Fairfax Water

WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2013 TO 12/31/2013
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	12	12	-	11	12	11	-	10
Alkalinity, Bicarbonate		mg/L	46	37	34	52	46	-	56	45	63	71	56	-	51	71	34	-	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	46	37	34	52	46	-	56	45	63	71	56	-	51	71	34	-	10
Bromide		mg/L	0.01	0.01	0.01	0.01	BQL	-	0.01	BQL	0.01	0.02	0.01	-	0.01	0.02	BQL	0.01	10
Carbon Dioxide		mg/L	2	1	1	3	4	-	1	3	3	1	1	-	2	4	1	-	10
Chloride	250.0 S	mg/L	42.1	37.8	43.6	53.6	37.1	-	33.8	24.9	32.7	45.7	30.4	-	38.2	53.6	24.9	5.0	10
Chlorine, Free		mg/L	0.1	0.1	0.1	2.8	2.0	-	0.2	0.2	0.1	0.2	0.0	-	0.6	2.8	0.0	0.0	10
Chlorine, Total		mg/L	2.7	2.9	3.3	3.0	2.4	-	2.7	2.5	2.7	2.6	2.9	-	2.8	3.3	2.4	0.0	10
Color	15 S	Units	1	0	2	1	1	-	1	0	1	2	2	-	1	2	0	0	10
Dissolved Oxygen		mg/L	16.3	16.0	16.7	14.5	15.8	-	11.7	11.5	12.5	15.1	17.3	-	14.7	17.3	11.5	0.0	10
Fluoride	4.0/2.0 P/S	mg/L	0.6	0.7	0.7	0.6	0.6	-	BQL	BQL	0.7	0.6	0.7	-	0.5	0.7	BQL	0.2	10
Hardness, Calcium		mg/L	49	35	35	59	44	-	48	33	58	90	57	-	51	90	33	-	10
Hardness, Total		mg/L	68	50	48	81	60	-	65	44	76	113	76	-	68	113	44	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	ND	-	-	-	-	-	ND	ND	ND	0.05	1
N, Ammonia (Ammonia as N)		mg/L	0.90	0.83	0.82	BQL	BQL	-	0.59	0.62	0.69	-	0.92	-	0.60	0.92	BQL	0.20	9
N, Nitrate (Nitrate as N)	10 P	mg/L	0.9	0.8	0.6	0.6	0.8	-	1.1	0.6	1.0	2.0	1.1	-	1.0	2.0	0.6	0.2	10
N, Nitrite (Nitrite as N)	1 P	mg/L	-	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	0.01	9
pH	6.5-8.5 S	Units	7.7	7.7	7.7	7.6	7.4	-	7.9	7.5	7.7	8.0	8.0	-	7.7	8.0	7.4	-	10
Phosphate as Phosphorous		mg/L	0.35	0.37	0.40	0.38	0.35	-	0.34	0.32	0.40	0.32	0.33	-	0.36	0.40	0.32	0.10	10
Orthophosphate as PO4		mg/L	1.08	1.13	1.21	1.15	1.07		1.04	0.99	1.21	0.99	0.99	-	1.09	1.21	0.99	0.31	10
Solids, Total		mg/L	163	139	135	211	166	-	159	107	204	246	182	-	171	246	107	1	10
Solids, Total Dissolved	500 S	mg/L	-	118	96	192	-	-	204	132	158	258	192	-	169	258	96	1	8
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	1	10
Specific Conductivity		µmhos/cm	297	249	261	346	266	-	293	209	308	408	289	-	293	408	209	0	10
Sulfate	250.0 S	mg/L	26.4	16.8	14.9	30.4	18.4	-	21.5	12.4	28.1	50.9	29.9	-	25.0	50.9	12.4	5.0	10
Taste		Units	3	3	3	3	2	-	3	2	4	2	3	-	3	4	2	1	10
Temperature		°C	16.5	14.6	15.7	19.4	20.8	-	24.7	26.0	22.5	23.2	19.3	-	20.3	26.0	14.6	-	10
Threshold Odor Number	3 S	Units	1	3	1	4	7	-	3	1	3	4	3	-	3	7	1	0	10
Total Organic Carbon		mg/L	2.7	2.6	2.0	1.8	2.4	-	2.2	2.2	2.2	2.0	2.5	-	2.3	2.7	1.8	0.5	10
Turbidity	≤ 5 P	NTU	0.15	0.10	0.15	0.10	0.10	-	0.15	0.05	0.10	0.10	0.10	-	0.11	0.15	0.05	0.05	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: 012314140212

Fairfax Water

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METAL ANALYSES
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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	-	-	33.6	-	-	29.0	-	-	41.6	-	-	26.0	41.6	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	20.6	-	-	23.8	-	-	19.3	-	-	32.7	-	-	24.1	32.7	19.3	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	BQL	-	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	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	5.0	-	-	5.9	-	-	4.2	-	-	6.0	-	-	5.3	6.0	4.2	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	3.7	-	-	2.9	-	-	3.8	-	-	6.0	-	-	4.1	6.0	2.9	1.0	4
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Silicon		mg/L	3.2	-	-	2.4	-	-	3.6	-	-	2.9	-	-	3.0	3.6	2.4	1.0	4
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Sodium		mg/L	26.7	24.7	27.5	31.4	24.4	-	26.2	20.5	26.2	32.7	23.3	-	26.4	32.7	20.5	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

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