Fairfax Water

Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2018 TO 12/31/2018

Distribution Site Representing Griffith Treatment Plant

Date Report Generated: 12/21/2018

Parameter	MCL[1]	Units[2]	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Quant Limit[3]
Aggressive Index Number		Units	12	11	11	11	11	11	12	11	12	11	11	-	N/A
Alkalinity, Bicarbonate		mg/L	78	75	54	56	46	54	62	45	58	49	63	-	0
Alkalinity, Carbonate		mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Hydroxyl		mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Total		mg/L	78	75	54	56	46	54	62	45	58	49	63	-	0
Bromide		mg/L	0.03	0.03	0.02	0.01	BQL	BQL	BQL	BQL	BQL	BQL	0.01	-	0.01
Carbon Dioxide		mg/L	3	5	2	3	4	2	1	1	1	1	3	-	N/A
Chloride	250 S	mg/L	57.3	62.8	69.6	74.7	47.9	29.3	30.7	23.5	26.9	24.4	35.5	-	5.0
Chlorine, Free		mg/L	0.1	0.1	0.1	2.1	2.6	0.3	0.3	0.3	0.3	0.2	0.0	-	0.0
Chlorine, Total		mg/L	2.5	2.7	2.9	2.7	2.9	3.0	2.9	2.1	2.7	2.7	3.0	-	0.0
Color	15 S	Units	0	0	0	0	0	0	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	21.0	16.3	21.6	18.9	13.8	14.1	12.9	16.5	16.7	18.0	17.4	-	0.0
Fluoride	4.0 P / 2.0 S	mg/L	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.6	0.7	-	0.2
Hardness, Calcium		mg/L	108	105	70	71	46	38	43	29	40	34	61	-	10
Hardness, Total		mg/L	142	139	91	98	62	47	56	35	51	43	82	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)		mg/L	0.49	0.70	0.65	BQL	BQL	-	0.70	0.78	0.63	0.58	0.64	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	1.88	1.74	1.09	0.95	0.56	0.71	0.66	0.61	0.81	0.73	1.36	-	0.20
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	BQL	-	0.01
pH	6.5 - 8.5 S	Units	7.7	7.5	7.7	7.6	7.4	7.7	8.3	8.0	8.2	8.0	7.6	-	N/A
Phosphate as Phosphorous		mg/L	0.44	0.40	0.44	0.51	0.51	0.45	0.46	0.44	-	0.44	0.42	-	0.10
Orthophosphate as PO_4		mg/L	1.36	1.21	1.33	1.54	1.56	1.38	1.40	1.34	-	1.33	1.28	-	0.31
Solids, Total		mg/L	278	274	251	254	164	130	161	103	134	135	190	-	1
Solids, Total Dissolved	500 S	mg/L	280	298	190	254	146	122	162	88	138	120	212	-	1
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	508	525	410	450	304	242	266	193	240	211	324	-	0
Sulfate	250 S	mg/L	63.8	59.8	26.4	29.6	16.4	10.8	12.4	7.9	13.5	9.5	28.5	-	5.0
Taste		Units	2	2	2	2	2	2	1	3	2	2	2	-	1
Temperature		°C	17.8	16.0	16.7	16.0	20.4	24.9	25.0	25.8	26.3	25.2	20.0	-	N/A
Threshold Odor Number	3 S	Units	10	7	3	3	6	6	6	6	7	6	8	-	0
Total Organic Carbon		mg/L	2.3	2.3	2.3	2.4	2.6	2.9	2.4	2.2	1.9	2.2	2.5	-	0.5
Turbidity	≤ 5 P	NTU	0.10	0.10	0.15	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	-	0.05

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, N/A = not applicable

- Not sampled

* Analysis pending

Fairfax Water

Water Quality Laboratory

Metal Analyses

Period of 01/01/2018 TO 12/31/2018

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Parameter	MCL[1]	Units[2]	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Quant Limit[3]
Aluminum	50 - 200 S	µg/L	BQL	-	-	BQL	-	-	31.0	-	-	BQL	-	-	25.0
Antimony	6 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	10 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	2000 P	µg/L	39.6	-	-	31.8	-	-	BQL	-	-	BQL	-	-	25.0
Beryllium	4 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	5 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium		mg/L	41.3	-	-	29.9	-	-	15.8	-	-	14.0	-	-	1.0
Chromium	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	1300 AL	µg/L	BQL	BQL	BQL	BQL	28.9	BQL	BQL	26.2	31.1	32.2	BQL	-	25.0
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Lead	15 AL	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium		mg/L	8.7	-	-	7.3	-	-	4.1	-	-	3.6	-	-	1.0
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Mercury	2 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium		mg/L	6.9	-	-	4.3	-	-	3.4	-	-	3.5	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	1.8	-	-	1.9	-	-	4.2	-	-	5.1	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	36.9	38.8	37.5	45.7	31.2	25.8	25.7	20.0	22.6	19.0	27.4	-	1.0
Thallium	2 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Zinc	5000 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0

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- Not sampled

* Analysis pending