Fairfax Water

WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2010 TO 12/31/2010
Distribution Site Representing Griffith Treatment Plant Water

Parameter	MCL[1]	Units[2]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average	Max	Min	Quant[3] Limit	# of Tests
Aggressive Index Number		Units	10	11	10	11	11	11	11	12	12	11	11	11	11	12	10	-	12
Alkalinity, Bicarbonate		mg/L	27	41	32	42	53	56	62	76	74	61	64	65	54	76	27	-	12
Alkalinity, Carbonate		mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	12
Alkalinity, Hydroxyl		mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	12
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	12
Alkalinity, Total		mg/L	27	41	32	42	53	56	62	76	74	61	64	65	54	76	27	-	12
Bromide		mg/L	BQL	0.02	0.01	BQL	0.01	0.01	0.02	0.02	0.02	0.02	0.01	BQL	0.01	0.02	BQL	0.01	12
Carbon Dioxide		mg/L	2	2	2	3	4	6	2	2	2	2	3	4	3	6	2	-	12
Chloride	250.0 S	mg/L	45.1	59.3	40.4	40.7	44.0	40.5	40.6	50.7	50.2	41.9	35.7	38.0	43.9	59.3	35.7	5.0	12
Chlorine, Free		mg/L	0.0	0.1	0.3	2.3	2.0	2.0	0.2	0.1	0.3	0.3	0.1	0.2	0.7	2.3	0.0	0.0	12
Chlorine, Total		mg/L	3.0	3.0	2.7	2.3	2.2	2.1	2.4	2.0	2.1	2.2	3.1	2.8	2.5	3.1	2.0	0.0	12
Color	15 S	Units	0	0	--	1	1	1	1	1	0	2	1	1	1	2	0	0	11
Dissolved Oxygen		mg/L	22.2	23.0	18.6	15.5	15.7	13.7	12.8	16.2	12.7	12.2	15.8	22.1	16.7	23.0	12.2	0.0	12
Fluoride	4.0/2.0 P/S	mg/L	0.9	0.9	0.9	1.0	1.1	1.0	1.1	1.0	0.9	1.1	1.0	0.9	1.0	1.1	0.9	0.2	12
Hardness, Calcium		mg/L	30	58	37	47	55	60	57	78	74	58	57	61	56	78	30	-	12
Hardness, Total		mg/L	51	92	64	82	72	74	72	99	98	79	80	92	80	99	51	-	12
Methylene Blue Activated Substances	0.5 S	mg/L	--	--	--	--	--	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.050	1
N, Ammonia (Ammonia as N)		mg/L	0.72	0.81	0.71	BQL	BQL	BQL	0.67	0.55	0.45	0.50	--	--	0.44	0.81	BQL	0.20	10
N, Nitrate (Nitrate as N)	10 P	mg/L	0.7	1.0	0.7	0.7	0.9	0.9	0.5	1.4	0.8	1.5	1.5	2.0	1.1	2.0	0.5	0.2	12
N, Nitrite (Nitrite as N)	1 P	mg/L	0.02	0.01	BQL	BQL	BQL	BQL	BQL	0.01	BQL	BQL	BQL	0.01	BQL	0.02	BQL	0.01	12
pH	6.5-8.5 S	Units	7.5	7.6	7.5	7.4	7.4	7.3	7.9	8.0	7.8	7.7	7.6	7.5	7.6	8.0	7.3	-	12
Phosphate as Phosphorous		mg/L	0.66	0.56	0.41	0.48	0.48	0.42	0.48	0.31	0.30	0.32	0.36	0.33	0.43	0.66	0.30	0.10	12
Solids, Total		mg/L	132	197	--	155	181	169	176	243	225	200	212	212	191	243	132	1	11
Solids, Total Dissolved	500 S	mg/L	129	197	122	166	174	163	167	238	226	206	198	210	183	238	122	1	12
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1	12
Specific Conductivity		µmhos/cm	238	347	248	281	306	308	299	436	421	345	346	357	328	436	238	0	12
Sulfate	250.0 S	mg/L	11.1	21.4	13.8	17.0	24.3	21.6	22.5	38.7	34.9	29.3	26.4	30.9	24.3	38.7	11.1	5.0	12
Taste		Units	2	2	2	2	2	3	2	2	2	2	2	3	2	3	2	1	12
Temperature		°C	12.5	14.0	16.7	18.2	19.3	23.5	25.3	26.8	26.9	22.2	21.1	16.1	20.2	26.9	12.5	-	12
Threshold Odor Number	3 S	Units	3	7	7	1	5	7	4	0	2	9	6	6	5	9	0	0	12
Total Organic Carbon		mg/L	1.6	1.9	2.2	2.1	2.0	2.1	2.3	2.1	2.3	2.4	2.4	2.8	2.2	2.8	1.6	0.5	12
Turbidity	≤ 5 P	NTU	0.05	0.05	0.10	0.10	0.10	0.15	0.10	0.10	0.10	0.10	0.05	0.05	0.09	0.15	0.05	0.00	12

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

[3] Quant Limit = Quantitation Limit = Lowest level of measurement.

123010120347

Fairfax Water

WATER QUALITY LABORATORY
METAL ANALYSES
PERIOD OF 01/01/2010 TO 12/31/2010
Distribution Site Representing Griffith Treatment Plant Water

Parameter	MCL[1]	Units[2]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average	Max	Min	Quant[3] Limit	# of Tests
Aluminum	50-200 S	µg/L	BQL	--	--	BQL	--	--	34.4	--	--	BQL	--	--	BQL	34.4	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	--	--	29.0	--	--	27.8	--	--	BQL	--	--	BQL	29.0	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	11.7	--	--	17.3	--	--	20.4	--	--	23.3	--	--	18.2	23.3	11.7	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	BQL	28.0	27.6	BQL	BQL	BQL	BQL	BQL	BQL	BQL	28.0	BQL	25.0	12
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	25.0	12
Lead	15 AL	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Magnesium		mg/L	3.4	--	--	4.8	--	--	4.8	--	--	4.8	--	--	4.5	4.8	3.4	1.0	4
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	25.0	12
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	2.8	--	--	2.4	--	--	3.8	--	--	4.7	--	--	3.4	4.7	2.4	1.0	4
Selenium	50 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Silicon		mg/L	3.7	--	--	3.4	--	--	3.3	--	--	3.0	--	--	3.4	3.7	3.0	1.0	4
Silver	100 S	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Sodium		mg/L	28.7	35.9	26.3	27.8	27.0	27.8	31.7	38.5	37.9	30.6	30.3	31.3	31.2	38.5	26.3	1.0	12
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
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.

123010120347