Fairfax Water

WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2006 TO 12/31/2006
Griffith Treatment Plant Finished Water

Parameter	MCL[1]	Units[2]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit	# of Tests
Aggressive Index Number		Units	--	--	--	--	11	10	10	10	--	11	11	--	11	11	10	-	6
Alkalinity, Bicarbonate		mg/L	--	--	--	--	50	59	46	64	60	59	66	--	58	66	46	-	7
Alkalinity, Carbonate		mg/L	--	--	--	--	0	0	0	0	0	0	0	--	0	0	0	-	7
Alkalinity, Hydroxyl		mg/L	--	--	--	--	0	0	0	0	0	0	0	--	0	0	0	-	7
Alkalinity, Phenolphthalein		mg/L	--	--	--	--	0	0	0	0	0	0	0	--	0	0	0	-	7
Alkalinity, Total		mg/L	--	--	--	--	50	59	46	64	60	59	66	--	58	66	46	-	7
Bromate	10 P	µg/L	--	--	--	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	10	24 *
Bromide		mg/L	--	--	--	--	BQL	BQL	BQL	0.01	0.02	0.01	0.02	--	BQL	0.02	BQL	0.01	7
Carbon Dioxide		mg/L	--	--	--	--	6	15	14	16	--	7	8	--	11	16	6	-	6
Chloride	250.0 S	mg/L	--	--	--	--	40.0	44.4	37.4	36.0	38.5	34.6	35.5	--	38.1	44.4	34.6	5.0	7
Chlorine, Free		mg/L	--	--	--	--	3.0	3.1	3.8	0.4	0.2	0.2	0.1	--	1.5	3.8	0.1	0.0	7
Chlorine, Total		mg/L	--	--	--	--	3.0	3.3	4.4	4.2	3.7	4.4	4.1	--	3.9	4.4	3.0	0.0	7
Color	15 S	Units	--	--	--	--	4	4	16	0	1	4	0	--	4	16	0	0	7
Cyanide (as free cyanide)	0.2 P	mg/L	--	--	--	--	--	BQL	--	--	--	--	--	--	BQL	BQL	BQL	0.025	3 *
Dissolved Oxygen		mg/L	--	--	--	--	17.9	21.7	22.1	16.0	17.6	21.9	16.6	--	19.1	22.1	16.0	0.0	7
Fluoride	4.0/2.0 P/S	mg/L	--	--	--	--	1.0	1.1	1.0	1.0	0.9	1.0	0.9	--	1.0	1.1	0.9	0.2	7
Hardness, Calcium		mg/L	--	--	--	--	55	57	31	52	61	54	65	--	54	65	31	-	7
Hardness, Total		mg/L	--	--	--	--	72	79	41	75	77	78	92	--	73	92	41	-	7
Methylene Blue Activated Substances	0.5 S	mg/L	--	--	--	--	--	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.050	1
N, Ammonia (Ammonia as N)		mg/L	--	--	--	--	BQL	BQL	--	1.27	--	1.18	1.15	--	0.72	1.27	BQL	0.05	5
N, Nitrate (Nitrate as N)	10 P	mg/L	--	--	--	--	1.3	1.3	0.6	0.6	1.3	1.6	2.4	--	1.3	2.4	0.6	0.2	7
N, Nitrite (Nitrite as N)	1 P	mg/L	--	--	--	--	BQL	BQL	0.06	BQL	--	BQL	BQL	--	0.01	0.06	BQL	0.01	6
pH	6.5-8.5 S	Units	--	--	--	--	7.2	6.9	6.8	6.9	7.1	7.2	7.2	--	7.0	7.2	6.8	-	7
Phosphate as Phosphorous		mg/L	--	--	--	--	0.56	0.44	0.42	0.44	0.26	0.47	0.38	--	0.42	0.56	0.26	0.20	7
Solids, Fixed		mg/L	--	--	--	--	166	135	104	136	137	--	155	--	139	166	104	1	6
Solids, Total		mg/L	--	--	--	--	207	207	235	192	234	--	193	--	211	235	192	1	6
Solids, Total Dissolved	500 S	mg/L	--	--	--	--	167	190	137	172	176	152	193	--	170	193	137	1	7
Solids, Total Suspended		mg/L	--	--	--	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	1	7
Solids, Volatile		mg/L	--	--	--	--	41	72	131	59	97	--	38	--	73	131	38	1	6
Specific Conductivity		µmhos/cm	--	--	--	--	285	295	--	290	314	300	311	--	299	314	285	0	6
Sulfate	250.0 S	mg/L	--	--	--	--	22.2	25.1	11.1	22.1	29.5	26.3	28.9	--	23.6	29.5	11.1	5.0	7
Taste		Units	--	--	--	--	3	2	4	3	2	1	2	--	2	4	1	1	7
Temperature		°C	--	--	--	--	18.9	22.5	24.0	25.8	23.2	20.7	18.8	--	22.0	25.8	18.8	-	7
Threshold Odor Number	3 S	Units	--	--	--	--	9	8	4	1	2	BQL	2	--	4	9	BQL	1	7
Total Organic Carbon		mg/L	--	--	--	--	1.9	2.0	2.9	2.8	2.2	2.4	2.9	--	2.4	2.9	1.9	0.5	7
Turbidity	≤5 P	NTU	--	--	--	--	0.20	0.25	0.50	0.15	0.15	0.15	0.10	--	0.21	0.50	0.10	0.00	7

* = Monthly result composed from an average of parameter results for Griffith Treatment Plant finished water points of entry to distribution system.

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
P=Primary-enforceable, S=Secondary-non-enforceable, AL=Action Level on specific taps, MCL=Maximum Contaminant Level.

[2] mg/L=milligrams per liter, µg/L=micrograms per liter

Print Date: 2/6/2007 10:19 am

Fairfax Water

WATER QUALITY LABORATORY
METAL ANALYSES
PERIOD OF 01/01/2006 TO 12/31/2006
Griffith Treatment Plant Finished Water

Parameter	MCL[1]	Units[2]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit	# of Tests
Aluminum	50-200 S	µg/L	--	--	--	--	BQL	BQL	--	35.6	--	BQL	--	--	BQL	35.6	BQL	25.0	4
Antimony	6 P	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Arsenic	10 P	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Barium	2000 P	µg/L	--	--	--	--	28.2	28.6	--	30.9	--	26.2	--	--	28.5	30.9	26.2	25.0	4
Beryllium	4 P	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Cadmium	5 P	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Calcium		mg/L	--	--	--	--	20.8	22.9	--	21.6	22.7	21.7	--	--	21.9	22.9	20.8	2.0	5
Chromium	100 P	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Copper	1300 AL	µg/L	--	--	--	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	25.0	7
Iron	300 S	µg/L	--	--	--	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	60	7
Lead	15 AL	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Magnesium		mg/L	--	--	--	--	5.2	5.3	--	5.0	5.1	5.3	--	--	5.2	5.3	5.0	2.0	5
Manganese	50 S	µg/L	--	--	--	--	BQL	BQL	39	BQL	BQL	BQL	BQL	--	BQL	39	BQL	25.0	7
Mercury	2 P	µg/L	--	--	--	--	--	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.5	1
Nickel	100 P	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Potassium		mg/L	--	--	--	--	3.2	3.8	--	4.7	--	4.4	--	--	4.0	4.7	3.2	0.5	4
Selenium	50 P	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Silicon		mg/L	--	--	--	--	BQL	BQL	--	5	--	4	--	--	BQL	5	BQL	4	4
Silver	100 S	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Sodium		mg/L	--	--	--	--	28.4	29.9	31.2	27.0	28.5	24.8	24.6	--	27.8	31.2	24.6	5.0	7
Thallium	2 P	µg/L	--	--	--	--	BQL	BQL	--	BQL	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Zinc	5000 S	µg/L	--	--	--	--	169	130	--	145	--	152	--	--	149	169	130	25	4

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
P=Primary-enforceable, S=Secondary-non-enforceable, AL=Action Level on specific taps, MCL=Maximum Contaminant Level.

[2] mg/L=milligrams per liter, µg/L=micrograms per liter

Print Date: 2/6/2007 10:19 am