

AFPC Rock Check Program

Sample No. 2015-12

| | Method # | # of Anal. | Grand Median | Std Dev |
|--|----------|------------|--------------|-------------|
| Moisture | | | | |
| Ground Sample AFPC IX.2.A | 101 | 27 | 1.03 | 0.174 |
| Other (describe) | 102 | | | |
| Method Group 100 | | 27 | 1.03 | 0.17 |
| P₂O₅ | | | | |
| Gravimetric AFPC IX.3.B | 201 | 3 | 33.09 | 0.050 |
| ICP-induced coupled plasma AFPC IX.3.D | 202 | 5 | 33.01 | 0.220 |
| Photometric-AFPC IX.3.C | 203 | 17 | 33.00 | 0.134 |
| Automated -AOAC 978.01-15th | 204 | 10 | 33.03 | 0.077 |
| Other(describe) | 205 | 4 | 33.11 | 0.349 |
| Method Group 200 | | 39 | 33.02 | 0.11 |
| P₂O₅ (on Dry Basis) | | | | |
| Gravimetric AFPC IX.3.B | 211 | 2 | 33.33 | 0.010 |
| ICP-induced coupled plasma AFPC IX.3.D | 212 | 5 | 33.38 | 0.238 |
| Photometric-AFPC IX.3.C | 213 | 10 | 33.42 | 0.083 |
| Automated -AOAC 978.01-15th | 214 | 10 | 33.40 | 0.137 |
| Other(describe) | 215 | | | |
| Method Group 210 | | 27 | 33.40 | 0.14 |
| Fe₂O₃ | | | | |
| Atomic Absorption-AFPC IX.6.B | 301 | 3 | 1.00 | 0.032 |
| ICP-induced coupled plasma-AFPC IX.6.C | 302 | 28 | 1.10 | 0.022 |
| Other(describe) | 303 | 6 | 1.12 | 0.133 |
| Method Group 300 | | 37 | 1.10 | 0.04 |
| Al₂O₃ | | | | |
| Atomic Absorption-AFPC IX.7.B | 401 | 2 | 1.51 | 0.037 |
| ICP-induced coupled plasma-AFPC IX.7.C | 402 | 28 | 1.44 | 0.132 |
| Other(describe) | 403 | 6 | 1.58 | 0.123 |
| Method Group 400 | | 36 | 1.46 | 0.13 |
| MgO | | | | |
| Atomic Absorption-AFPC IX.8.A | 501 | 5 | 0.37 | 0.119 |
| ICP-induced coupled plasma-AFPC IX.8.B | 502 | 26 | 0.35 | 0.007 |
| Other(describe) | 503 | 6 | 0.34 | 0.013 |
| Method Group 500 | | 37 | 0.35 | 0.01 |
| Acid Insoluble | | | | |
| Insoluble-AFPC IX.4.A | 601 | 21 | 3.17 | 0.082 |
| Other(describe) | 602 | 2 | 3.64 | 0.265 |
| Method Group 600 | | 23 | 3.19 | 0.11 |
| Carbon Dioxide | | | | |
| Gasometric-AFPC IX.13.B | 651 | 14 | 3.56 | 0.090 |
| Other(describe) | 652 | 10 | 3.74 | 0.972 |
| Method Group 650 | | 24 | 3.57 | 0.18 |
| CaO | | | | |
| Gravimetric sulfate-AFPC IX.12.A | 701 | | | |
| ICP-induced coupled plasma-AFPC IX.12.D | 702 | 21 | 47.75 | 0.433 |
| Ceric Sulfate volumetric-AFPC IX.12.B | 703 | | | |
| Permanganate | 704 | 2 | 47.24 | 0.250 |
| EDTA Volumetric-AFPC IX.12.C | 705 | 3 | 48.72 | 0.049 |
| Other(describe) | 706 | 9 | 48.00 | 0.131 |
| Method Group 700 | | 35 | 47.80 | 0.49 |
| CaO (on Dry Basis) | | | | |
| Gravimetric sulfate-AFPC IX.12.A | 711 | | | |
| ICP-induced coupled plasma-AFPC IX.12.D | 712 | 15 | 48.25 | 0.280 |
| Ceric Sulfate volumetric-AFPC IX.12.B | 713 | | | |
| Permanganate | 714 | 1 | 48.06 | 0.000 |
| EDTA Volumetric-AFPC IX.12.C | 715 | 3 | 49.05 | 0.085 |
| Other(describe) | 716 | 5 | 48.46 | 0.989 |
| Method Group 710 | | 23 | 48.34 | 0.40 |

| | Method # | # of Anal. | Grand Median | Std Dev |
|---|----------|------------|--------------|-------------|
| Fluorine, F | | | | |
| Volumetric-AFPC IX.14.A | 801 | | | |
| Specific Ion Electrode-AFPC IX.14.B | 802 | 21 | 3.70 | 0.209 |
| Other (describe) | 803 | 3 | 3.74 | 0.015 |
| Method Group 800 | | 24 | 3.72 | 0.14 |
| Arsenic, As | | | | |
| Atomic Absorption | 911 | | | |
| ICP-induced coupled plasma-AFPC IX.15.B | 912 | 8 | 11.2 | 3.51 |
| Other(describe) | 913 | 2 | 8.0 | 0.39 |
| Method Group 900 | | 10 | 10.3 | 3.85 |
| Cadmium, Cd | | | | |
| Atomic Absorption-AFPC IX.11.A | 921 | 1 | 11 | 0.0 |
| ICP-induced coupled plasma-AFPC IX.11.B | 922 | 14 | 6 | 0.8 |
| Other(describe) | 923 | 3 | 11 | 2.3 |
| Method Group 910 | | 18 | 6 | 0.9 |
| Cobalt, Co | | | | |
| Atomic Absorption-AFPC IX.16.B | 931 | 1 | 3 | 0.0 |
| ICP-induced coupled plasma-AFPC IX.16.A | 932 | 13 | 3 | 0.7 |
| Other(describe) | 933 | 3 | 11 | 3.3 |
| Method Group 920 | | 17 | 3 | 1.0 |
| Mercury, Hg | | | | |
| Atomic Absorption-AFPC IX.16.B | 941 | | | |
| ICP-induced coupled plasma-AFPC IX.16.A | 942 | 4 | 0.6 | 0.85 |
| Other(describe) | 943 | 1 | 0.5 | 0.00 |
| Method Group 930 | | 5 | 0.5 | 0.66 |
| Molybdenum, Mo | | | | |
| Atomic Absorption-AFPC IX.16.B | 951 | 1 | 12 | 0.0 |
| ICP-induced coupled plasma-AFPC IX.16.A | 952 | 9 | 6 | 1.7 |
| Other(describe) | 953 | 1 | 7 | 0.0 |
| Method Group 940 | | 11 | 7 | 2.0 |
| Nickel, Ni | | | | |
| Atomic Absorption-AFPC IX.16.B | 961 | 1 | 25 | 0.0 |
| ICP-induced coupled plasma-AFPC IX.16.A | 962 | 14 | 9 | 1.5 |
| Other(describe) | 963 | 2 | 10 | 2.3 |
| Method Group 950 | | 17 | 10 | 2.2 |
| Lead, Pb | | | | |
| Atomic Absorption-AFPC IX.16.B | 971 | 1 | 4 | 0.0 |
| ICP-induced coupled plasma-AFPC IX.16.A | 972 | 9 | 20 | 4.8 |
| Other(describe) | 973 | 3 | 4 | 3.9 |
| Method Group 960 | | 13 | 15 | 6.6 |
| Selenium, Se | | | | |
| Atomic Absorption-AFPC IX.16.B | 981 | | | |
| ICP-induced coupled plasma-AFPC IX.16.A | 982 | 4 | 3 | 2.1 |
| Other(describe) | 983 | 1 | 3 | 0.0 |
| Method Group 970 | | 5 | 3 | 1.8 |
| Zinc, Zn | | | | |
| Atomic Absorption-AFPC IX.16.B | 991 | 2 | 73 | 1 |
| ICP-induced coupled plasma-AFPC IX.16.A | 992 | 14 | 67 | 8 |
| Other(describe) | 993 | 5 | 69 | 7 |
| Method Group 980 | | 21 | 68 | 8 |

| 101 Ground Sample AFPC IX.2.A | | |
|-------------------------------|------|------------------|
| Lab | % | H ₂ O |
| 21 | 1.23 | -1.153 |
| Std Dev | 1.20 | -1.000 |
| 10 | 1.16 | -0.778 |
| 10 | 1.16 | -0.778 |
| 15 | 1.11 | -0.490 |
| 49 | 1.11 | -0.490 |
| 6 | 1.11 | -0.461 |
| 6 | 1.10 | -0.432 |
| 266 | 1.10 | -0.432 |
| 15 | 1.10 | -0.403 |
| 75 | 1.08 | -0.317 |
| 13 | 1.07 | -0.231 |
| 52 | 1.06 | -0.202 |
| 9 | 1.03 | -0.029 |
| 9 | 1.03 | 0.000 |
| 13 | 1.03 | 0.000 |
| Median | 1.03 | 0.000 |
| 30 | 1.02 | 0.029 |
| 26 | 1.02 | 0.040 |
| 61 | 1.02 | 0.058 |
| 75 | 1.00 | 0.173 |
| 275 | 0.89 | 0.807 |
| Std Dev | 0.85 | 1.000 |
| 275 | 0.85 | 1.009 |
| 61 | 0.84 | 1.066 |
| 55 | 0.71 | 1.844 |
| 77 | 0.68 | 1.988 |
| 77 | 0.63 | 2.277 |
| 35 | 0.60 | 2.449 |
| 35 | 0.45 | 3.314 |

| 102 Other (describe) | | |
|----------------------|------|------------------|
| Lab | % | H ₂ O |
| Median | 0.00 | 0.000 |

| 201 Gravimetric AFPC IX.3.B | | |
|-----------------------------|-------|--------|
| Lab | % | P2O5 |
| 77 | 33.12 | -0.695 |
| 55 | 33.09 | 0.000 |
| Median | 33.09 | 0.000 |
| Std Dev | 33.03 | 1.000 |
| 56 | 32.99 | 1.985 |

| 202 ICP-induced coupled plasma AFPC IX.3.D | | |
|--|-------|--------|
| Lab | % | P2O5 |
| 10 | 33.09 | -0.363 |
| 10 | 33.06 | -0.227 |
| 6 | 33.01 | 0.000 |
| Median | 33.01 | 0.000 |
| Std Dev | 32.79 | 1.000 |
| 6 | 32.77 | 1.113 |
| 266 | 32.65 | 1.635 |

| 203 Photometric-AFPC IX.3.C | | |
|-----------------------------|-------|--------|
| Lab | % | P2O5 |
| 45 | 33.52 | -3.871 |
| 275 | 33.24 | -1.787 |
| 275 | 33.20 | -1.493 |
| 26 | 33.16 | -1.191 |
| Std Dev | 33.13 | -1.000 |
| 9 | 33.10 | -0.744 |
| 9 | 33.08 | -0.596 |
| 30 | 33.05 | -0.372 |
| 49 | 33.04 | -0.298 |
| 52 | 33.00 | 0.000 |
| Median | 33.00 | 0.000 |
| 45 | 32.97 | 0.223 |
| 78 | 32.94 | 0.484 |
| 35 | 32.93 | 0.521 |
| 92 | 32.92 | 0.596 |
| 78 | 32.89 | 0.856 |
| 92 | 32.88 | 0.893 |
| Std Dev | 32.87 | 1.000 |
| 60 | 32.75 | 1.861 |
| 35 | 32.72 | 2.084 |

| 204 Automated -AOAC 978.01-15th | | |
|---------------------------------|-------|--------|
| Lab | % | P2O5 |
| 15 | 33.07 | -0.517 |
| 75 | 33.07 | -0.452 |
| 13 | 33.06 | -0.387 |
| 13 | 33.05 | -0.258 |
| 15 | 33.05 | -0.194 |
| Median | 33.03 | 0.000 |
| 21 | 33.02 | 0.194 |
| 77 | 32.98 | 0.646 |

| | | |
|---------|-------|-------|
| Std Dev | 32.95 | 1.000 |
| 61 | 32.95 | 1.098 |
| 75 | 32.95 | 1.098 |
| 61 | 32.85 | 2.389 |

| 205 Other(describe) | | |
|---------------------|-------|--------|
| Lab | % | P2O5 |
| 19 | 33.40 | -0.824 |
| 20 | 33.29 | -0.494 |
| Median | 33.11 | 0.000 |
| 56 | 32.94 | 0.494 |
| Std Dev | 32.76 | 1.000 |
| 20 | 32.57 | 1.569 |

| 211 Gravimetric AFPC IX.3.B | | | |
|-----------------------------|-------|--------|----|
| Lab | % | P2O5 | dB |
| 77 | 33.35 | -1.340 | |
| Std Dev | 33.34 | -1.000 | |
| Median | 33.33 | 0.000 | |
| Std Dev | 33.32 | 1.000 | |
| 55 | 33.32 | 1.340 | |

| 212 ICP-induced coupled plasma AFPC IX.3.D | | | |
|--|-------|--------|----|
| Lab | % | P2O5 | dB |
| 10 | 33.48 | -0.419 | |
| 10 | 33.45 | -0.291 | |
| 6 | 33.38 | 0.000 | |
| Median | 33.38 | 0.000 | |
| Std Dev | 33.14 | 1.000 | |
| 6 | 33.13 | 1.049 | |
| 266 | 33.01 | 1.538 | |

| 213 Photometric-AFPC IX.3.C | | | |
|-----------------------------|-------|--------|----|
| Lab | % | P2O5 | dB |
| 275 | 33.54 | -1.430 | |
| 26 | 33.50 | -1.001 | |
| Std Dev | 33.50 | -1.000 | |
| 275 | 33.49 | -0.810 | |
| 9 | 33.44 | -0.302 | |
| 9 | 33.42 | -0.080 | |
| Median | 33.42 | 0.000 | |
| 49 | 33.41 | 0.080 | |
| 30 | 33.39 | 0.324 | |
| 52 | 33.35 | 0.768 | |

| | | |
|---------|-------|-------|
| Std Dev | 33.33 | 1.000 |
| 35 | 33.13 | 3.463 |
| 35 | 32.87 | 6.592 |

| 214 Automated -AOAC 978.01-15th | | | |
|---------------------------------|-------|--------|----|
| Lab | % | P2O5 | dB |
| 15 | 33.44 | -0.270 | |
| 75 | 33.43 | -0.160 | |
| 21 | 33.42 | -0.148 | |
| 15 | 33.41 | -0.049 | |
| 13 | 33.41 | -0.012 | |
| Median | 33.40 | 0.000 | |
| 13 | 33.40 | 0.012 | |
| 75 | 33.28 | 0.932 | |
| Std Dev | 33.27 | 1.000 | |
| 61 | 33.22 | 1.311 | |
| 77 | 33.19 | 1.566 | |
| 61 | 33.18 | 1.619 | |

| 215 Other(describe) | | | |
|---------------------|------|------|-------|
| Lab | % | P2O5 | dB |
| Median | 0.00 | | 0.000 |

| 301 Atomic Absorption-AFPC IX.6.B | | |
|-----------------------------------|------|--------|
| Lab | % | Fe2O3 |
| 60 | 1.08 | -2.365 |
| Std Dev | 1.03 | -1.000 |
| 55 | 1.00 | 0.000 |
| Median | 1.00 | 0.000 |
| 30 | 0.99 | 0.315 |

| 302 ICP-induced coupled plasma-AFPC IX.6.C | | |
|--|------|--------|
| Lab | % | Fe2O3 |
| 266 | 1.19 | -4.068 |
| 78 | 1.17 | -2.938 |
| 21 | 1.15 | -2.260 |
| 78 | 1.14 | -1.582 |
| Std Dev | 1.12 | -1.000 |
| 35 | 1.11 | -0.452 |
| 49 | 1.11 | -0.452 |
| 6 | 1.11 | -0.226 |
| 75 | 1.10 | -0.205 |
| 6 | 1.10 | 0.000 |
| 10 | 1.10 | 0.000 |

| | | |
|----------------|-------------|--------------|
| 10 | 1.10 | 0.000 |
| 35 | 1.10 | 0.000 |
| 45 | 1.10 | 0.000 |
| 45 | 1.10 | 0.000 |
| 52 | 1.10 | 0.000 |
| Median | 1.10 | 0.000 |
| 13 | 1.10 | 0.226 |
| 9 | 1.09 | 0.452 |
| 9 | 1.09 | 0.678 |
| 15 | 1.09 | 0.678 |
| 75 | 1.08 | 0.887 |
| Std Dev | 1.08 | 1.000 |
| 13 | 1.08 | 1.130 |
| 15 | 1.08 | 1.130 |
| 61 | 1.05 | 2.260 |
| 92 | 1.03 | 3.164 |
| 92 | 1.02 | 3.616 |
| 275 | 1.02 | 3.796 |
| 61 | 1.02 | 3.842 |
| 275 | 0.98 | 5.356 |

| 303 Other(describe) | | |
|---------------------|-------------|---------------|
| Lab | % | Fe2O3 |
| 77 | 1.27 | -1.162 |
| 77 | 1.25 | -1.012 |
| Std Dev | 1.25 | -1.000 |
| 56 | 1.15 | -0.262 |
| Median | 1.12 | 0.000 |
| 19 | 1.08 | 0.262 |
| 20 | 1.04 | 0.600 |
| 20 | 1.00 | 0.862 |

| 401 Atomic Absorption-AFPC IX.6.B | | |
|-----------------------------------|-------------|---------------|
| Lab | % | Al2O3 |
| 55 | 1.56 | -1.340 |
| Std Dev | 1.55 | -1.000 |
| Median | 1.51 | 0.000 |
| Std Dev | 1.47 | 1.000 |
| 30 | 1.46 | 1.340 |

| 402 ICP-induced coupled plasma-AFPC IX.6.C | | |
|--|------|--------|
| Lab | % | Al2O3 |
| 52 | 1.76 | -2.469 |
| 266 | 1.72 | -2.164 |

| | | |
|----------------|-------------|---------------|
| 35 | 1.65 | -1.632 |
| 78 | 1.63 | -1.480 |
| 35 | 1.62 | -1.404 |
| 61 | 1.61 | -1.328 |
| 78 | 1.59 | -1.176 |
| 61 | 1.59 | -1.138 |
| Std Dev | 1.57 | -1.000 |
| 275 | 1.56 | -0.944 |
| 92 | 1.50 | -0.492 |
| 275 | 1.48 | -0.344 |
| 92 | 1.46 | -0.188 |
| 45 | 1.45 | -0.112 |
| 13 | 1.44 | -0.036 |
| Median | 1.44 | 0.000 |
| 75 | 1.43 | 0.036 |
| 6 | 1.43 | 0.040 |
| 21 | 1.43 | 0.040 |
| 6 | 1.43 | 0.078 |
| 10 | 1.42 | 0.116 |
| 13 | 1.42 | 0.116 |
| 10 | 1.41 | 0.192 |
| 15 | 1.41 | 0.192 |
| 45 | 1.41 | 0.192 |
| 49 | 1.41 | 0.192 |
| 9 | 1.40 | 0.269 |
| 9 | 1.40 | 0.307 |
| 15 | 1.40 | 0.307 |
| 75 | 1.39 | 0.339 |

| 403 Other(describe) | | |
|---------------------|-------------|--------------|
| Lab | % | Al2O3 |
| 20 | 1.66 | -0.609 |
| 77 | 1.64 | -0.487 |
| 77 | 1.61 | -0.244 |
| Median | 1.58 | 0.000 |
| 20 | 1.55 | 0.244 |
| Std Dev | 1.46 | 1.000 |
| 56 | 1.44 | 1.137 |
| 19 | 1.37 | 1.705 |

| 501 Atomic Absorption-AFPC IX.8.A | | |
|-----------------------------------|------|--------|
| Lab | % | MgO |
| 35 | 0.51 | -1.173 |
| 35 | 0.50 | -1.089 |

| | | |
|----------------|-------------|---------------|
| Std Dev | 0.49 | -1.000 |
| 30 | 0.37 | 0.000 |
| Median | 0.37 | 0.000 |
| 55 | 0.34 | 0.251 |
| 60 | 0.33 | 0.335 |

| 502 ICP-induced coupled plasma-AFPC IX.8.B | | |
|--|-------------|---------------|
| Lab | % | MgO |
| 13 | 0.38 | -4.020 |
| 21 | 0.36 | -1.340 |
| 45 | 0.36 | -1.340 |
| 45 | 0.36 | -1.340 |
| 61 | 0.36 | -1.340 |
| Std Dev | 0.36 | -1.000 |
| 6 | 0.35 | 0.000 |
| 6 | 0.35 | 0.000 |
| 9 | 0.35 | 0.000 |
| 9 | 0.35 | 0.000 |
| 10 | 0.35 | 0.000 |
| 10 | 0.35 | 0.000 |
| 10 | 0.35 | 0.000 |
| 13 | 0.35 | 0.000 |
| 49 | 0.35 | 0.000 |
| 78 | 0.35 | 0.000 |
| 92 | 0.35 | 0.000 |
| 92 | 0.35 | 0.000 |
| 266 | 0.35 | 0.000 |
| Median | 0.35 | 0.000 |
| Std Dev | 0.34 | 1.000 |
| 15 | 0.34 | 1.340 |
| 15 | 0.34 | 1.340 |
| 52 | 0.34 | 1.340 |
| 78 | 0.34 | 1.340 |
| 275 | 0.33 | 2.278 |
| 61 | 0.33 | 2.680 |
| 275 | 0.33 | 3.283 |
| 75 | 0.32 | 4.354 |
| 75 | 0.31 | 4.821 |

| 503 Other(describe) | | |
|---------------------|-------------|---------------|
| Lab | % | MgO |
| 77 | 0.37 | -2.680 |
| 77 | 0.35 | -1.149 |
| Std Dev | 0.35 | -1.000 |
| 56 | 0.34 | -0.383 |

| | | |
|---------------|-------------|--------------|
| Median | 0.34 | 0.000 |
| 19 | 0.33 | 0.383 |
| 20 | 0.33 | 0.383 |
| 20 | 0.33 | 0.766 |

| 601 Insoluble-AFPC IX.4.A | | |
|---------------------------|-------------|---------------|
| Lab | % | Al |
| 55 | 4.59 | -17.298 |
| 45 | 3.55 | -4.629 |
| 6 | 3.47 | -3.655 |
| 45 | 3.27 | -1.218 |
| 9 | 3.26 | -1.035 |
| Std Dev | 3.25 | -1.000 |
| 61 | 3.23 | -0.731 |
| 49 | 3.22 | -0.609 |
| 9 | 3.20 | -0.365 |
| 35 | 3.20 | -0.365 |
| 30 | 3.19 | -0.244 |
| 10 | 3.17 | 0.000 |
| Median | 3.17 | 0.000 |
| 35 | 3.16 | 0.122 |
| 13 | 3.15 | 0.244 |
| 10 | 3.14 | 0.365 |
| 26 | 3.12 | 0.609 |
| 52 | 3.12 | 0.609 |
| 6 | 3.09 | 0.975 |
| Std Dev | 3.09 | 1.000 |
| 13 | 3.08 | 1.157 |
| 15 | 3.08 | 1.157 |
| 21 | 3.07 | 1.218 |
| 15 | 3.07 | 1.279 |

| 602 Other(describe) | | |
|---------------------|-------------|---------------|
| Lab | % | Al |
| 19 | 3.99 | -1.340 |
| Std Dev | 3.90 | -1.000 |
| Median | 3.64 | 0.000 |
| Std Dev | 3.37 | 1.000 |
| 266 | 3.28 | 1.340 |

| 651 Gasometric-AFPC IX.13.B | | |
|-----------------------------|------|--------|
| Lab | % | CO2 |
| 61 | 3.89 | -3.592 |
| 13 | 3.71 | -1.658 |

| | | |
|---------|------|--------|
| 13 | 3.71 | -1.602 |
| Std Dev | 3.65 | -1.000 |
| 6 | 3.63 | -0.718 |
| 30 | 3.58 | -0.221 |
| 9 | 3.56 | 0.000 |
| 9 | 3.56 | 0.000 |
| 77 | 3.56 | 0.000 |
| Median | 3.56 | 0.000 |
| 15 | 3.50 | 0.663 |
| 15 | 3.50 | 0.663 |
| 6 | 3.49 | 0.774 |
| Std Dev | 3.47 | 1.000 |
| 49 | 3.45 | 1.216 |
| 52 | 3.40 | 1.768 |
| 77 | 3.26 | 3.315 |

| 652 Other(describe) | | |
|---------------------|---|-----|
| Lab | % | CO2 |

| | | |
|---------|------|--------|
| 35 | 7.84 | -4.218 |
| 35 | 7.79 | -4.167 |
| 78 | 4.93 | -1.219 |
| Std Dev | 4.71 | -1.000 |
| 78 | 4.62 | -0.905 |
| 55 | 3.85 | -0.113 |
| Median | 3.74 | 0.000 |
| 20 | 3.63 | 0.113 |
| 20 | 3.61 | 0.134 |
| 21 | 3.53 | 0.221 |
| 56 | 3.38 | 0.370 |
| 266 | 2.89 | 0.874 |

| 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 |

| | | |
|---------|-------|--------|
| 61 | 50.79 | -7.023 |
| 92 | 50.05 | -5.314 |
| 92 | 49.68 | -4.459 |
| 78 | 48.28 | -1.213 |
| Std Dev | 48.18 | -1.000 |
| 61 | 47.94 | -0.427 |
| 9 | 47.89 | -0.312 |

| | | |
|---------|-------|--------|
| 10 | 47.80 | -0.116 |
| 6 | 47.80 | -0.104 |
| 10 | 47.78 | -0.069 |
| 13 | 47.76 | -0.012 |
| 13 | 47.75 | 0.000 |
| Median | 47.75 | 0.000 |
| 6 | 47.72 | 0.081 |
| 9 | 47.67 | 0.196 |
| 49 | 47.54 | 0.485 |
| 45 | 47.33 | 0.970 |
| Std Dev | 47.32 | 1.000 |
| 78 | 47.31 | 1.028 |
| 21 | 47.29 | 1.063 |
| 45 | 47.07 | 1.571 |
| 75 | 46.81 | 2.174 |
| 52 | 46.30 | 3.350 |
| 75 | 45.09 | 6.136 |

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

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

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

| | | |
|---------|-------|--------|
| 30 | 47.57 | -1.340 |
| Std Dev | 47.49 | -1.000 |
| Median | 47.24 | 0.000 |
| Std Dev | 46.99 | 1.000 |
| 60 | 46.90 | 1.340 |

| 705 EDTA Volumetric-AFPC IX.12.C | | |
|----------------------------------|---|-----|
| Lab | % | CaO |

| | | |
|---------|-------|--------|
| 35 | 48.83 | -2.268 |
| Std Dev | 48.77 | -1.000 |
| 35 | 48.72 | 0.000 |
| Median | 48.72 | 0.000 |
| 266 | 48.70 | 0.412 |

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

| | | |
|---------|-------|---------|
| 77 | 50.20 | -16.846 |
| 77 | 49.40 | -10.720 |
| Std Dev | 48.13 | -1.000 |
| 19 | 48.05 | -0.383 |

| | | |
|---------|-------|-------|
| 55 | 48.00 | 0.000 |
| 56 | 48.00 | 0.000 |
| Median | 48.00 | 0.000 |
| 15 | 47.93 | 0.574 |
| 15 | 47.88 | 0.957 |
| Std Dev | 47.87 | 1.000 |
| 20 | 47.67 | 2.527 |
| 20 | 47.46 | 4.135 |

| 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 |

| | | |
|---------|-------|---------|
| 61 | 51.22 | -10.606 |
| Std Dev | 48.53 | -1.000 |
| 61 | 48.43 | -0.645 |
| 9 | 48.38 | -0.482 |
| 10 | 48.36 | -0.411 |
| 10 | 48.34 | -0.339 |
| 6 | 48.33 | -0.297 |
| 13 | 48.27 | -0.083 |
| 6 | 48.25 | 0.000 |
| Median | 48.25 | 0.000 |
| 13 | 48.24 | 0.004 |
| 9 | 48.16 | 0.302 |
| 49 | 48.07 | 0.614 |
| Std Dev | 47.97 | 1.000 |
| 21 | 47.88 | 1.316 |
| 75 | 47.28 | 3.445 |
| 52 | 46.80 | 5.169 |
| 75 | 45.59 | 9.482 |

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

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

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

| | | |
|--------|-------|-------|
| 30 | 48.06 | 0.000 |
| Median | 48.06 | 0.000 |

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

| | | |
|---------|-------|--------|
| 266 | 49.24 | -2.248 |
| Std Dev | 49.14 | -1.000 |
| 35 | 49.05 | 0.000 |
| Median | 49.05 | 0.000 |
| 35 | 49.01 | 0.432 |

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

| | | |
|---------|-------|--------|
| 77 | 50.52 | -2.085 |
| 77 | 49.74 | -1.296 |
| Std Dev | 49.45 | -1.000 |
| 15 | 48.46 | 0.000 |
| Median | 48.46 | 0.000 |
| 15 | 48.41 | 0.044 |
| 55 | 48.34 | 0.116 |

| 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 | |

| | | |
|---------|------|--------|
| 52 | 3.90 | -0.981 |
| 35 | 3.85 | -0.742 |
| 9 | 3.85 | -0.718 |
| 35 | 3.81 | -0.550 |
| 26 | 3.78 | -0.407 |
| 9 | 3.78 | -0.407 |
| 13 | 3.77 | -0.359 |
| 21 | 3.77 | -0.335 |
| 49 | 3.73 | -0.167 |
| 13 | 3.72 | -0.120 |
| 6 | 3.70 | 0.000 |
| Median | 3.70 | 0.000 |
| 6 | 3.69 | 0.024 |
| 30 | 3.68 | 0.072 |
| 15 | 3.65 | 0.215 |
| 15 | 3.62 | 0.383 |
| 266 | 3.50 | 0.933 |
| Std Dev | 3.49 | 1.000 |
| 55 | 3.43 | 1.268 |
| 75 | 3.43 | 1.268 |

| | | |
|-----|------|-------|
| 275 | 3.37 | 1.579 |
| 275 | 3.32 | 1.795 |
| 75 | 3.09 | 2.919 |

| 803 Other(describe) | | |
|----------------------|------|-------------|
| Lab | % | Fluorine, F |
| 19 | 3.76 | -1.340 |
| Std Dev | 3.75 | -1.000 |
| 77 | 3.74 | 0.000 |
| Median | 3.74 | 0.000 |
| Std Dev | 3.73 | 1.000 |
| 77 | 3.72 | 1.340 |

| 911 Atomic Absorption-AFPC | | |
|----------------------------|-----|-------------|
| Lab | ppm | Arsenic, As |
| Median | 0.0 | 0.000 |

| 912 ICP-induced coupled plasma-AFPC IX.15.B | | |
|---|------|-------------|
| Lab | ppm | Arsenic, As |
| 61 | 20.3 | -2.597 |
| 35 | 15.0 | -1.091 |
| Std Dev | 14.7 | -1.000 |
| 35 | 14.0 | -0.805 |
| 61 | 11.8 | -0.164 |
| Median | 11.2 | 0.000 |
| 78 | 10.6 | 0.164 |
| 78 | 10.0 | 0.335 |
| 266 | 8.2 | 0.848 |
| Std Dev | 7.7 | 1.000 |
| 52 | 5.3 | 1.675 |

| 913 Other(describe) | | |
|----------------------|-----|-------------|
| Lab | ppm | Arsenic, As |
| 13 | 8.5 | -1.340 |
| Std Dev | 8.4 | -1.000 |
| Median | 8.0 | 0.000 |
| Std Dev | 7.6 | 1.000 |
| 77 | 7.5 | 1.340 |

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

| 922 ICP-induced coupled plasma-AFPC IX.11.B | | |
|---|-----|-------------|
| Lab | ppm | Cadmium, Cd |
| 78 | 7 | -1.037 |
| Std Dev | 7 | -1.000 |
| 61 | 7 | -0.966 |
| 61 | 7 | -0.786 |
| 78 | 7 | -0.696 |
| 35 | 6 | 0.000 |
| 45 | 6 | 0.000 |
| 45 | 6 | 0.000 |
| 75 | 6 | 0.000 |
| 75 | 6 | 0.000 |
| Median | 6 | 0.000 |
| 77 | 6 | 0.644 |
| 266 | 5 | 0.876 |
| Std Dev | 5 | 1.000 |
| 77 | 5 | 1.031 |
| 35 | 5 | 1.288 |
| 52 | 4 | 2.319 |

| 923 Other(describe) | | |
|----------------------|-----|-------------|
| Lab | ppm | Cadmium, Cd |
| 20 | 12 | -0.428 |
| 20 | 11 | 0.000 |
| Median | 11 | 0.000 |
| Std Dev | 9 | 1.000 |
| 13 | 6 | 2.252 |

| 931 Atomic Absorption-AFPC IX.16.B | | |
|------------------------------------|-----|------------|
| Lab | ppm | Cobalt, Co |
| 55 | 3 | 0.000 |
| Median | 3 | 0.000 |

| 932 ICP-induced coupled plasma-AFPC IX.16.A | | |
|---|-----|------------|
| Lab | ppm | Cobalt, Co |
| 78 | 6 | -4.020 |
| 78 | 6 | -4.020 |
| 266 | 4 | -1.742 |
| 35 | 4 | -1.340 |
| Std Dev | 4 | -1.000 |
| 61 | 3 | -0.402 |
| 35 | 3 | 0.000 |
| 45 | 3 | 0.000 |
| 45 | 3 | 0.000 |

| | | |
|---------|---|-------|
| 77 | 3 | 0.000 |
| 77 | 3 | 0.000 |
| Median | 3 | 0.000 |
| 61 | 3 | 0.060 |
| 75 | 3 | 0.670 |
| Std Dev | 2 | 1.000 |
| 75 | 2 | 1.340 |

| 933 Other(describe) | | |
|----------------------|-----|------------|
| Lab | ppm | Cobalt, Co |
| 20 | 12 | -0.303 |
| 20 | 11 | 0.000 |
| Median | 11 | 0.000 |
| Std Dev | 8 | 1.000 |
| 13 | 3 | 2.377 |

| 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 |
| 35 | 2.0 | -1.698 |
| Std Dev | 1.4 | -1.000 |
| 35 | 1.0 | -0.523 |
| Median | 0.6 | 0.000 |
| 52 | 0.1 | 0.523 |
| 266 | 0.1 | 0.525 |

| 943 Other(describe) | | |
|----------------------|-----|-------------|
| Lab | ppm | Mercury, Hg |
| 13 | 0.5 | 0.000 |
| Median | 0.5 | 0.000 |

| 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 |
| 45 | 10 | -2.420 |
| 45 | 9 | -1.815 |
| Std Dev | 8 | -1.000 |

| | | |
|---------|---|--------|
| 61 | 7 | -0.817 |
| 266 | 7 | -0.738 |
| 78 | 6 | 0.000 |
| Median | 6 | 0.000 |
| 78 | 6 | 0.121 |
| 61 | 5 | 0.523 |
| Std Dev | 4 | 1.000 |
| 77 | 4 | 1.210 |
| 77 | 4 | 1.210 |

| 953 Other(describe) | | |
|----------------------|-----|----------------|
| Lab | ppm | Iolybdenum, Mo |
| 13 | 7 | 0.000 |
| Median | 7 | 0.000 |

| 961 Atomic Absorption-AFPC IX.16.B | | |
|------------------------------------|-----|------------|
| Lab | ppm | Nickel, Ni |
| 55 | 25 | 0.000 |
| Median | 25 | 0.000 |

| 962 ICP-induced coupled plasma-AFPC IX.16. | | |
|--|-----|------------|
| Lab | ppm | Nickel, Ni |
| 266 | 17 | -5.140 |
| 45 | 12 | -1.654 |
| 45 | 12 | -1.654 |
| 61 | 11 | -1.029 |
| Std Dev | 11 | -1.000 |
| 52 | 11 | -0.996 |
| 35 | 10 | -0.339 |
| 61 | 10 | -0.319 |
| Median | 9 | 0.000 |
| 35 | 9 | 0.319 |
| 75 | 9 | 0.319 |
| 75 | 9 | 0.319 |
| 77 | 9 | 0.319 |
| 77 | 8 | 0.977 |
| 78 | 8 | 0.977 |
| 78 | 8 | 0.977 |

| 963 Other(describe) | | |
|----------------------|-----|------------|
| Lab | ppm | Nickel, Ni |
| 19 | 13 | -1.340 |
| Std Dev | 12 | -1.000 |
| Median | 10 | 0.000 |

| | | |
|---------|----|-------|
| Std Dev | 8 | 1.000 |
| | 13 | 7 |
| | | 1.340 |

| | | |
|--------|--------------------------------|----------|
| 971 | Atomic Absorption-AFPC IX.16.B | |
| Lab | ppm | Lead, Pb |
| | 55 | 4 |
| | | 0.000 |
| Median | 4 | 0.000 |

| | | |
|---------|---|----------|
| 972 | ICP-induced coupled plasma-AFPC IX.16.A | |
| Lab | ppm | Lead, Pb |
| | 61 | 29 |
| | | -1.799 |
| Std Dev | 25 | -1.000 |
| | 61 | 21 |
| | | -0.293 |
| | 266 | 21 |
| | | -0.293 |
| | 35 | 20 |
| | | 0.000 |
| | 35 | 20 |
| | | 0.000 |
| Median | 20 | 0.000 |
| | 77 | 16 |
| | | 0.838 |
| Std Dev | 15 | 1.000 |
| | 77 | 15 |
| | | 1.047 |
| | 78 | 12 |
| | | 1.780 |
| | 78 | 11 |
| | | 1.843 |

| | | |
|---------|-----------------|----------|
| 973 | Other(describe) | |
| Lab | ppm | Lead, Pb |
| | 13 | 15 |
| | | -2.680 |
| Std Dev | 8 | -1.000 |
| | 20 | 4 |
| | | 0.000 |
| | 20 | 4 |
| | | 0.000 |
| Median | 4 | 0.000 |

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

| | | |
|---------|---------------------------------------|--------------|
| 982 | ICP-induc coupled plasma-AFPC IX.16.A | |
| Lab | ppm | Selenium, Se |
| | 275 | 4 |
| | | -0.628 |
| | 275 | 4 |
| | | -0.587 |
| Median | 3 | 0.000 |
| | 77 | 1 |
| | | 0.587 |
| Std Dev | 0 | 1.000 |
| | 266 | 0 |
| | | 1.210 |

| | | |
|--------|-----------------|--------------|
| 983 | Other(describe) | |
| Lab | ppm | Selenium, Se |
| | 13 | 3 |
| | | 0.000 |
| Median | 3 | 0.000 |

| | | |
|---------|--------------------------------|----------|
| 991 | Atomic Absorption-AFPC IX.16.B | |
| Lab | ppm | Zinc, Zn |
| | 60 | 75 |
| | | -1.340 |
| Std Dev | 74 | -1.000 |
| Median | 73 | 0.000 |
| Std Dev | 72 | 1.000 |
| | 55 | 71 |
| | | 1.340 |

| | | |
|---------|---|----------|
| 992 | ICP-induced coupled plasma-AFPC IX.16.A | |
| Lab | ppm | Zinc, Zn |
| | 61 | 80 |
| | | -1.727 |
| | 35 | 75 |
| | | -1.059 |
| Std Dev | 75 | -1.000 |
| | 266 | 70 |
| | | -0.357 |
| | 78 | 70 |
| | | -0.331 |
| | 75 | 69 |
| | | -0.265 |
| | 61 | 68 |
| | | -0.066 |
| | 35 | 67 |
| | | 0.000 |
| | 75 | 67 |
| | | 0.000 |
| | 78 | 67 |
| | | 0.000 |
| Median | 67 | 0.000 |
| | 45 | 60 |
| | | 0.926 |
| Std Dev | 59 | 1.000 |
| | 45 | 59 |
| | | 1.059 |
| | 52 | 59 |
| | | 1.059 |
| | 77 | 58 |
| | | 1.191 |
| | 77 | 56 |
| | | 1.456 |

| | | |
|---------|-----------------|----------|
| 993 | Other(describe) | |
| Lab | ppm | Zinc, Zn |
| | 20 | 75 |
| | | -0.760 |
| | 20 | 75 |
| | | -0.760 |
| | 19 | 69 |
| | | 0.000 |
| Median | 69 | 0.000 |
| | 13 | 65 |
| | | 0.580 |
| Std Dev | 62 | 1.000 |
| | 19 | 60 |
| | | 1.243 |