Fairfax Water

Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2019 TO 12/31/2019

Distribution Site Representing Griffith Treatment Plant

Date Report Generated: 1/24/2020

Parameter	MCL[1]	Units[2]	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Quant Limit[3]
Aggressive Index Number		Units	10	10	11	11	11	11	11	11	11	11	11	-	N/A
Alkalinity, Bicarbonate		mg/L	38	30	41	37	40	54	63	68	78	80	68	-	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	38	30	41	37	40	54	63	68	78	80	68	-	0
Bromide		mg/L	0.01	0.01	0.02	BQL	BQL	BQL	0.01	0.02	0.02	0.03	0.02	-	0.01
Carbon Dioxide		mg/L	5	4	2	3	3	7	6	4	10	8	7	-	N/A
Chloride	250 S	mg/L	24.7	51.3	55.3	36.8	30.6	30.3	35.1	39.1	44.9	48.5	45.7	-	5.0
Chlorine, Free		mg/L	0.1	0.1	0.2	2.8	2.5	1.0	0.2	0.3	0.3	0.2	0.1	-	0.0
Chlorine, Total		mg/L	3.2	3.3	3.3	3.0	2.9	1.1	2.5	3.0	3.3	3.1	2.7	-	0.0
Color	15 S	Units	0	0	0	0	0	0	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	19.9	20.0	15.3	20.5	15.3	12.3	13.2	11.2	13.0	14.2	14.5	-	0.0
Fluoride	4.0 P / 2.0 S	mg/L	0.7	0.6	0.8	0.7	0.7	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.2
Hardness, Calcium		mg/L	33	33	46	35	37	43	55	60	74	82	80	-	10
Hardness, Total		mg/L	46	47	64	50	51	60	75	80	95	108	107	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)		mg/L	0.68	0.67	0.74	BQL	BQL	BQL	0.67	0.70	0.74	0.78	0.74	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	0.69	0.73	0.88	0.75	0.67	0.81	1.05	0.63	1.06	1.27	1.27	-	0.20
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.01
pH	6.5 - 8.5 S	Units	7.2	7.2	7.6	7.4	7.4	7.2	7.3	7.5	7.2	7.3	7.3	-	N/A
Phosphate as Phosphorous		mg/L	0.49	0.50	0.54	0.45	0.49	0.47	0.45	0.44	0.43	0.40	0.52	-	0.10
Orthophosphate as PO_4		mg/L	1.51	1.52	1.63	1.39	1.49	1.42	1.37	1.33	1.31	1.22	1.58	-	0.31
Solids, Total		mg/L	116	143	202	117	104	132	173	163	204	246	220	-	1
Solids, Total Dissolved	500 S	mg/L	148	192	166	160	102	130	144	148	180	302	310	-	1
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	195	272	323	237	216	250	300	326	383	414	393	-	0
Sulfate	250 S	mg/L	14.0	12.0	18.6	13.8	10.9	15.3	19.0	22.8	31.7	39.4	43.9	-	5.0
Taste		Units	2	2	2	2	2	2	2	2	2	2	2	-	1
Temperature		°C	15.0	16.3	17.3	17.7	20.8	22.9	24.2	26.8	24.1	25.2	19.0	-	N/A
Threshold Odor Number	3 S	Units	-	1	8	7	7	8	0	3	4	6	5	-	0
Total Organic Carbon		mg/L	1.6	1.4	1.5	1.4	2.1	2.2	1.9	1.9	1.9	1.9	2.1	-	0.5
Turbidity	≤ 5 P	NTU	0.10	0.10	0.10	0.10	0.10	0.05	0.05	0.05	0.10	0.05	0.05	-	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

Water Quality Laboratory

Metal Analyses

Period of 01/01/2019 TO 12/31/2019

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Parameter	MCL[1]	Units[2]	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	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	BQL	-	-	BQL	-	-	29.5	-	-	43.4	-	-	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	13.3	-	-	14.7	-	-	21.9	-	-	32.1	-	-	1.0
Chromium	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	1300 AL	µg/L	BQL	BQL	BQL	BQL	32.8	114	41.7	39.7	39.9	41.9	31.0	-	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	4.1	-	-	4.1	-	-	5.2	-	-	6.9	-	-	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	2.3	-	-	2.3	-	-	3.4	-	-	5.5	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	4.4	-	-	3.7	-	-	3.9	-	-	4.2	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	16.3	30.7	33.2	24.5	20.4	23.2	27.2	30.0	36.1	37.6	33.5	-	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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