FAIRFAX COUNTY WATER AUTHORITY
WATER QUALITY LABORATORY
INORGANIC AND METAL ANALYSES
PERIOD OF 01/01/2003 TO 12/31/2003
Lorton Treatment Plants Finished Water

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	-	16
Alkalinity, Bicarbonate			mg/L	43	58	27	-	16
Alkalinity, Carbonate			mg/L	0	0	0	-	16
Alkalinity, Hydroxyl			mg/L	0	0	0	-	16
Alkalinity, Phenolphthalein			mg/L	0	0	0	-	16
Alkalinity, Total			mg/L	43	58	27	-	16
Bromate	10	P	µg/L	BQL	BQL	BQL	10	8
Bromide			mg/L	BQL	0.01	BQL	0.01	18
Carbon Dioxide			mg/L	4	9	0	-	16
Chemical Oxygen Demand			mg/L	BQL	7.3	BQL	5.0	4
Chloride	250.0	S	mg/L	33.4	55.7	22.3	5.0	16
Chlorine, Free			mg/L	1.0	3.7	0.0	0.0	16
Chlorine, Total			mg/L	4.0	5.2	3.3	0.0	16
Color	15	S	Units	6	16	0	0	16
Dissolved Oxygen			mg/L	8.8	13.5	4.0	0.0	16
Fluoride	4.0/2.0	P/S	mg/L	0.9	1.2	0.6	0.2	16
Hardness, Calcium			mg/L	69	100	54	-	16
Hardness, Total			mg/L	88	110	71	-	16
Methylene Blue Activated Substances	0.5	S	mg/L	BQL	BQL	BQL	0.050	2
N, Ammonia (Ammonia as N)			mg/L	0.86	1.25	BQL	0.05	16
N, Nitrate (Nitrate as N)	10	P	mg/L	0.9	1.8	0.6	0.2	16
N, Nitrite (Nitrite as N)	1	P	mg/L	0.01	0.05	BQL	0.01	16
pH	6.5-8.5	S	Units	7.6	8.7	7.0	-	16
Phosphate as Phosphorous			mg/L	0.36	0.52	0.21	0.20	14
Solids, Fixed			mg/L	147	201	110	1	16
Solids, Total			mg/L	217	277	149	1	16
Solids, Total Dissolved	500	S	mg/L	166	200	138	1	16
Solids, Total Suspended			mg/L	BQL	1	BQL	1	16
Solids, Volatile			mg/L	70	92	49	1	12
Specific Conductivity			µmhos/cm	261	330	213	0	16
Sulfate	250.0	S	mg/L	26.8	36.7	19.4	5.0	16
Taste			Units	2	3	1	1	16
Temperature			°C	16.0	26.1	7.9	-	16
Threshold Odor Number	3	S	Units	10	40	3	1	16
Total Organic Carbon			mg/L	2.7	3.5	1.8	0.5	16
Turbidity	≤5	P	NTU	0.30	0.65	0.15	0.00	16
Aluminum	50-200	S	µg/L	39	57	27	20	6
Antimony	6	P	µg/L	BQL	BQL	BQL	4	6
Arsenic	50	P	µg/L	BQL	BQL	BQL	2	6
Barium	2000	P	µg/L	36	50	23	10	6
Beryllium	4	P	µg/L	BQL	BQL	BQL	1.0	6
Cadmium	5	P	µg/L	BQL	BQL	BQL	1	6
Calcium			mg/L	30.8	39.0	25.9	0.5	6
Chromium	100	P	µg/L	BQL	BQL	BQL	1	6
Copper	1300	AL	µg/L	BQL	BQL	BQL	40	16
Iron	300	S	µg/L	BQL	BQL	BQL	60	16
Lead	15	AL	µg/L	BQL	0.46	BQL	0.29	6
Magnesium			mg/L	4.6	5.4	3.4	0.5	6
Manganese	50	S	µg/L	BQL	BQL	BQL	25	16
Mercury	2	P	µg/L	BQL	BQL	BQL	0.5	4
Nickel	100	P	µg/L	BQL	BQL	BQL	5	6
Potassium			mg/L	3.5	4.0	3.0	0.5	6
Selenium	50	P	µg/L	BQL	BQL	BQL	4	6
Silicon			mg/L	4	5	4	4	6
Silver	100	S	µg/L	BQL	BQL	BQL	0.5	6
Sodium			mg/L	14.4	25.7	8.1	5.0	16
Thallium	2	P	µg/L	BQL	BQL	BQL	2	6
Zinc	5000	S	µg/L	110	124	92	25	6

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