638  |
| 330                            | 1.11 | -1.266  |
| 31                             | 1.11 | -1.266  |
| Std Dev                        | 1.06 | -1.000  |
| 79                             | 1.00 | -0.720  |
| 32                             | 0.97 | -0.571  |
| 24                             | 0.96 | -0.521  |
| 32                             | 0.89 | -0.174  |
| 24                             | 0.88 | -0.124  |
| 111                            | 0.86 | 0.000   |
| Median                         | 0.86 | 0.000   |
| 140                            | 0.84 | 0.099   |
| 34                             | 0.78 | 0.372   |
| 275                            | 0.75 | 0.521   |
| 23                             | 0.74 | 0.596   |
| 23                             | 0.73 | 0.620   |
| Std Dev                        | 0.65 | 1.000   |
| 275                            | 0.65 | 1.017   |
| 61                             | 0.60 | 1.266   |
| 43                             | 0.51 | 1.712   |
| 61                             | 0.51 | 1.737   |
| 43                             | 0.49 | 1.811   |

| 101.30 Acid Soluble Calcium %CaO ICP |      |        |
|--------------------------------------|------|--------|
| Lab                                  |      |        |
| 330                                  | 0.39 | -1.356 |
| 24                                   | 0.39 | -1.175 |

AFPC Check Sample 09  
-2018

| Std Dev        | 0.38        | -1.000       |
|----------------|-------------|--------------|
| 23             | 0.38        | -0.994       |
| 24             | 0.38        | -0.994       |
| 111            | 0.38        | -0.994       |
| 34             | 0.37        | -0.633       |
| 23             | 0.36        | -0.271       |
| 61             | 0.36        | -0.090       |
| <b>Median</b>  | <b>0.35</b> | <b>0.000</b> |
| 61             | 0.35        | 0.090        |
| 31             | 0.35        | 0.127        |
| 14             | 0.35        | 0.271        |
| 43             | 0.34        | 0.310        |
| 32             | 0.34        | 0.452        |
| 32             | 0.34        | 0.452        |
| 43             | 0.34        | 0.485        |
| <b>Std Dev</b> | <b>0.32</b> | <b>1.000</b> |
| 14             | 0.23        | 4.430        |

| 101.XX         | Acid Soluble Calcium |               |
|----------------|----------------------|---------------|
| Lab            | %CaO                 | Total Method  |
| 330            | 0.39                 | -1.356        |
| 24             | 0.39                 | -1.175        |
| <b>Std Dev</b> | <b>0.38</b>          | <b>-1.000</b> |
| 23             | 0.38                 | -0.994        |
| 24             | 0.38                 | -0.994        |
| 111            | 0.38                 | -0.994        |
| 34             | 0.37                 | -0.633        |
| 23             | 0.36                 | -0.271        |
| 61             | 0.36                 | -0.090        |
| <b>Median</b>  | <b>0.35</b>          | <b>0.000</b>  |
| 61             | 0.35                 | 0.090         |
| 31             | 0.35                 | 0.127         |
| 14             | 0.35                 | 0.271         |
| 43             | 0.34                 | 0.310         |
| 32             | 0.34                 | 0.452         |
| 32             | 0.34                 | 0.452         |
| 43             | 0.34                 | 0.485         |
| <b>Std Dev</b> | <b>0.32</b>          | <b>1.000</b>  |
| 14             | 0.23                 | 4.430         |

| 121.30 | Acid Soluble Magnesium |        |
|--------|------------------------|--------|
| Lab    | %MgO                   | ICP    |
| 24     | 1.59                   | -1.905 |
| 34     | 1.54                   | -1.324 |

| Std Dev       | 1.51        | -1.000       |
|---------------|-------------|--------------|
| 23            | 1.51        | -0.936       |
| 24            | 1.51        | -0.936       |
| 32            | 1.51        | -0.936       |
| 23            | 1.50        | -0.807       |
| 32            | 1.46        | -0.226       |
| <b>Median</b> | <b>1.44</b> | <b>0.000</b> |
| 61            | 1.42        | 0.226        |
| 31            | 1.42        | 0.291        |
| 61            | 1.41        | 0.355        |
| 14            | 1.41        | 0.420        |
| 14            | 1.39        | 0.613        |
| 43            | 1.38        | 0.807        |
| 43            | 1.37        | 0.872        |

| 121.99         | Acid Soluble Magnesium |               |
|----------------|------------------------|---------------|
| Lab            | %MgO                   | Other         |
| 111            | 1.45                   | -1.340        |
| <b>Std Dev</b> | <b>1.44</b>            | <b>-1.000</b> |
| <b>Median</b>  | <b>1.40</b>            | <b>0.000</b>  |
| <b>Std Dev</b> | <b>1.36</b>            | <b>1.000</b>  |
| 330            | 1.35                   | 1.340         |

| 121.XX         | Acid Soluble Magnesium |               |
|----------------|------------------------|---------------|
| Lab            | %MgO                   | Total Method  |
| 24             | 1.59                   | -1.848        |
| 34             | 1.54                   | -1.294        |
| <b>Std Dev</b> | <b>1.52</b>            | <b>-1.000</b> |
| 23             | 1.51                   | -0.924        |
| 24             | 1.51                   | -0.924        |
| 32             | 1.51                   | -0.924        |
| 23             | 1.50                   | -0.801        |
| 32             | 1.46                   | -0.246        |
| 111            | 1.45                   | -0.185        |
| <b>Median</b>  | <b>1.44</b>            | <b>0.000</b>  |
| 61             | 1.42                   | 0.185         |
| 31             | 1.42                   | 0.246         |
| 61             | 1.41                   | 0.308         |
| 14             | 1.41                   | 0.370         |
| 14             | 1.39                   | 0.554         |
| 43             | 1.38                   | 0.739         |
| 43             | 1.37                   | 0.801         |
| <b>Std Dev</b> | <b>1.35</b>            | <b>1.000</b>  |
| 330            | 1.35                   | 1.047         |

| 144..01        | Sulfate Sulfur (S) |               |
|----------------|--------------------|---------------|
| Lab            | Gravimetric        |               |
| 47             | 9.80               | -1.340        |
| <b>Std Dev</b> | <b>8.84</b>        | <b>-1.000</b> |
| <b>Median</b>  | <b>6.01</b>        | <b>0.000</b>  |
| <b>Std Dev</b> | <b>3.19</b>        | <b>1.000</b>  |
| 79             | 2.23               | 1.340         |

| 144.99         | Sulfate Sulfur (S) |               |
|----------------|--------------------|---------------|
| Lab            | Other              |               |
| 330            | 2.51               | -3.350        |
| 32             | 2.28               | -1.149        |
| <b>Std Dev</b> | <b>2.26</b>        | <b>-1.000</b> |
| 34             | 2.20               | -0.431        |
| 23             | 2.20               | -0.383        |
| 23             | 2.16               | 0.000         |
| 24             | 2.16               | 0.000         |
| 24             | 2.16               | 0.000         |
| <b>Median</b>  | <b>2.16</b>        | <b>0.000</b>  |
| 14             | 2.13               | 0.239         |
| 14             | 2.08               | 0.766         |
| 61             | 2.06               | 0.957         |
| 61             | 2.06               | 0.957         |
| <b>Std Dev</b> | <b>2.05</b>        | <b>1.000</b>  |
| 32             | 2.05               | 1.053         |
| 31             | 1.99               | 1.579         |

| 144.XX         | Sulfate Sulfur (S) |               |
|----------------|--------------------|---------------|
| Lab            | Total Method       |               |
| 47             | 9.80               | -69.453       |
| 330            | 2.51               | -3.180        |
| 32             | 2.28               | -1.090        |
| <b>Std Dev</b> | <b>2.27</b>        | <b>-1.000</b> |
| 79             | 2.23               | -0.636        |
| 34             | 2.20               | -0.409        |
| 23             | 2.20               | -0.363        |
| 23             | 2.16               | 0.000         |
| 24             | 2.16               | 0.000         |
| 24             | 2.16               | 0.000         |
| <b>Median</b>  | <b>2.16</b>        | <b>0.000</b>  |
| 14             | 2.13               | 0.227         |
| 14             | 2.08               | 0.727         |
| 61             | 2.06               | 0.908         |

|                |             |              |
|----------------|-------------|--------------|
| 61             | 2.06        | 0.908        |
| 32             | 2.05        | 0.999        |
| <b>Std Dev</b> | <b>2.04</b> | <b>1.000</b> |
| 31             | 1.99        | 1.499        |

| 145.99         | Total Sulfur (S) |               |
|----------------|------------------|---------------|
| Lab            | Other            |               |
| 111            | 2.26             | -2.233        |
| <b>Std Dev</b> | <b>2.22</b>      | <b>-1.000</b> |
| 43             | 2.19             | 0.000         |
| <b>Median</b>  | <b>2.19</b>      | <b>0.000</b>  |
| 43             | 2.17             | 0.447         |

| 145.XX         | Total Sulfur (S) |               |
|----------------|------------------|---------------|
| Lab            | Total Method     |               |
| 111            | 2.26             | -2.233        |
| <b>Std Dev</b> | <b>2.22</b>      | <b>-1.000</b> |
| 43             | 2.19             | 0.000         |
| <b>Median</b>  | <b>2.19</b>      | <b>0.000</b>  |
| 43             | 2.17             | 0.447         |

| 151.30         | Total Arsenic |               |
|----------------|---------------|---------------|
| Lab            | ICP           |               |
| 330            | 9.81          | -5.212        |
| 43             | 3.40          | -1.178        |
| 43             | 3.30          | -1.115        |
| <b>Std Dev</b> | <b>3.12</b>   | <b>-1.000</b> |
| 335            | 1.53          | 0.000         |
| <b>Median</b>  | <b>1.53</b>   | <b>0.000</b>  |
| 24             | 1.35          | 0.117         |
| 31             | 1.10          | 0.271         |
| 140            | 1.07          | 0.290         |

| 151.XX         | Total Arsenic |               |
|----------------|---------------|---------------|
| Lab            | Total Method  |               |
| 330            | 9.81          | -5.212        |
| 43             | 3.40          | -1.178        |
| 43             | 3.30          | -1.115        |
| <b>Std Dev</b> | <b>3.12</b>   | <b>-1.000</b> |
| 335            | 1.53          | 0.000         |
| <b>Median</b>  | <b>1.53</b>   | <b>0.000</b>  |
| 24             | 1.35          | 0.117         |
| 31             | 1.10          | 0.271         |
| 140            | 1.07          | 0.290         |

AFPC Check Sample 09  
-2018

| 165.99 Acid Soluble Boron |       |        |
|---------------------------|-------|--------|
| Lab                       | PPM   | Other  |
| 24                        | 82.50 | -1.340 |
| Std Dev                   | 80.85 | -1.000 |
| Median                    | 76.00 | 0.000  |
| Std Dev                   | 71.15 | 1.000  |
| 330                       | 69.50 | 1.340  |

| 65.XX, ppm Acid Soluble Boron |       |              |
|-------------------------------|-------|--------------|
| Lab                           | PPM   | Total Method |
| 24                            | 82.50 | -1.340       |
| Std Dev                       | 80.85 | -1.000       |
| Median                        | 76.00 | 0.000        |
| Std Dev                       | 71.15 | 1.000        |
| 330                           | 69.50 | 1.340        |

| 171.99 Water Soluble Boron |       |       |
|----------------------------|-------|-------|
| Lab                        | PPM   | Other |
| 330                        | 55.50 | 0.000 |
| Median                     | 55.50 | 0.000 |

| 171.XX Water Soluble Boron |       |              |
|----------------------------|-------|--------------|
| Lab                        | PPM   | Total Method |
| 330                        | 55.50 | 0.000        |
| Median                     | 55.50 | 0.000        |

| 181.00 Total Cadmium |       |                   |
|----------------------|-------|-------------------|
| Lab                  |       | Atomic Absorbtion |
| 330                  | 30.35 | 0.000             |
| Median               | 30.35 | 0.000             |

| 181.30 Total Cadmium |       |        |
|----------------------|-------|--------|
| Lab                  | PPM   | ICP    |
| 31                   | 35.35 | -0.698 |
| 61                   | 35.00 | -0.480 |
| 61                   | 35.00 | -0.480 |
| 43                   | 34.44 | -0.131 |
| 43                   | 34.23 | 0.000  |
| Median               | 34.23 | 0.000  |
| 275                  | 34.20 | 0.019  |
| 275                  | 32.85 | 0.860  |
| Std Dev              | 32.63 | 1.000  |
| 335                  | 32.03 | 1.374  |

111 24.00 6.376

| 181.99 Total Cadmium |       |       |
|----------------------|-------|-------|
| Lab                  |       | Other |
| 24                   | 38.40 | 0.000 |
| Median               | 38.40 | 0.000 |

| 181.XX Total Cadmium |       |              |
|----------------------|-------|--------------|
| Lab                  | PPM   | Total Method |
| 24                   | 38.40 | -2.181       |
| Std Dev              | 36.14 | -1.000       |
| 31                   | 35.35 | -0.586       |
| 61                   | 35.00 | -0.403       |
| 61                   | 35.00 | -0.403       |
| 43                   | 34.44 | -0.110       |
| 43                   | 34.23 | 0.000        |
| Median               | 34.23 | 0.000        |
| 275                  | 34.20 | 0.016        |
| 275                  | 32.85 | 0.722        |
| Std Dev              | 32.32 | 1.000        |
| 335                  | 32.03 | 1.153        |
| 330                  | 30.35 | 2.029        |
| 111                  | 24.00 | 5.350        |

| 190.00 Aluminum |                                 |        |
|-----------------|---------------------------------|--------|
| Lab             | %Al <sub>2</sub> O <sub>3</sub> | ICP    |
| 275             | 0.52                            | -1.053 |
| Std Dev         | 0.52                            | -1.000 |
| 14              | 0.51                            | -0.670 |
| 14              | 0.51                            | -0.670 |
| 43              | 0.51                            | -0.670 |
| 43              | 0.51                            | -0.479 |
| 23              | 0.50                            | -0.287 |
| 34              | 0.50                            | -0.287 |
| 32              | 0.50                            | -0.096 |
| Median          | 0.49                            | 0.000  |
| 23              | 0.49                            | 0.096  |
| 24              | 0.49                            | 0.096  |
| 275             | 0.49                            | 0.096  |
| 111             | 0.48                            | 0.670  |
| Std Dev         | 0.47                            | 1.000  |
| 61              | 0.46                            | 1.244  |
| 24              | 0.46                            | 1.436  |
| 32              | 0.46                            | 1.436  |

61 0.45 1.627

| 190.99 Aluminum |                                 |                   |
|-----------------|---------------------------------|-------------------|
| Lab             | %Al <sub>2</sub> O <sub>3</sub> | Atomic Absorption |
| 31              | 0.48                            | -1.340            |
| Std Dev         | 0.47                            | -1.000            |
| Median          | 0.45                            | 0.000             |
| Std Dev         | 0.43                            | 1.000             |
| 330             | 0.42                            | 1.340             |

| 190.XX Aluminum |                                 |              |
|-----------------|---------------------------------|--------------|
| Lab             | %Al <sub>2</sub> O <sub>3</sub> | Total Method |
| 275             | 0.52                            | -1.005       |
| Std Dev         | 0.52                            | -1.000       |
| 14              | 0.51                            | -0.670       |
| 14              | 0.51                            | -0.670       |
| 43              | 0.51                            | -0.670       |
| 43              | 0.51                            | -0.503       |
| 23              | 0.50                            | -0.335       |
| 34              | 0.50                            | -0.335       |
| 32              | 0.50                            | -0.168       |
| 23              | 0.49                            | 0.000        |
| 24              | 0.49                            | 0.000        |
| 275             | 0.49                            | 0.000        |
| Median          | 0.49                            | 0.000        |
| 31              | 0.48                            | 0.503        |
| 111             | 0.48                            | 0.503        |
| Std Dev         | 0.46                            | 1.000        |
| 61              | 0.46                            | 1.005        |
| 24              | 0.46                            | 1.173        |
| 32              | 0.46                            | 1.173        |
| 61              | 0.45                            | 1.340        |
| 330             | 0.42                            | 2.345        |

| 191.00 Total Chromium |        |                   |
|-----------------------|--------|-------------------|
| Lab                   |        | Atomic Absorbtion |
| 330                   | 181.50 | 0.000             |
| Median                | 181.50 | 0.000             |

| 191.30 Total Chromium |        |        |
|-----------------------|--------|--------|
| Lab                   |        | ICP    |
| 335                   | 223.12 | -1.276 |
| Std Dev               | 221.90 | -1.000 |
| 111                   | 220.50 | -0.681 |

| 31 218.30 -0.182 |        |       |
|------------------|--------|-------|
| Lab              | PPM    | Other |
| 43               | 217.50 | 0.000 |
| Median           | 217.50 | 0.000 |
| 43               | 215.50 | 0.454 |
| Std Dev          | 213.10 | 1.000 |
| 61               | 211.50 | 1.363 |
| 61               | 208.00 | 2.158 |

| 191.99 Total Chromium |        |       |
|-----------------------|--------|-------|
| Lab                   | PPM    | Other |
| 24                    | 240.50 | 0.000 |
| Median                | 240.50 | 0.000 |

| 191.XX Total Chromium |        |              |
|-----------------------|--------|--------------|
| Lab                   | PPM    | Total Method |
| 24                    | 240.50 | -3.424       |
| Std Dev               | 224.22 | -1.000       |
| 335                   | 223.12 | -0.837       |
| 111                   | 220.50 | -0.447       |
| 31                    | 218.30 | -0.119       |
| 43                    | 217.50 | 0.000        |
| Median                | 217.50 | 0.000        |
| 43                    | 215.50 | 0.298        |
| 61                    | 211.50 | 0.893        |
| Std Dev               | 210.78 | 1.000        |
| 61                    | 208.00 | 1.414        |
| 330                   | 181.50 | 5.360        |

| 202.30 Acid Soluble Cobalt |     |     |
|----------------------------|-----|-----|
| Lab                        | PPM | ICP |
| 61                         |     |     |

| 202.99 Acid Soluble Cobalt |      |       |
|----------------------------|------|-------|
| Lab                        |      | Other |
| 24                         | 1.20 | 0.000 |
| Median                     | 1.20 | 0.000 |

| 202.XX Acid Soluble Cobalt |      |              |
|----------------------------|------|--------------|
| Lab                        | PPM  | Total Method |
| 61                         | 2.35 | -0.815       |
| 43                         | 2.00 | -0.054       |
| 43                         | 2.00 | -0.054       |
| Median                     | 1.98 | 0.000        |
| 61                         | 1.95 | 0.054        |
| Std Dev                    | 1.52 | 1.000        |



AFPC Check Sample 09  
-2018

|                            |      |        |
|----------------------------|------|--------|
| 24                         | 1.20 | 1.696  |
| 335                        | 0.71 | 2.751  |
| 221.30 Acid Soluble Copper |      |        |
| Lab                        | PPM  | ICP    |
| 43                         | 1.00 | -0.596 |
| 43                         | 1.00 | -0.596 |
| Median                     | 0.90 | 0.000  |
| 61                         | 0.80 | 0.596  |
| Std Dev                    | 0.73 | 1.000  |
| 61                         | 0.70 | 1.191  |

|                            |      |       |
|----------------------------|------|-------|
| 221.99 Acid Soluble Copper |      |       |
| Lab                        |      | Other |
| 24                         | 0.50 | 0.000 |
| Median                     | 0.50 | 0.000 |

|                            |      |              |
|----------------------------|------|--------------|
| 221.XX Acid Soluble Copper |      |              |
| Lab                        | PPM  | Total Method |
| 43                         | 1.00 | -0.893       |
| 43                         | 1.00 | -0.893       |
| 61                         | 0.80 | 0.000        |
| Median                     | 0.80 | 0.000        |
| 61                         | 0.70 | 0.447        |
| Std Dev                    | 0.58 | 1.000        |
| 24                         | 0.50 | 1.331        |

|                          |                                 |         |
|--------------------------|---------------------------------|---------|
| 241.30 Acid Soluble Iron |                                 |         |
| Lab                      | %Fe <sub>2</sub> O <sub>3</sub> | ICP     |
| 14                       | 1.77                            | -47.347 |
| 14                       | 1.76                            | -46.900 |
| 275                      | 0.83                            | -5.360  |
| 275                      | 0.79                            | -3.573  |
| Std Dev                  | 0.73                            | -1.000  |
| 23                       | 0.73                            | -0.893  |
| 34                       | 0.73                            | -0.893  |
| 32                       | 0.72                            | -0.447  |
| 24                       | 0.72                            | -0.223  |
| 23                       | 0.71                            | 0.000   |
| 111                      | 0.71                            | 0.000   |
| Median                   | 0.71                            | 0.000   |
| 24                       | 0.71                            | 0.223   |
| 43                       | 0.70                            | 0.447   |
| 43                       | 0.70                            | 0.447   |

|         |      |       |
|---------|------|-------|
| 32      | 0.69 | 0.893 |
| Std Dev | 0.69 | 1.000 |
| 31      | 0.66 | 2.233 |
| 61      | 0.66 | 2.457 |
| 61      | 0.65 | 2.680 |

|                          |                                 |       |
|--------------------------|---------------------------------|-------|
| 241.99 Acid Soluble Iron |                                 |       |
| Lab                      | %Fe <sub>2</sub> O <sub>3</sub> | Other |
| 330                      | 0.61                            | 0.000 |
| Median                   | 0.61                            | 0.000 |

|                          |                                 |              |
|--------------------------|---------------------------------|--------------|
| 241.XX Acid Soluble Iron |                                 |              |
| Lab                      | %Fe <sub>2</sub> O <sub>3</sub> | Total Method |
| 14                       | 1.77                            | -37.877      |
| 14                       | 1.76                            | -37.520      |
| 275                      | 0.83                            | -4.288       |
| 275                      | 0.79                            | -2.859       |
| Std Dev                  | 0.74                            | -1.000       |
| 23                       | 0.73                            | -0.715       |
| 34                       | 0.73                            | -0.715       |
| 32                       | 0.72                            | -0.357       |
| 24                       | 0.72                            | -0.179       |
| 23                       | 0.71                            | 0.000        |
| 111                      | 0.71                            | 0.000        |
| Median                   | 0.71                            | 0.000        |
| 24                       | 0.71                            | 0.179        |
| 43                       | 0.70                            | 0.357        |
| 43                       | 0.70                            | 0.357        |
| 32                       | 0.69                            | 0.715        |

|                          |                                 |         |
|--------------------------|---------------------------------|---------|
| 241.30 Acid Soluble Iron |                                 |         |
| Lab                      | %Fe <sub>2</sub> O <sub>3</sub> | ICP     |
| 14                       | 1.77                            | -47.347 |
| 14                       | 1.76                            | -46.900 |
| 275                      | 0.83                            | -5.360  |
| 275                      | 0.79                            | -3.573  |
| Std Dev                  | 0.73                            | -1.000  |
| 23                       | 0.73                            | -0.893  |
| 34                       | 0.73                            | -0.893  |
| 32                       | 0.72                            | -0.447  |
| 24                       | 0.72                            | -0.223  |
| 23                       | 0.71                            | 0.000   |
| 111                      | 0.71                            | 0.000   |
| Median                   | 0.71                            | 0.000   |
| 24                       | 0.71                            | 0.223   |
| 43                       | 0.70                            | 0.447   |
| 43                       | 0.70                            | 0.447   |

|                   |      |                   |
|-------------------|------|-------------------|
| 251.00 Total Lead |      |                   |
| Lab               |      | Atomic Absorbtion |
| 330               | <3,7 | 0.000             |
| Median            | 0.00 | 0.000             |

|                   |      |        |
|-------------------|------|--------|
| 251.30 Total Lead |      |        |
| Lab               | PPM  | ICP    |
| 335               | 7.29 | -6.577 |
| 61                | 2.45 | -1.626 |

|         |      |        |
|---------|------|--------|
| Std Dev | 1.84 | -1.000 |
| 61      | 1.35 | -0.501 |
| 275     | 0.86 | 0.000  |
| Median  | 0.86 | 0.000  |
| 275     | 0.78 | 0.082  |
| 43      | 0.40 | 0.471  |
| 43      | 0.35 | 0.522  |

|                   |      |       |
|-------------------|------|-------|
| 251.99 Total Lead |      |       |
| Lab               |      | Other |
| 24                | 0.52 | 0.000 |
| Median            | 0.52 | 0.000 |

|                   |      |              |
|-------------------|------|--------------|
| 251.XX Total Lead |      |              |
| Lab               | PPM  | Total Method |
| 330               | <3,7 | 0.000        |
| 335               | 7.29 | -7.639       |
| 61                | 2.45 | -1.924       |
| Std Dev           | 1.67 | -1.000       |
| 61                | 1.35 | -0.626       |
| 275               | 0.86 | -0.047       |
| Median            | 0.82 | 0.000        |
| 275               | 0.78 | 0.047        |
| 24                | 0.52 | 0.354        |
| 43                | 0.40 | 0.496        |
| 43                | 0.35 | 0.555        |

|                               |       |        |
|-------------------------------|-------|--------|
| 261.30 Acid Soluble Manganese |       |        |
| Lab                           |       | ICP    |
| 31                            | 55.95 | -1.141 |
| Std Dev                       | 55.40 | -1.000 |
| 111                           | 51.50 | 0.000  |
| Median                        | 51.50 | 0.000  |
| Std Dev                       | 47.60 | 1.000  |
| 330                           | 45.50 | 1.539  |

|                               |       |        |
|-------------------------------|-------|--------|
| 261.99 Acid Soluble Manganese |       |        |
| Lab                           | PPM   | Other  |
| 43                            | 60.00 | -1.228 |
| 43                            | 60.00 | -1.228 |
| Std Dev                       | 58.98 | -1.000 |
| 61                            | 54.50 | 0.000  |
| Median                        | 54.50 | 0.000  |
| 61                            | 54.00 | 0.112  |

|                               |       |              |
|-------------------------------|-------|--------------|
| 24                            | 52.00 | 0.558        |
| 261.XX Acid Soluble Manganese |       |              |
| Lab                           | PPM   | Total Method |
| 43                            | 60.00 | -1.514       |
| 43                            | 60.00 | -1.514       |
| Std Dev                       | 58.05 | -1.000       |
| 31                            | 55.95 | -0.448       |
| 61                            | 54.50 | -0.066       |
| Median                        | 54.25 | 0.000        |
| 61                            | 54.00 | 0.066        |
| 24                            | 52.00 | 0.593        |
| 111                           | 51.50 | 0.724        |
| Std Dev                       | 50.45 | 1.000        |
| 330                           | 45.50 | 2.305        |

|                      |      |        |
|----------------------|------|--------|
| 281.30 Total Mercury |      |        |
| Lab                  | PPM  | ICP    |
| 24                   | 0.47 | -1.340 |
| Std Dev              | 0.41 | -1.000 |
| Median               | 0.24 | 0.000  |
| Std Dev              | 0.07 | 1.000  |
| 335                  | 0.02 | 1.340  |

|                      |      |       |
|----------------------|------|-------|
| 281.99 Total Mercury |      |       |
| Lab                  | PPM  | Other |
| 330                  | 0.02 | 0.000 |
| Median               | 0.02 | 0.000 |

|                      |      |              |
|----------------------|------|--------------|
| 281.XX Total Mercury |      |              |
| Lab                  | PPM  | Total Method |
| 24                   | 0.47 | -2.662       |
| Std Dev              | 0.19 | -1.000       |
| 330                  | 0.02 | 0.000        |
| Median               | 0.02 | 0.000        |
| 335                  | 0.02 | 0.018        |

|                         |     |     |
|-------------------------|-----|-----|
| 289.30 Total Molybdenum |     |     |
| Lab                     | PPM | ICP |
| 330                     |     |     |

|                         |      |       |
|-------------------------|------|-------|
| 289.99 Total Molybdenum |      |       |
| Lab                     | PPM  | Other |
| 24                      | 5.10 | 0.000 |
| Median                  | 5.10 | 0.000 |

AFPC Check Sample 09  
-2018

| 289.XX Total Molybdenum |      |              |
|-------------------------|------|--------------|
| Lab                     | PPM  | Total Method |
| 330                     | 6.05 | -2.012       |
| 24                      | 5.10 | -1.211       |
| Std Dev                 | 4.84 | -1.000       |
| 43                      | 4.10 | -0.377       |
| 43                      | 4.00 | -0.293       |
| Median                  | 3.65 | 0.000        |
| 61                      | 3.30 | 0.293        |
| 61                      | 2.90 | 0.629        |
| Std Dev                 | 2.46 | 1.000        |
| 31                      | 2.30 | 1.132        |
| 111                     | 1.50 | 1.802        |

| 291.30 Total Nickel |     |     |
|---------------------|-----|-----|
| Lab                 | PPM | ICP |
| 335                 |     |     |

| 291.99 Total Nickel |       |       |
|---------------------|-------|-------|
| Lab                 | PPM   | Other |
| 24                  | 18.75 | 0.000 |
| Median              | 18.75 | 0.000 |

| 291.XX Total Nickel |       |              |
|---------------------|-------|--------------|
| Lab                 | PPM   | Total Method |
| 24                  | 18.75 | -18.392      |
| Std Dev             | 17.10 | -1.000       |
| 335                 | 17.01 | -0.105       |
| 43                  | 17.00 | 0.000        |
| 43                  | 17.00 | 0.000        |
| 61                  | 17.00 | 0.000        |
| 61                  | 17.00 | 0.000        |
| Median              | 17.00 | 0.000        |
| Std Dev             | 16.90 | 1.000        |
| 330                 | 16.50 | 5.255        |
| 31                  | 11.05 | 62.533       |

| 301.30 Total Selenium |      |        |
|-----------------------|------|--------|
| Lab                   | PPM  | ICP    |
| 330                   | 0.97 | -1.521 |
| Std Dev               | 0.78 | -1.000 |
| 24                    | 0.43 | 0.000  |
| Median                | 0.43 | 0.000  |
| Std Dev               | 0.07 | 1.000  |

| 301.XX Total Selenium |      |              |
|-----------------------|------|--------------|
| Lab                   | PPM  | Total Method |
| 330                   | 0.97 | -1.521       |
| Std Dev               | 0.78 | -1.000       |
| 24                    | 0.43 | 0.000        |
| Median                | 0.43 | 0.000        |
| Std Dev               | 0.07 | 1.000        |
| 335                   | 0.01 | 1.159        |

| 311.00 Sodium |                    |                  |
|---------------|--------------------|------------------|
| Lab           | %Na <sub>2</sub> O | Atomic Absorbion |
| 330           | 0.22               | 0.000            |
| Median        | 0.22               | 0.000            |

| 311.99 Sodium |                    |        |
|---------------|--------------------|--------|
| Lab           | %Na <sub>2</sub> O | Other  |
| 111           | 0.22               | -0.999 |
| 275           | 0.22               | -0.999 |
| 23            | 0.22               | -0.666 |
| 23            | 0.21               | -0.333 |
| 275           | 0.21               | -0.333 |
| 24            | 0.21               | 0.000  |
| 31            | 0.21               | 0.000  |
| Median        | 0.21               | 0.000  |
| 24            | 0.20               | 0.333  |
| 43            | 0.19               | 0.899  |
| 61            | 0.19               | 0.999  |
| Std Dev       | 0.19               | 1.000  |
| 43            | 0.19               | 1.165  |
| 61            | 0.19               | 1.332  |

| 311.XX Sodium |                    |              |
|---------------|--------------------|--------------|
| Lab           | %Na <sub>2</sub> O | Total Method |
| 111           | 0.22               | -0.855       |
| 275           | 0.22               | -0.855       |
| 330           | 0.22               | -0.855       |
| 23            | 0.22               | -0.570       |
| 23            | 0.21               | -0.285       |
| 275           | 0.21               | -0.285       |
| 24            | 0.21               | 0.000        |
| 31            | 0.21               | 0.000        |
| Median        | 0.21               | 0.000        |

|         |      |       |
|---------|------|-------|
| 24      | 0.20 | 0.285 |
| 43      | 0.19 | 0.770 |
| 61      | 0.19 | 0.855 |
| 43      | 0.19 | 0.998 |
| Std Dev | 0.19 | 1.000 |
| 61      | 0.19 | 1.140 |

| 321.30 Acid Soluble Zinc |        |        |
|--------------------------|--------|--------|
| Lab                      | PPM    | ICP    |
| 111                      | 498.00 | -3.325 |
| 31                       | 451.50 | -1.257 |
| Std Dev                  | 445.73 | -1.000 |
| 61                       | 426.50 | -0.145 |
| Median                   | 423.25 | 0.000  |
| 61                       | 420.00 | 0.145  |
| 24                       | 413.50 | 0.434  |
| Std Dev                  | 400.77 | 1.000  |
| 47                       | 1.00   | 18.782 |

| 321.99 Acid Soluble Zinc |        |        |
|--------------------------|--------|--------|
| Lab                      | PPM    | Other  |
| 43                       | 443.50 | -0.233 |
| 43                       | 440.50 | 0.000  |
| Median                   | 440.50 | 0.000  |
| Std Dev                  | 427.63 | 1.000  |
| 330                      | 409.00 | 2.447  |

| 321.XX Acid Soluble Zinc |        |              |
|--------------------------|--------|--------------|
| Lab                      | PPM    | Total Method |
| 111                      | 498.00 | -3.194       |
| 31                       | 451.50 | -1.117       |
| Std Dev                  | 448.89 | -1.000       |
| 43                       | 443.50 | -0.759       |
| 43                       | 440.50 | -0.625       |
| 61                       | 426.50 | 0.000        |
| Median                   | 426.50 | 0.000        |
| 61                       | 420.00 | 0.290        |
| 24                       | 413.50 | 0.581        |
| 330                      | 409.00 | 0.782        |
| Std Dev                  | 404.11 | 1.000        |
| 47                       | 1.00   | 19.006       |

| 325.10 Fluoride |   |           |
|-----------------|---|-----------|
| Lab             | % | Electrode |

|        |      |        |
|--------|------|--------|
| 32     | 1.44 | -0.853 |
| 79     | 1.44 | -0.853 |
| 23     | 1.42 | -0.609 |
| 23     | 1.41 | -0.426 |
| 32     | 1.41 | -0.426 |
| 24     | 1.37 | 0.000  |
| Median | 1.37 | 0.000  |
| 24     | 1.36 | 0.122  |
| 14     | 1.31 | 0.792  |
| 14     | 1.30 | 0.853  |
| 31     | 1.29 | 0.975  |
| 111    | 0.51 | 10.476 |

| 325.99 Fluoride |      |       |
|-----------------|------|-------|
| Lab             | %    | Other |
| 61              | 1.40 | 0.000 |
| 330             | 1.40 | 0.000 |
| Median          | 1.40 | 0.000 |
| 61              | 1.38 | 2.680 |

| 325.XX Fluoride |      |              |
|-----------------|------|--------------|
| Lab             | %    | Total Method |
| 32              | 1.44 | -0.816       |
| 79              | 1.44 | -0.816       |
| 23              | 1.42 | -0.505       |
| 23              | 1.41 | -0.272       |
| 32              | 1.41 | -0.272       |
| 61              | 1.40 | -0.117       |
| 330             | 1.40 | -0.117       |
| Median          | 1.39 | 0.000        |
| 61              | 1.38 | 0.117        |
| 24              | 1.37 | 0.272        |
| 24              | 1.36 | 0.427        |
| 14              | 1.31 | 1.282        |
| 14              | 1.30 | 1.359        |
| 31              | 1.29 | 1.515        |
| 111             | 0.51 | 13.633       |