Fairfax Water

Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2017 TO 12/31/2017

Distribution Site Representing Griffith Treatment Plant

Date Report Generated: 12/12/2017

Parameter	MCL[1]	Units[2]	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Quant Limit[3]
Aggressive Index Number		Units	11	11	11	11	11	-	11	11	12	12	12	-	N/A
Alkalinity, Bicarbonate		mg/L	71	56	56	46	59	-	66	63	61	78	74	-	0
Alkalinity, Carbonate		mg/L	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
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	0	-	0	0	0	0	0	-	0
Alkalinity, Total		mg/L	71	56	56	46	59	-	66	63	61	78	74	-	0
Bromide		mg/L	0.02	0.02	0.02	0.01	0.01	-	0.01	0.01	0.01	0.02	0.02	-	0.01
Carbon Dioxide		mg/L	4	6	4	1	4	-	2	2	1	2	1	-	N/A
Chloride	250 S	mg/L	66.8	62.2	62.2	60.4	59.5	-	39.3	37.4	33.0	42.7	45.1	-	5.0
Chlorine, Free		mg/L	0.3	0.2	0.1	2.9	2.5	-	0.2	0.2	0.2	0.2	0.2	-	0.0
Chlorine, Total		mg/L	3.0	3.1	2.7	3.1	2.9	-	2.8	2.9	2.8	3.1	3.3	-	0.0
Color	15 S	Units	0	0	0	0	0	-	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	18.2	17.1	18.3	16.9	16.9	-	13.9	12.6	16.4	16.8	16.8	-	0.0
Fluoride	4.0 P / 2.0 S	mg/L	0.6	0.6	0.6	0.7	0.7	-	0.3	BQL	0.6	0.7	0.7	-	0.2
Hardness, Calcium		mg/L	97	72	75	53	61	-	60	56	51	76	79	-	10
Hardness, Total		mg/L	123	97	98	74	86	-	81	76	68	100	105	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	-	BQL	-	-	-	-	0.05
N, Ammonia (Ammonia as N)		mg/L	0.66	0.71	0.61	BQL	BQL	-	0.63	0.64	0.64	0.72	0.72	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	1.68	1.13	1.17	0.87	0.91	-	1.35	0.94	1.03	1.65	1.61	-	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	7.5	7.3	7.5	7.8	7.5	-	7.8	7.9	8.1	8.0	8.1	-	N/A
Phosphate as Phosphorous		mg/L	0.41	0.45	0.45	0.47	0.50	-	0.45	0.45	0.47	0.45	0.47	-	0.10
Orthophosphate as PO_4		mg/L	1.26	1.39	1.37	1.43	1.51	-	1.37	1.37	1.44	1.38	1.45	-	0.31
Solids, Total		mg/L	292	256	250	225	214	-	192	185	166	224	238	-	1
Solids, Total Dissolved	500 S	mg/L	-	235	264	181	190	-	203	201	-	226	230	-	1
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	508	429	415	358	387	-	332	323	289	395	415	-	0
Sulfate	250 S	mg/L	61.6	39.9	37.2	23.8	28.8	-	25.6	24.1	19.3	34.0	41.1	-	5.0
Taste		Units	2	2	2	2	2	-	3	2	2	2	2	-	1
Temperature		°C	16.3	17.2	18.1	18.3	19.8	-	26.4	25.1	24.1	24.4	21.5	-	N/A
Threshold Odor Number	3 S	Units	7	7	1	7	7	-	5	8	5	6	3	-	0
Total Organic Carbon		mg/L	2.1	2.3	2.3	2.5	2.3	-	2.2	2.0	1.9	2.0	2.1	-	0.5
Turbidity	≤ 5 P	NTU	0.05	0.05	0.35	0.10	0.05	-	0.25	0.05	0.05	0.05	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 01/01/2017 TO 12/31/2017

Distribution Site Representing Griffith Treatment Plant

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Parameter	MCL[1]	Units[2]	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Quant Limit[3]
Aluminum	50 - 200 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	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	36.3	-	-	BQL	-	-	28.6	-	-	38.7	-	-	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	38.8	-	-	21.4	-	-	23.5	-	-	30.7	-	-	1.0
Chromium	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	1300 AL	µg/L	BQL	BQL	28.0	BQL	BQL	-	BQL	BQL	BQL	33.9	BQL	-	25.0
Iron	300 S	µg/L	BQL	BQL	50.3	BQL	BQL	-	BQL	BQL	BQL	BQL	BQL	-	25.0
Lead	15 AL	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium		mg/L	8.6	-	-	5.6	-	-	5.6	-	-	6.6	-	-	1.0
Manganese	50 S	µg/L	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	5.9	-	-	3.4	-	-	4.3	-	-	5.2	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	2.9	-	-	3.3	-	-	3.6	-	-	3.8	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	40.4	35.9	34.6	38.1	37.0	-	31.0	28.7	27.6	34.4	33.4	-	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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