

FAIRFAX COUNTY WATER AUTHORITY
 WATER QUALITY LABORATORY
 INORGANIC AND METAL ANALYSES
 PERIOD OF 01/01/2003 TO 12/31/2003

Distribution Site Representing Lorton Treatment Plants

| Parameter | Maximum Contaminant Level ¹ | Contaminant Type ² | Units of Measure ³ | Average | Max | Min | Quantitation Limit | # of Tests |
|-------------------------------------|--|-------------------------------|-------------------------------|---------|------|------|--------------------|------------|
| Aggressive Index Number | | | Units | 11 | 12 | 10 | - | 8 |
| Alkalinity, Bicarbonate | | | mg/L | 47 | 84 | 33 | - | 8 |
| Alkalinity, Carbonate | | | mg/L | 0 | 0 | 0 | - | 8 |
| Alkalinity, Hydroxyl | | | mg/L | 0 | 0 | 0 | - | 8 |
| Alkalinity, Phenolphthalein | | | mg/L | 0 | 0 | 0 | - | 8 |
| Alkalinity, Total | | | mg/L | 47 | 84 | 33 | - | 8 |
| Bromate | 10 | P | µg/L | BQL | BQL | BQL | 10 | 2 |
| Bromide | | | mg/L | BQL | 0.01 | BQL | 0.01 | 8 |
| Carbon Dioxide | | | mg/L | 4 | 9 | 1 | - | 8 |
| Chemical Oxygen Demand | | | mg/L | BQL | 6.9 | BQL | 5.0 | 2 |
| Chloride | 250.0 | S | mg/L | 34.1 | 57.4 | 22.6 | 5.0 | 8 |
| Chlorine, Free | | | mg/L | 0.8 | 2.7 | 0.0 | 0.0 | 8 |
| Chlorine, Total | | | mg/L | 3.5 | 4.0 | 2.7 | 0.0 | 8 |
| Color | 15 | S | Units | 9 | 31 | 0 | 0 | 9 |
| Dissolved Oxygen | | | mg/L | 7.5 | 12.0 | 4.0 | 0.0 | 8 |
| Fluoride | 4.0/2.0 | P/S | mg/L | 0.9 | 1.1 | 0.8 | 0.2 | 8 |
| Hardness, Calcium | | | mg/L | 76 | 130 | 58 | - | 8 |
| Hardness, Total | | | mg/L | 94 | 144 | 74 | - | 8 |
| Methylene Blue Activated Substances | 0.5 | S | mg/L | BQL | BQL | BQL | 0.050 | 1 |
| N, Ammonia (Ammonia as N) | | | mg/L | 0.80 | 1.23 | BQL | 0.05 | 8 |
| N, Nitrate (Nitrate as N) | 10 | P | mg/L | 0.9 | 1.9 | 0.6 | 0.2 | 8 |
| N, Nitrite (Nitrite as N) | 1 | P | mg/L | BQL | 0.02 | BQL | 0.01 | 8 |
| pH | 6.5-8.5 | S | Units | 7.4 | 7.9 | 7.0 | - | 8 |
| Phosphate as Phosphorous | | | mg/L | 0.46 | 0.93 | 0.32 | 0.20 | 7 |
| Solids, Fixed | | | mg/L | 144 | 182 | 112 | 1 | 8 |
| Solids, Total | | | mg/L | 213 | 258 | 144 | 1 | 8 |
| Solids, Total Dissolved | 500 | S | mg/L | 167 | 202 | 139 | 1 | 8 |
| Solids, Total Suspended | | | mg/L | BQL | 3 | BQL | 1 | 8 |
| Solids, Volatile | | | mg/L | 69 | 77 | 43 | 1 | 6 |
| Specific Conductivity | | | µmhos/cm | 265 | 343 | 214 | 0 | 8 |
| Sulfate | 250.0 | S | mg/L | 27.0 | 36.7 | 20.0 | 5.0 | 8 |
| Taste | | | Units | 2 | 3 | 1 | 1 | 8 |
| Temperature | | | °C | 17.9 | 25.4 | 11.3 | - | 8 |
| Threshold Odor Number | 3 | S | Units | 9 | 23 | 1 | 1 | 9 |
| Total Organic Carbon | | | mg/L | 2.8 | 3.5 | 1.9 | 0.5 | 8 |
| Turbidity | ≤5 | P | NTU | 0.72 | 3.70 | 0.15 | 0.00 | 9 |
| Aluminum | 50-200 | S | µg/L | 73 | 101 | 30 | 20 | 3 |
| Antimony | 6 | P | µg/L | BQL | BQL | BQL | 4 | 3 |
| Arsenic | 50 | P | µg/L | BQL | BQL | BQL | 2 | 3 |
| Barium | 2000 | P | µg/L | 37 | 48 | 32 | 10 | 3 |
| Beryllium | 4 | P | µg/L | BQL | BQL | BQL | 1.0 | 3 |
| Cadmium | 5 | P | µg/L | BQL | BQL | BQL | 1 | 3 |
| Calcium | | | mg/L | 32.0 | 40.9 | 26.4 | 0.5 | 3 |
| Chromium | 100 | P | µg/L | BQL | BQL | BQL | 1 | 3 |
| Copper | 1300 | AL | µg/L | BQL | BQL | BQL | 40 | 8 |
| Iron | 300 | S | µg/L | BQL | 110 | BQL | 60 | 8 |
| Lead | 15 | AL | µg/L | 0.29 | 0.88 | BQL | 0.29 | 3 |
| Magnesium | | | mg/L | 4.6 | 5.5 | 3.4 | 0.5 | 3 |
| Manganese | 50 | S | µg/L | BQL | BQL | BQL | 25 | 8 |
| Mercury | 2 | P | µg/L | BQL | BQL | BQL | 0.5 | 2 |
| Nickel | 100 | P | µg/L | BQL | BQL | BQL | 5 | 3 |
| Potassium | | | mg/L | 3.5 | 3.9 | 2.9 | 0.5 | 3 |
| Selenium | 50 | P | µg/L | BQL | BQL | BQL | 4 | 3 |
| Silicon | | | mg/L | 4 | 4 | 4 | 4 | 3 |
| Silver | 100 | S | µg/L | BQL | BQL | BQL | 0.5 | 3 |
| Sodium | | | mg/L | 14.6 | 26.8 | 8.2 | 5.0 | 8 |
| Thallium | 2 | P | µg/L | BQL | BQL | BQL | 2 | 3 |
| Zinc | 5000 | S | µg/L | 110 | 132 | 75 | 25 | 3 |

BQL = The lowest quantitation limit of all analyses for the particular parameter, Below Quantitation Limit.

¹ Environmental Protection Agency/Virginia Department of Health established levels for drinking water

² P=Primary-enforceable, S=Secondary-non-enforceable, AL=Action Level on specific taps

³ mg/L=milligrams per liter, µg/L=micrograms per liter