

AFPC Rock Check Program

Sample No. 2020-11

| | Method # | # of Anal. | Grand Median | Std Dev |
|--|----------|------------|--------------|---------|
| Moisture | | | | |
| Ground Sample AFPC IX.2.A | 101 | 24 | 1.83 | 0.303 |
| Other (describe) | 102 | 4 | 1.62 | 0.064 |
| Method Group 100 | | 28 | 1.81 | 0.29 |
| P₂O₅ | | | | |
| Gravimetric AFPC IX.3.B | 201 | 3 | 30.02 | 0.110 |
| ICP-induced coupled plasma AFPC IX.3.D | 202 | 4 | 30.09 | 0.052 |
| AOAC 962.02-15th | 203 | 7 | 29.93 | 0.047 |
| Photometric-AFPC IX.3.C | 204 | 18 | 29.87 | 0.190 |
| Automated -AOAC 978.01-15th | 205 | 4 | 30.99 | 0.747 |
| Method Group 200 | | 36 | 29.93 | 0.18 |
| P₂O₅ (on Dry Basis) | | | | |
| Gravimetric AFPC IX.3.B | 211 | 2 | 30.46 | 0.032 |
| ICP-induced coupled plasma AFPC IX.3.D | 212 | 3 | 30.64 | 0.014 |
| AOAC 962.02-15th | 213 | 7 | 30.50 | 0.131 |
| Photometric-AFPC IX.3.C | 214 | 13 | 30.45 | 0.190 |
| Automated -AOAC 978.01-15th | 215 | 3 | 31.98 | 0.653 |
| Method Group 210 | | 28 | 30.50 | 0.21 |
| Fe₂O₃ | | | | |
| Atomic Absorption-AFPC IX.6.B | 301 | 1 | 0.56 | 0.000 |
| ICP-induced coupled plasma-AFPC IX.6.C | 302 | 22 | 0.55 | 0.226 |
| Other(describe) | 303 | 5 | 0.59 | 0.052 |
| Method Group 300 | | 28 | 0.57 | 0.22 |
| Al₂O₃ | | | | |
| Atomic Absorption-AFPC IX.7.B | 401 | 1 | 0.32 | 0.000 |
| ICP-induced coupled plasma-AFPC IX.7.C | 402 | 22 | 0.33 | 0.037 |
| Other(describe) | 403 | 5 | 0.40 | 0.090 |
| Method Group 400 | | 28 | 0.34 | 0.05 |
| MgO | | | | |
| Atomic Absorption-AFPC IX.8.A | 501 | 2 | 0.69 | 0.078 |
| ICP-induced coupled plasma-AFPC IX.8.B | 502 | 22 | 0.59 | 0.021 |
| Other(describe) | 503 | 5 | 0.55 | 0.022 |
| Method Group 500 | | 29 | 0.59 | 0.02 |
| Acid Insoluble | | | | |
| Insoluble-AFPC IX.4.A | 601 | 17 | 1.70 | 0.418 |
| Other(describe) | 602 | 5 | 1.73 | 0.485 |
| Method Group 600 | | 22 | 1.72 | 0.40 |
| Carbon Dioxide | | | | |
| Gasometric-AFPC IX.13.B | 651 | 11 | 5.61 | 0.468 |
| Other(describe) | 652 | 10 | 6.56 | 1.220 |
| Method Group 650 | | 21 | 5.82 | 0.54 |
| CaO | | | | |
| Gravimetric sulfate-AFPC IX.12.A | 701 | | | |
| ICP-induced coupled plasma-AFPC IX.12.D | 702 | 17 | 47.86 | 0.493 |
| Ceric Sulfate volumetric-AFPC IX.12.B | 703 | | | |
| Permanganate | 704 | 3 | 48.05 | 0.319 |
| EDTA Volumetric-AFPC IX.12.C | 705 | 1 | 49.13 | 0.000 |
| Other(describe) | 706 | 9 | 48.30 | 1.280 |
| Method Group 700 | | 30 | 48.00 | 0.64 |
| CaO (on Dry Basis) | | | | |
| Gravimetric sulfate-AFPC IX.12.A | 711 | | | |
| ICP-induced coupled plasma-AFPC IX.12.D | 712 | 13 | 48.76 | 0.632 |
| Ceric Sulfate volumetric-AFPC IX.12.B | 713 | | | |
| Permanganate | 714 | 3 | 48.85 | 0.299 |
| EDTA Volumetric-AFPC IX.12.C | 715 | 1 | 49.78 | 0.000 |
| Other(describe) | 716 | 8 | 48.82 | 0.744 |
| Method Group 710 | | 25 | 48.78 | 0.42 |

| | Method # | # of Anal. | Grand Median | Std Dev |
|---|----------|------------|--------------|---------|
| Fluorine, F | | | | |
| Volumetric-AFPC IX.14.A | 801 | | | |
| Specific Ion Electrode-AFPC IX.14.B | 802 | 22 | 3.55 | 0.097 |
| Other (describe) | 803 | 4 | 3.80 | 0.440 |
| Method Group 800 | | 26 | 3.55 | 0.10 |
| Arsenic, As | | | | |
| Atomic Absorption | 911 | 1 | 11.0 | 0.00 |
| ICP-induced coupled plasma-AFPC IX.15.B | 912 | 6 | 13.5 | 2.43 |
| Other(describe) | 913 | 3 | 9.0 | 2.35 |
| Method Group 900 | | 10 | 12.0 | 3.25 |
| Cadmium, Cd | | | | |
| Atomic Absorption-AFPC IX.11.A | 921 | 1 | 48 | 0.0 |
| ICP-induced coupled plasma-AFPC IX.11.B | 922 | 11 | 46 | 2.7 |
| Other(describe) | 923 | 3 | 44 | 3.1 |
| Method Group 910 | | 15 | 46 | 3.6 |
| Cobalt, Co | | | | |
| Atomic Absorption-AFPC IX.16.B | 931 | 1 | 7 | 0.0 |
| ICP-induced coupled plasma-AFPC IX.16.A | 932 | 9 | 2 | 0.7 |
| Other(describe) | 933 | 3 | | 0.6 |
| Method Group 920 | | 13 | 2 | 0.7 |
| Mercury, Hg | | | | |
| Atomic Absorption-AFPC IX.16.B | 941 | | | |
| ICP-induced coupled plasma-AFPC IX.16.A | 942 | 5 | 0.1 | 60.45 |
| Other(describe) | 943 | 3 | 0.1 | 0.02 |
| Method Group 930 | | 8 | 0.1 | 15.14 |
| Molybdenum, Mo | | | | |
| Atomic Absorption-AFPC IX.16.B | 951 | 1 | 12 | 0.0 |
| ICP-induced coupled plasma-AFPC IX.16.A | 952 | 9 | 9 | 1.4 |
| Other(describe) | 953 | 1 | 13 | 0.0 |
| Method Group 940 | | 11 | 9 | 2.1 |
| Nickel, Ni | | | | |
| Atomic Absorption-AFPC IX.16.B | 961 | 2 | 21 | 1.1 |
| ICP-induced coupled plasma-AFPC IX.16.A | 962 | 8 | 19 | 1.1 |
| Other(describe) | 963 | 3 | 20 | 0.3 |
| Method Group 950 | | 13 | 19 | 0.6 |
| Lead, Pb | | | | |
| Atomic Absorption-AFPC IX.16.B | 971 | 1 | 12 | 0.0 |
| ICP-induced coupled plasma-AFPC IX.16.A | 972 | 9 | 4 | 1.1 |
| Other(describe) | 973 | 3 | 6 | 0.8 |
| Method Group 960 | | 13 | 4 | 0.9 |
| Selenium, Se | | | | |
| Atomic Absorption-AFPC IX.16.B | 981 | | | |
| ICP-induced coupled plasma-AFPC IX.16.A | 982 | 2 | 3 | 0.1 |
| Other(describe) | 983 | 3 | | 1.4 |
| Method Group 970 | | 5 | 3 | 2.2 |
| Zinc, Zn | | | | |
| Atomic Absorption-AFPC IX.16.B | 991 | 1 | 353 | 0 |
| ICP-induced coupled plasma-AFPC IX.16.A | 992 | 9 | 366 | 31 |
| Other(describe) | 993 | 3 | 394 | 15 |
| Method Group 980 | | 13 | 391 | 31 |

| 101 | Ground Sample AFPC IX.2.A | |
|----------------|---------------------------|------------------|
| Lab | % | H ₂ O |
| 21 | 2.31 | -1.559 |
| 21 | 2.15 | -1.047 |
| 13 | 2.14 | -1.014 |
| Std Dev | 2.14 | -1.000 |
| 49 | 2.09 | -0.833 |
| 16 | 2.06 | -0.750 |
| 24 | 2.05 | -0.717 |
| 24 | 2.02 | -0.602 |
| 13 | 1.99 | -0.520 |
| 26 | 1.94 | -0.355 |
| 26 | 1.93 | -0.322 |
| 10 | 1.87 | -0.107 |
| 20 | 1.84 | -0.008 |
| Median | 1.83 | 0.000 |
| 9 | 1.83 | 0.008 |
| 10 | 1.80 | 0.107 |
| 9 | 1.77 | 0.206 |
| 27 | 1.72 | 0.371 |
| 15 | 1.67 | 0.552 |
| 30 | 1.63 | 0.668 |
| 55 | 1.58 | 0.833 |
| 15 | 1.58 | 0.849 |
| Std Dev | 1.53 | 1.000 |
| 77 | 1.34 | 1.641 |
| 266 | 1.30 | 1.756 |
| 237 | 1.19 | 2.119 |
| 77 | 0.73 | 3.637 |

| 102 | Other (describe) | |
|----------------|------------------|------------------|
| Lab | % | H ₂ O |
| 20 | 1.81 | -3.000 |
| Std Dev | 1.68 | -1.000 |
| 35 | 1.63 | -0.113 |
| Median | 1.62 | 0.000 |
| 275 | 1.61 | 0.113 |
| Std Dev | 1.55 | 1.000 |
| 35 | 1.51 | 1.681 |

| 201 | Gravimetric AFPC IX.3.B | |
|----------------|-------------------------|---------------|
| Lab | % | P2O5 |
| 77 | 30.20 | -1.590 |
| Std Dev | 30.13 | -1.000 |

| | | |
|----------------|--------------|--------------|
| 55 | 30.02 | 0.000 |
| Median | 30.02 | 0.000 |
| Std Dev | 29.91 | 1.000 |
| 56 | 29.90 | 1.090 |

| 202 | ICP-induced coupled plasma AFPC IX.3.D | |
|----------------|--|---------------|
| Lab | % | P2O5 |
| 266 | 30.22 | -2.584 |
| Std Dev | 30.14 | -1.000 |
| 10 | 30.11 | -0.383 |
| Median | 30.09 | 0.000 |
| 10 | 30.07 | 0.383 |
| 10 | 30.06 | 0.479 |

| 203 | AOAC 962.02-15th | |
|----------------|------------------|---------------|
| Lab | % | P2O5 |
| 9 | 30.09 | -3.430 |
| Std Dev | 29.98 | -1.000 |
| 21 | 29.94 | -0.107 |
| 30 | 29.93 | 0.000 |
| 49 | 29.93 | 0.000 |
| Median | 29.93 | 0.000 |
| 27 | 29.90 | 0.643 |
| Std Dev | 29.88 | 1.000 |
| 21 | 29.84 | 1.930 |
| 9 | 29.81 | 2.680 |

| 204 | Photometric-AFPC IX.3.C | |
|----------------|-------------------------|---------------|
| Lab | % | P2O5 |
| 35 | 30.19 | -1.682 |
| 10 | 30.18 | -1.603 |
| 24 | 30.16 | -1.498 |
| 15 | 30.08 | -1.077 |
| Std Dev | 30.06 | -1.000 |
| 51 | 30.02 | -0.762 |
| 35 | 29.96 | -0.447 |
| 51 | 29.95 | -0.420 |
| 13 | 29.90 | -0.131 |
| 24 | 29.87 | 0.000 |
| 92 | 29.87 | 0.000 |
| Median | 29.87 | 0.000 |
| 92 | 29.85 | 0.105 |
| 13 | 29.85 | 0.131 |
| 15 | 29.79 | 0.420 |

| | | |
|----------------|--------------|--------------|
| 26 | 29.73 | 0.736 |
| 26 | 29.73 | 0.736 |
| Std Dev | 29.68 | 1.000 |
| 275 | 29.66 | 1.127 |
| 16 | 29.63 | 1.261 |
| 237 | 29.62 | 1.314 |

| 205 | Automated -AOAC 978.01-15th | |
|----------------|-----------------------------|--------------|
| Lab | % | P2O5 |
| 20 | 31.43 | -0.596 |
| 20 | 31.39 | -0.542 |
| Median | 30.99 | 0.000 |
| 56 | 30.58 | 0.542 |
| Std Dev | 30.24 | 1.000 |
| 77 | 29.86 | 1.512 |

| 211 | Gravimetric AFPC IX.3.B | | |
|----------------|-------------------------|---------------|----|
| Lab | % | P2O5 | dB |
| 55 | 30.50 | -1.340 | |
| Std Dev | 30.49 | -1.000 | |
| Median | 30.46 | 0.000 | |
| Std Dev | 30.43 | 1.000 | |
| 77 | 30.42 | 1.340 | |

| 212 | ICP-induced coupled plasma AFPC IX.3.D | | |
|----------------|--|---------------|----|
| Lab | % | P2O5 | dB |
| 10 | 30.66 | -1.413 | |
| Std Dev | 30.65 | -1.000 | |
| 10 | 30.64 | 0.000 | |
| Median | 30.64 | 0.000 | |
| Std Dev | 30.62 | 1.000 | |
| 266 | 30.62 | 1.267 | |

| 213 | AOAC 962.02-15th | | |
|----------------|------------------|---------------|----|
| Lab | % | P2O5 | dB |
| 21 | 30.64 | -1.114 | |
| 9 | 30.63 | -1.045 | |
| Std Dev | 30.63 | -1.000 | |
| 49 | 30.57 | -0.548 | |
| 21 | 30.50 | 0.000 | |
| Median | 30.50 | 0.000 | |
| 30 | 30.43 | 0.533 | |
| 27 | 30.42 | 0.554 | |
| Std Dev | 30.36 | 1.000 | |

| | | |
|---|-------|-------|
| 9 | 30.36 | 1.033 |
|---|-------|-------|

| 214 | Photometric-AFPC IX.3.C | | |
|----------------|-------------------------|---------------|----|
| Lab | % | P2O5 | dB |
| 24 | 30.78 | -1.714 | |
| 35 | 30.65 | -1.070 | |
| Std Dev | 30.64 | -1.000 | |
| 15 | 30.56 | -0.561 | |
| 13 | 30.55 | -0.521 | |
| 24 | 30.50 | -0.239 | |
| 13 | 30.45 | -0.006 | |
| 35 | 30.45 | 0.000 | |
| Median | 30.45 | 0.000 | |
| 26 | 30.32 | 0.694 | |
| 26 | 30.32 | 0.710 | |
| 15 | 30.29 | 0.819 | |
| Std Dev | 30.26 | 1.000 | |
| 16 | 30.25 | 1.036 | |
| 275 | 30.14 | 1.627 | |
| 237 | 29.98 | 2.492 | |

| 215 | Automated -AOAC 978.01-15th | | |
|----------------|-----------------------------|--------------|----|
| Lab | % | P2O5 | dB |
| 20 | 32.01 | -0.050 | |
| 20 | 31.98 | 0.000 | |
| Median | 31.98 | 0.000 | |
| Std Dev | 31.32 | 1.000 | |
| 77 | 30.26 | 2.630 | |

| 301 | Atomic Absorption-AFPC IX.6.B | | |
|---------------|-------------------------------|--------------|--|
| Lab | % | Fe2O3 | |
| 55 | 0.56 | 0.000 | |
| Median | 0.56 | 0.000 | |

| 302 | ICP-induced coupled plasma-AFPC IX.6.C | | |
|-----|--|--------|--|
| Lab | % | Fe2O3 | |
| 35 | 0.69 | -0.620 | |
| 266 | 0.67 | -0.532 | |
| 16 | 0.64 | -0.399 | |
| 35 | 0.64 | -0.399 | |
| 51 | 0.63 | -0.354 | |
| 15 | 0.62 | -0.310 | |
| 51 | 0.62 | -0.310 | |
| 92 | 0.61 | -0.266 | |

| | | |
|----------------|-------------|--------------|
| 92 | 0.61 | -0.244 |
| 15 | 0.60 | -0.221 |
| 24 | 0.55 | 0.000 |
| 24 | 0.55 | 0.000 |
| Median | 0.55 | 0.000 |
| 237 | 0.53 | 0.108 |
| 21 | 0.34 | 0.952 |
| 49 | 0.33 | 0.975 |
| 10 | 0.33 | 0.997 |
| Std Dev | 0.32 | 1.000 |
| 10 | 0.32 | 1.041 |
| 13 | 0.32 | 1.041 |
| 9 | 0.31 | 1.063 |
| 9 | 0.31 | 1.085 |
| 13 | 0.31 | 1.085 |
| 21 | 0.31 | 1.085 |

| 303 Other(describe) | | |
|---------------------|-------------|---------------|
| Lab | % | Fe2O3 |
| 77 | 0.70 | -2.201 |
| 56 | 0.64 | -1.053 |
| Std Dev | 0.64 | -1.000 |
| 77 | 0.59 | 0.000 |
| Median | 0.59 | 0.000 |
| 20 | 0.57 | 0.287 |
| 20 | 0.56 | 0.574 |

| 401 Atomic Absorption-AFPC IX.6.B | | |
|-----------------------------------|-------------|--------------|
| Lab | % | Al2O3 |
| 55 | 0.32 | 0.000 |
| Median | 0.32 | 0.000 |

| 402 ICP-induced coupled plasma-AFPC IX.6.C | | |
|--|-------------|---------------|
| Lab | % | Al2O3 |
| 266 | 0.51 | -4.824 |
| 35 | 0.44 | -2.948 |
| 35 | 0.43 | -2.546 |
| 92 | 0.38 | -1.340 |
| Std Dev | 0.37 | -1.000 |
| 49 | 0.36 | -0.804 |
| 51 | 0.36 | -0.804 |
| 92 | 0.36 | -0.804 |
| 237 | 0.35 | -0.623 |
| 21 | 0.35 | -0.536 |

| | | |
|---------------|-------------|--------------|
| 51 | 0.35 | -0.536 |
| 9 | 0.33 | 0.000 |
| 16 | 0.33 | 0.000 |
| Median | 0.33 | 0.000 |
| 9 | 0.32 | 0.268 |
| 24 | 0.32 | 0.268 |
| 13 | 0.32 | 0.402 |
| 15 | 0.31 | 0.536 |
| 24 | 0.31 | 0.536 |
| 10 | 0.31 | 0.670 |
| 15 | 0.31 | 0.670 |
| 21 | 0.30 | 0.804 |
| 10 | 0.30 | 0.804 |
| 13 | 0.30 | 0.804 |

| 403 Other(describe) | | |
|---------------------|-------------|---------------|
| Lab | % | Al2O3 |
| 77 | 0.50 | -1.173 |
| 77 | 0.50 | -1.173 |
| Std Dev | 0.48 | -1.000 |
| 20 | 0.40 | 0.000 |
| Median | 0.40 | 0.000 |
| 20 | 0.38 | 0.168 |
| Std Dev | 0.31 | 1.000 |
| 56 | 0.22 | 1.954 |

| 501 Atomic Absorption-AFPC IX.8.A | | |
|-----------------------------------|-------------|---------------|
| Lab | % | MgO |
| 27 | 0.79 | -1.340 |
| Std Dev | 0.76 | -1.000 |
| Median | 0.69 | 0.000 |
| Std Dev | 0.61 | 1.000 |
| 55 | 0.58 | 1.340 |

| 502 ICP-induced coupled plasma-AFPC IX.8.B | | |
|--|-------------|---------------|
| Lab | % | MgO |
| 21 | 0.63 | -1.748 |
| 21 | 0.62 | -1.282 |
| 92 | 0.61 | -1.049 |
| Std Dev | 0.61 | -1.000 |
| 10 | 0.61 | -0.816 |
| 13 | 0.61 | -0.816 |
| 92 | 0.61 | -0.816 |
| 13 | 0.60 | -0.583 |

| | | |
|----------------|-------------|--------------|
| 15 | 0.60 | -0.350 |
| 35 | 0.60 | -0.350 |
| 9 | 0.59 | -0.117 |
| 49 | 0.59 | -0.117 |
| Median | 0.59 | 0.000 |
| 15 | 0.59 | 0.117 |
| 51 | 0.59 | 0.117 |
| 10 | 0.58 | 0.350 |
| 266 | 0.58 | 0.350 |
| 35 | 0.58 | 0.583 |
| 51 | 0.58 | 0.583 |
| 9 | 0.57 | 0.816 |
| 16 | 0.57 | 0.816 |
| 24 | 0.57 | 0.816 |
| Std Dev | 0.57 | 1.000 |
| 24 | 0.55 | 1.748 |
| 237 | 0.55 | 1.832 |

| 503 Other(describe) | | |
|---------------------|-------------|---------------|
| Lab | % | MgO |
| 77 | 0.60 | -2.233 |
| 77 | 0.58 | -1.117 |
| Std Dev | 0.57 | -1.000 |
| 56 | 0.55 | 0.000 |
| Median | 0.55 | 0.000 |
| 20 | 0.55 | 0.223 |
| 20 | 0.54 | 0.447 |

| 601 Insoluble-AFPC IX.4.A | | |
|---------------------------|-------------|--------------|
| Lab | % | Al |
| 15 | 2.11 | -0.969 |
| 10 | 1.94 | -0.574 |
| 15 | 1.92 | -0.526 |
| 13 | 1.84 | -0.335 |
| 13 | 1.84 | -0.335 |
| 55 | 1.82 | -0.287 |
| 10 | 1.77 | -0.168 |
| 9 | 1.74 | -0.084 |
| 9 | 1.70 | 0.000 |
| Median | 1.70 | 0.000 |
| 49 | 1.60 | 0.239 |
| 26 | 1.40 | 0.718 |
| 16 | 1.36 | 0.814 |
| Std Dev | 1.28 | 1.000 |

| | | |
|----|------|-------|
| 26 | 1.28 | 1.005 |
| 35 | 1.24 | 1.101 |
| 51 | 1.24 | 1.101 |
| 51 | 1.21 | 1.184 |
| 35 | 1.16 | 1.292 |

| 602 Other(describe) | | |
|---------------------|-------------|---------------|
| Lab | % | Al |
| 20 | 2.33 | -1.237 |
| 20 | 2.32 | -1.206 |
| Std Dev | 2.22 | -1.000 |
| 21 | 1.73 | 0.000 |
| Median | 1.73 | 0.000 |
| 21 | 1.67 | 0.134 |
| 266 | 1.29 | 0.907 |

| 651 Gasometric-AFPC IX.13.B | | |
|-----------------------------|-------------|---------------|
| Lab | % | CO2 |
| 21 | 6.25 | -1.377 |
| 21 | 6.25 | -1.377 |
| Std Dev | 6.07 | -1.000 |
| 77 | 6.00 | -0.844 |
| 9 | 5.82 | -0.448 |
| 9 | 5.82 | -0.448 |
| 13 | 5.61 | 0.000 |
| Median | 5.61 | 0.000 |
| 30 | 5.59 | 0.032 |
| 13 | 5.37 | 0.513 |
| 49 | 5.20 | 0.876 |
| Std Dev | 5.14 | 1.000 |
| 15 | 4.01 | 3.417 |
| 15 | 3.89 | 3.673 |

| 652 Other(describe) | | |
|---------------------|-------------|---------------|
| Lab | % | CO2 |
| 35 | 11.37 | -3.946 |
| 35 | 11.25 | -3.844 |
| Std Dev | 7.78 | -1.000 |
| 51 | 7.48 | -0.758 |
| 51 | 7.30 | -0.611 |
| 237 | 6.89 | -0.275 |
| Median | 6.56 | 0.000 |
| 20 | 6.22 | 0.275 |
| 20 | 6.19 | 0.299 |

| | | |
|-----|------|-------|
| 55 | 5.67 | 0.725 |
| 56 | 5.53 | 0.840 |
| 266 | 5.38 | 0.963 |

| 701 Gravimetric sulfate-AFPC IX.12.A | | | |
|--------------------------------------|------|-----|-------|
| Lab | % | CaO | |
| Median | 0.00 | | 0.000 |

| 702 ICP-induced coupled plasma-AFPC IX.12.D | | | |
|---|---|-----|--|
| Lab | % | CaO | |

| | | |
|---------|-------|--------|
| 92 | 48.73 | -1.766 |
| 92 | 48.67 | -1.634 |
| 21 | 48.53 | -1.360 |
| 21 | 48.49 | -1.279 |
| Std Dev | 48.35 | -1.000 |
| 13 | 48.05 | -0.386 |
| 10 | 48.04 | -0.355 |
| 9 | 47.96 | -0.193 |
| 9 | 47.87 | -0.010 |
| 10 | 47.86 | 0.000 |
| Median | 47.86 | 0.000 |
| 51 | 47.77 | 0.183 |
| 49 | 47.76 | 0.203 |
| 51 | 47.61 | 0.508 |
| 16 | 47.39 | 0.954 |
| Std Dev | 47.37 | 1.000 |
| 35 | 47.32 | 1.096 |
| 13 | 47.02 | 1.716 |
| 35 | 46.68 | 2.406 |
| 237 | 45.25 | 5.309 |

| 703 Ceric Sulfate volumetric-AFPC IX.12.B | | | |
|---|------|-----|-------|
| Lab | % | CaO | |
| Median | 0.00 | | 0.000 |

| 704 Permanganate | | | |
|------------------|---|-----|--|
| Lab | % | CaO | |

| | | |
|---------|-------|--------|
| 55 | 48.28 | -0.721 |
| 30 | 48.05 | 0.000 |
| Median | 48.05 | 0.000 |
| Std Dev | 47.73 | 1.000 |
| 27 | 47.43 | 1.959 |

| 705 EDTA Volumetric-AFPC IX.12.C | | | |
|----------------------------------|-------|-----|-------|
| Lab | % | CaO | |
| 266 | 49.13 | | 0.000 |
| Median | 49.13 | | 0.000 |

| 706 Other(describe) | | | |
|---------------------|---|-----|--|
| Lab | % | CaO | |

| | | |
|---------|-------|--------|
| 20 | 50.21 | -1.488 |
| 20 | 50.19 | -1.477 |
| 56 | 49.59 | -1.008 |
| Std Dev | 49.58 | -1.000 |
| 77 | 48.50 | -0.156 |
| 77 | 48.30 | 0.000 |
| Median | 48.30 | 0.000 |
| 15 | 48.14 | 0.129 |
| 15 | 47.88 | 0.332 |
| 24 | 47.71 | 0.465 |
| 24 | 47.55 | 0.590 |

| 711 Gravimetric sulfate-AFPC IX.12.A | | | |
|--------------------------------------|------|-----|-------|
| Lab | % | CaO | dB |
| Median | 0.00 | | 0.000 |

| 712 ICP-induced coupled plasma-AFPC IX.12.D | | | |
|---|---|-----|----|
| Lab | % | CaO | dB |

| | | |
|---------|-------|--------|
| 21 | 49.63 | -1.388 |
| 21 | 49.60 | -1.329 |
| Std Dev | 49.39 | -1.000 |
| 13 | 49.10 | -0.544 |
| 10 | 48.95 | -0.302 |
| 9 | 48.82 | -0.098 |
| 49 | 48.78 | -0.031 |
| 9 | 48.76 | 0.000 |
| Median | 48.76 | 0.000 |
| 10 | 48.74 | 0.032 |
| 16 | 48.39 | 0.587 |
| Std Dev | 48.13 | 1.000 |
| 35 | 48.10 | 1.038 |
| 13 | 47.97 | 1.247 |
| 35 | 47.39 | 2.164 |
| 237 | 45.79 | 4.699 |

| 713 Ceric Sulfate volumetric-AFPC IX.12.B | | | |
|---|---|-----|----|
| Lab | % | CaO | dB |

| | | | |
|--------|------|--|-------|
| Median | 0.00 | | 0.000 |
|--------|------|--|-------|

| 714 Permanganate | | | |
|------------------|---|-----|----|
| Lab | % | CaO | dB |

| | | |
|---------|-------|--------|
| 55 | 49.06 | -0.700 |
| 30 | 48.85 | 0.000 |
| Median | 48.85 | 0.000 |
| Std Dev | 48.55 | 1.000 |
| 27 | 48.25 | 1.980 |

| 715 EDTA Volumetric-AFPC IX.12.C | | | |
|----------------------------------|---|-----|----|
| Lab | % | CaO | dB |

| | | |
|--------|-------|-------|
| 266 | 49.78 | 0.000 |
| Median | 49.78 | 0.000 |

| 716 Other(describe) | | | |
|---------------------|---|-----|----|
| Lab | % | CaO | dB |

| | | |
|---------|-------|--------|
| 20 | 51.13 | -3.106 |
| 20 | 51.13 | -3.103 |
| Std Dev | 49.56 | -1.000 |
| 77 | 49.16 | -0.454 |
| 15 | 48.95 | -0.177 |
| Median | 48.82 | 0.000 |
| 24 | 48.69 | 0.177 |
| 77 | 48.66 | 0.219 |
| 15 | 48.64 | 0.238 |
| 24 | 48.54 | 0.373 |

| 801 Volumetric-AFPC IX.14.A | | | |
|-----------------------------|---|-------------|--|
| Lab | % | Fluorine, F | |

| | | | |
|--------|------|--|-------|
| Median | 0.00 | | 0.000 |
|--------|------|--|-------|

| 802 Specific Ion Electrode-AFPC IX.14.B | | | |
|---|---|-------------|--|
| Lab | % | Fluorine, F | |

| | | |
|---------|------|--------|
| 35 | 3.90 | -3.556 |
| 21 | 3.73 | -1.804 |
| 35 | 3.71 | -1.598 |
| Std Dev | 3.65 | -1.000 |
| 24 | 3.62 | -0.722 |
| 21 | 3.61 | -0.567 |
| 15 | 3.60 | -0.515 |
| 15 | 3.60 | -0.515 |
| 51 | 3.57 | -0.206 |
| 26 | 3.56 | -0.103 |

| | | |
|---------|------|--------|
| 9 | 3.56 | -0.052 |
| 9 | 3.55 | 0.000 |
| 26 | 3.55 | 0.000 |
| Median | 3.55 | 0.000 |
| 13 | 3.52 | 0.361 |
| 55 | 3.50 | 0.515 |
| 49 | 3.49 | 0.618 |
| 51 | 3.49 | 0.670 |
| 13 | 3.47 | 0.876 |
| 24 | 3.47 | 0.876 |
| Std Dev | 3.45 | 1.000 |
| 27 | 3.44 | 1.134 |
| 266 | 3.43 | 1.237 |
| 237 | 3.30 | 2.628 |
| 16 | 1.93 | 16.698 |

| 803 Other(describe) | | | |
|---------------------|---|-------------|--|
| Lab | % | Fluorine, F | |

| | | |
|--------|------|--------|
| 20 | 4.11 | -0.687 |
| 20 | 4.09 | -0.642 |
| Median | 3.80 | 0.000 |
| 77 | 3.52 | 0.642 |
| 77 | 3.44 | 0.823 |

| 911 Atomic Absorption-AFPC | | | |
|----------------------------|-----|-------------|--|
| Lab | ppm | Arsenic, As | |

| | | |
|--------|------|-------|
| 55 | 11.0 | 0.000 |
| Median | 11.0 | 0.000 |

| 912 ICP-induced coupled plasma-AFPC IX.15.1 | | | |
|---|-----|-------------|--|
| Lab | ppm | Arsenic, As | |

| | | |
|---------|------|--------|
| 266 | 22.9 | -3.876 |
| Std Dev | 15.9 | -1.000 |
| 35 | 15.0 | -0.618 |
| 16 | 14.0 | -0.206 |
| Median | 13.5 | 0.000 |
| 35 | 13.0 | 0.206 |
| Std Dev | 11.1 | 1.000 |
| 51 | 11.0 | 1.031 |
| 51 | 10.0 | 1.443 |

| 913 Other(describe) | | | |
|---------------------|-----|-------------|--|
| Lab | ppm | Arsenic, As | |

| | | |
|----|------|--------|
| 13 | 14.8 | -2.467 |
|----|------|--------|

| | | |
|---------|------|--------|
| Std Dev | 11.4 | -1.000 |
| 20 | 9.0 | 0.000 |
| Median | 9.0 | 0.000 |
| 20 | 8.5 | 0.213 |

| | | |
|--------|--------------------------------|-------------|
| 921 | Atomic Absorption-AFPC IX.11.A | |
| Lab | ppm | Cadmium, Cd |
| 55 | 48 | 0.000 |
| Median | 48 | 0.000 |

| | | |
|---------|---|-------------|
| 922 | ICP-induced coupled plasma-AFPC IX.11.B | |
| Lab | ppm | Cadmium, Cd |
| 77 | 56 | -3.536 |
| 77 | 55 | -3.350 |
| 16 | 49 | -1.117 |
| Std Dev | 49 | -1.000 |
| 35 | 47 | -0.372 |
| 266 | 47 | -0.372 |
| 51 | 46 | 0.000 |
| Median | 46 | 0.000 |
| 24 | 46 | 0.074 |
| 51 | 45 | 0.372 |
| 24 | 44 | 0.819 |
| Std Dev | 43 | 1.000 |
| 35 | 43 | 1.303 |
| 237 | 34 | 4.374 |

| | | |
|---------|-----------------|-------------|
| 923 | Other(describe) | |
| Lab | ppm | Cadmium, Cd |
| 13 | 51 | -2.353 |
| Std Dev | 47 | -1.000 |
| 20 | 44 | 0.000 |
| Median | 44 | 0.000 |
| 20 | 43 | 0.327 |

| | | |
|--------|--------------------------------|------------|
| 931 | Atomic Absorption-AFPC IX.16.B | |
| Lab | ppm | Cobalt, Co |
| 55 | 7 | 0.000 |
| Median | 7 | 0.000 |

| | | |
|---------|---|------------|
| 932 | ICP-induced coupled plasma-AFPC IX.16.A | |
| Lab | ppm | Cobalt, Co |
| 237 | 4 | -2.754 |
| Std Dev | 3 | -1.000 |

| | | |
|---------|---|--------|
| 266 | 2 | -0.804 |
| 16 | 2 | -0.268 |
| 77 | 2 | -0.268 |
| 24 | 2 | 0.000 |
| Median | 2 | 0.000 |
| 24 | 2 | 0.402 |
| Std Dev | 1 | 1.000 |
| 35 | 1 | 1.072 |
| 77 | 1 | 1.072 |
| 35 | 0 | 2.412 |

| | | |
|---------|-----------------|------------|
| 933 | Other(describe) | |
| Lab | ppm | Cobalt, Co |
| 13 | 2 | -2.680 |
| Std Dev | 1 | -1.000 |
| 20 | 0 | 0.000 |
| 20 | 0 | 0.000 |
| Median | 0 | 0.000 |

| | | |
|--------|--------------------------------|-------------|
| 941 | Atomic Absorption-AFPC IX.16.B | |
| Lab | ppm | Mercury, Hg |
| Median | 0.0 | 0.000 |

| | | |
|---------|---|-------------|
| 942 | ICP-induced coupled plasma-AFPC IX.16.A | |
| Lab | ppm | Mercury, Hg |
| 24 | 84.0 | -1.388 |
| 24 | 81.0 | -1.339 |
| Std Dev | 60.5 | -1.000 |
| 266 | 0.1 | 0.000 |
| Median | 0.1 | 0.000 |
| 35 | 0.0 | 0.001 |
| 35 | 0.0 | 0.001 |

| | | |
|---------|-----------------|-------------|
| 943 | Other(describe) | |
| Lab | ppm | Mercury, Hg |
| 20 | 0.1 | -0.031 |
| 20 | 0.1 | 0.000 |
| Median | 0.1 | 0.000 |
| Std Dev | 0.1 | 1.000 |
| 13 | 0.1 | 2.649 |

| | | |
|-----|--------------------------------|----------------|
| 951 | Atomic Absorption-AFPC IX.16.B | |
| Lab | ppm | Molybdenum, Mo |
| 55 | 12 | 0.000 |

| | | |
|--------|----|-------|
| Median | 12 | 0.000 |
|--------|----|-------|

| | | |
|---------|---|----------------|
| 952 | ICP-induced coupled plasma-AFPC IX.16.A | |
| Lab | ppm | Molybdenum, Mo |
| 16 | 11 | -1.256 |
| Std Dev | 11 | -1.000 |
| 237 | 10 | -0.321 |
| 266 | 9 | -0.154 |
| 24 | 9 | -0.070 |
| 24 | 9 | 0.000 |
| Median | 9 | 0.000 |
| Std Dev | 8 | 1.000 |
| 20 | 8 | 1.186 |
| 77 | 8 | 1.186 |
| 20 | 7 | 1.535 |
| 77 | 7 | 1.535 |

| | | |
|--------|-----------------|----------------|
| 953 | Other(describe) | |
| Lab | ppm | Molybdenum, Mo |
| 13 | 13 | 0.000 |
| Median | 13 | 0.000 |

| | | |
|---------|--------------------------------|------------|
| 961 | Atomic Absorption-AFPC IX.16.B | |
| Lab | ppm | Nickel, Ni |
| 55 | 22 | -1.340 |
| Std Dev | 22 | -1.000 |
| Median | 21 | 0.000 |
| Std Dev | 19 | 1.000 |
| 77 | 19 | 1.340 |

| | | |
|---------|---|------------|
| 962 | ICP-induced coupled plasma-AFPC IX.16.A | |
| Lab | ppm | Nickel, Ni |
| 35 | 21 | -1.848 |
| Std Dev | 20 | -1.000 |
| 35 | 20 | -0.924 |
| 24 | 19 | -0.185 |
| 16 | 19 | 0.000 |
| 24 | 19 | 0.000 |
| Median | 19 | 0.000 |
| 266 | 18 | 0.832 |
| Std Dev | 18 | 1.000 |
| 77 | 18 | 1.386 |
| 237 | 13 | 5.360 |

| | | |
|---------|-----------------|------------|
| 963 | Other(describe) | |
| Lab | ppm | Nickel, Ni |
| 13 | 20 | -1.005 |
| Std Dev | 20 | -1.000 |
| 20 | 20 | 0.000 |
| Median | 20 | 0.000 |
| Std Dev | 19 | 1.000 |
| 20 | 19 | 1.675 |

| | | |
|--------|--------------------------------|----------|
| 971 | Atomic Absorption-AFPC IX.16.B | |
| Lab | ppm | Lead, Pb |
| 55 | 12 | 0.000 |
| Median | 12 | 0.000 |

| | | |
|--------|---|----------|
| 972 | ICP-induced coupled plasma-AFPC IX.16.A | |
| Lab | ppm | Lead, Pb |
| 77 | 5 | -0.893 |
| 266 | 5 | -0.625 |
| 51 | 5 | -0.447 |
| 237 | 4 | -0.027 |
| 35 | 4 | 0.000 |
| 51 | 4 | 0.000 |
| Median | 4 | 0.000 |
| 16 | 3 | 0.893 |
| 35 | 3 | 0.893 |
| 77 | 3 | 0.893 |

| | | |
|---------|-----------------|----------|
| 973 | Other(describe) | |
| Lab | ppm | Lead, Pb |
| 20 | 6 | -0.615 |
| 20 | 6 | 0.000 |
| Median | 6 | 0.000 |
| Std Dev | 5 | 1.000 |
| 13 | 4 | 2.065 |

| | | |
|--------|--------------------------------|--------------|
| 981 | Atomic Absorption-AFPC IX.16.B | |
| Lab | ppm | Selenium, Se |
| Median | 0 | 0.000 |

| | | |
|---------|---|--------------|
| 982 | ICP-induced coupled plasma-AFPC IX.16.A | |
| Lab | ppm | Selenium, Se |
| 16 | 3 | -1.340 |
| Std Dev | 3 | -1.000 |
| Median | 3 | 0.000 |

| | | |
|---------|---|-------|
| Std Dev | 3 | 1.000 |
| 266 | 3 | 1.340 |

| 983 Other(describe) | | |
|---------------------|-----|--------------|
| Lab | ppm | Selenium, Se |
| 13 | 4 | -2.680 |
| Std Dev | 1 | -1.000 |
| 20 | 0 | 0.000 |
| 20 | 0 | 0.000 |
| Median | 0 | 0.000 |

| 991 Atomic Absorption-AFPC IX.16.B | | |
|------------------------------------|-----|----------|
| Lab | ppm | Zinc, Zn |
| 55 | 353 | 0.000 |
| Median | 353 | 0.000 |

| 992 ICP-induced coupled plasma-AFPC IX.16.A | | |
|---|-----|----------|
| Lab | ppm | Zinc, Zn |
| 24 | 450 | -2.712 |
| 24 | 441 | -2.431 |
| 237 | 408 | -1.340 |
| 16 | 400 | -1.098 |
| Std Dev | 397 | -1.000 |
| 35 | 366 | 0.000 |
| 35 | 366 | 0.000 |
| 266 | 366 | 0.000 |
| Median | 366 | 0.000 |
| Std Dev | 335 | 1.000 |
| 77 | 333 | 1.066 |
| 77 | 326 | 1.308 |

| 993 Other(describe) | | |
|---------------------|-----|----------|
| Lab | ppm | Zinc, Zn |
| 13 | 432 | -2.517 |
| Std Dev | 409 | -1.000 |
| 20 | 394 | 0.000 |
| Median | 394 | 0.000 |
| 20 | 391 | 0.163 |