Fairfax Water

WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2012 TO 12/31/2012
Distribution Site Representing Griffith Treatment Plant

Parameter	MCL [1]	Units [2]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit [3]	# of Tests
Aggressive Index Number		Units	11	11	11	11	11	11	--	11	11	11	11	--	11	11	11	-	10
Alkalinity, Bicarbonate		mg/L	47	48	58	56	42	54	--	73	78	79	36	--	57	79	36	-	10
Alkalinity, Carbonate		mg/L	0	0	0	0	0	0	--	0	0	0	0	--	0	0	0	-	10
Alkalinity, Hydroxyl		mg/L	0	0	0	0	0	0	--	0	0	0	0	--	0	0	0	-	10
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	0	0	--	0	0	0	0	--	0	0	0	-	10
Alkalinity, Total		mg/L	47	48	58	56	42	54	--	73	78	79	36	--	57	79	36	-	10
Bromide		mg/L	0.01	0.02	0.02	0.02	BQL	BQL	--	0.02	0.02	0.03	BQL	--	0.01	0.03	BQL	0.01	10
Carbon Dioxide		mg/L	4	2	3	4	3	4	--	4	5	4	1	--	3	5	1	-	10
Chloride	250.0 S	mg/L	27.9	36.7	48.7	41.0	25.9	26.5	--	43.0	48.6	44.4	31.4	--	37.4	48.7	25.9	5.0	10
Chlorine, Free		mg/L	0.1	0.0	0.1	2.2	2.6	1.3	--	0.2	0.3	0.2	0.1	--	0.7	2.6	0.0	0.0	10
Chlorine, Total		mg/L	2.5	3.0	2.5	2.4	3.0	1.6	--	2.3	3.0	3.0	3.1	--	2.6	3.1	1.6	0.0	10
Color	15 S	Units	1	--	0	4	0	0	--	0	1	1	0	--	1	4	0	0	9
Dissolved Oxygen		mg/L	18.9	21.1	19.0	13.6	11.7	13.4	--	14.1	11.3	13.1	17.1	--	15.3	21.1	11.3	0.0	10
Fluoride	4.0/2.0 P/S	mg/L	0.6	0.6	0.6	0.6	BQL	0.6	--	0.7	0.6	0.7	0.7	--	0.6	0.7	BQL	0.2	10
Hardness, Calcium		mg/L	48	57	77	64	32	41	--	82	91	95	30	--	62	95	30	-	10
Hardness, Total		mg/L	69	80	106	93	43	56	--	105	116	121	41	--	83	121	41	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	--	--	--	--	--	--	--	BQL	--	--	--	--	BQL	BQL	BQL	0.05	1
N, Ammonia (Ammonia as N)		mg/L	0.69	0.64	0.59	BQL	BQL	BQL	--	0.69	--	0.71	0.80	--	0.46	0.80	BQL	0.20	9
N, Nitrate (Nitrate as N)	10 P	mg/L	1.0	1.0	1.1	0.8	0.7	0.6	--	1.0	0.9	1.7	0.6	--	0.9	1.7	0.6	0.2	10
N, Nitrite (Nitrite as N)	1 P	mg/L	0.01	0.02	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	0.01	--	BQL	0.02	BQL	0.01	10
pH	6.5-8.5 S	Units	7.4	7.6	7.6	7.4	7.4	7.4	--	7.6	7.5	7.6	8.0	--	7.6	8.0	7.4	-	10
Phosphate as Phosphorous		mg/L	0.59	0.46	0.31	0.28	0.35	0.32	--	0.29	0.31	0.31	0.38	--	0.36	0.59	0.28	0.10	10
Solids, Total		mg/L	127	190	204	192	119	136	--	216	254	254	105	--	180	254	105	1	10
Solids, Total Dissolved	500 S	mg/L	66	148	194	208	120	156	--	264	222	246	92	--	172	264	66	1	10
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	1	10
Specific Conductivity		µmhos/cm	250	300	337	315	210	240	--	401	453	455	215	--	318	455	210	0	10
Sulfate	250.0 S	mg/L	20.7	26.2	36.7	29.7	12.4	15.9	--	41.4	46.9	52.5	12.6	--	29.5	52.5	12.4	5.0	10
Taste		Units	2	2	3	3	3	3	--	2	3	2	3	--	3	3	2	1	10
Temperature		°C	16.9	15.6	14.3	19.4	23.2	24.0	--	24.8	25.5	21.8	20.3	--	20.6	25.5	14.3	-	10
Threshold Odor Number	3 S	Units	3	3	1	3	1	4	--	5	3	3	1	--	3	5	1	0	10
Total Organic Carbon		mg/L	2.2	1.9	2.3	2.2	2.5	2.7	--	2.4	2.6	2.6	2.8	--	2.4	2.8	1.9	0.5	10
Turbidity	≤ 5 P	NTU	0.05	0.15	0.30	0.55	0.15	0.15	--	0.10	0.15	0.10	0.15	--	0.19	0.55	0.05	0.00	10

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 at points of entry to the water distribution system
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, µmhos/cm = micromhos per centimeter, NTU = Nephelometric Turbidity Units

[3] Quant Limit = Quantitation Limit = lowest level of measurement

Report No: 012813122327

Fairfax Water

WATER QUALITY LABORATORY
METAL ANALYSES
PERIOD OF 01/01/2012 TO 12/31/2012
Distribution Site Representing Griffith Treatment Plant

Parameter	MCL [1]	Units [2]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit [3]	# of Tests
Aluminum	50-200 S	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	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	BQL	--	--	31.8	--	--	--	31.5	--	32.3	--	--	BQL	32.3	BQL	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	20.1	--	--	25.2	--	--	--	32.2	--	39.5	--	--	29.3	39.5	20.1	1.0	4
Chromium	100 P	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Copper	1300 AL	µg/L	BQL	BQL	BQL	28.0	BQL	29.8	--	26.4	BQL	BQL	BQL	--	BQL	29.8	BQL	25.0	10
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	25.0	10
Lead	15 AL	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Magnesium		mg/L	5.3	--	--	6.0	--	--	--	6.1	--	7.1	--	--	6.1	7.1	5.3	1.0	4
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	25.0	10
Mercury	2 P	µg/L	BQL	--	--	--	--	BQL	--	--	--	--	--	--	BQL	BQL	BQL	0.50	2
Nickel	100 P	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Potassium		mg/L	3.0	--	--	3.2	--	--	--	6.3	--	6.5	--	--	4.8	6.5	3.0	1.0	4
Selenium	50 P	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Silicon		mg/L	5.0	--	--	3.5	--	--	--	3.1	--	3.4	--	--	3.8	5.0	3.1	1.0	4
Silver	100 S	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Sodium		mg/L	21.8	24.9	28.9	25.8	22.5	22.0	--	32.1	36.1	35.0	22.0	--	27.1	36.1	21.8	1.0	10
Thallium	2 P	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Zinc	5000 S	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	25.0	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 at points of entry to the water distribution system
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

[3] Quant Limit = Quantitation Limit = lowest level of measurement

Report No: 012813122327