Fairfax Water

Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2021 TO 12/31/2021

Griffith Treatment Plant Finished Water

Date Report Generated: 12/22/2021

Parameter	MCL[1]	Units[2]	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Quant Limit[3]
Aggressive Index Number		Units	11	11	11	11	11	11	11	11	11	11	11	-	N/A
Alkalinity, Bicarbonate		mg/L	41	44	37	54	58	65	70	76	60	69	56	-	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	41	44	37	54	58	65	70	76	60	69	56	-	0
Bromate[4]	10 P	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5	BQL	BQL	BQL	5
Bromide		mg/L	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.01	0.02	0.01	-	0.01
Carbon Dioxide		mg/L	3	3	3	3	5	7	7	6	5	4	6	-	N/A
Chloride	250 S	mg/L	37.1	38.1	79.4	74.6	63.2	61.5	57.0	61.2	40.5	43.8	37.1	-	5.0
Chlorine, Free[4]		mg/L	0.2	0.1	0.2	3.4	3.6	3.4	0.3	0.1	0.2	0.4	0.2	-	0.0
Chlorine, Total[4]		mg/L	3.6	3.7	3.6	3.5	3.7	3.6	3.5	3.6	3.7	3.9	3.2	-	0.0
Color	15 S	Units	0	0	0	0	0	0	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	18.4	21.1	18.5	15.8	12.6	13.9	12.3	13.3	11.2	11.3	13.3	-	0.0
Fluoride	4.0 P / 2.0 S	mg/L	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.8	0.6	-	0.2
Hardness, Calcium		mg/L	39	44	41	61	60	70	65	70	51	57	54	-	10
Hardness, Total		mg/L	56	62	58	82	86	94	85	96	68	79	75	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)[4]		mg/L	0.80	0.83	0.67	BQL	BQL	BQL	0.77	0.77	0.80	0.81	0.66	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	0.93	0.98	0.57	0.76	0.77	1.14	0.83	0.78	0.94	1.29	1.17	-	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	7.5	7.5	7.4	7.5	7.4	7.3	7.3	7.4	7.4	7.5	7.3	-	N/A
Phosphate as Phosphorous		mg/L	0.48	0.54	0.53	0.49	0.50	0.42	0.46	0.44	-	0.46	0.46	-	0.10
Orthophosphate as PO_4		mg/L	1.47	1.66	1.61	1.51	1.52	1.28	1.41	1.34	-	1.40	1.41	-	0.31
Solids, Total		mg/L	146	160	197	237	231	252	211	242	176	208	197	-	1
Solids, Total Dissolved	500 S	mg/L	158	138	178	202	192	190	216	220	146	206	160	-	1
Solids, Total Suspended		mg/L	BQL	BQL	2	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	254	268	379	419	390	420	392	426	306	348	305	-	0
Sulfate	250 S	mg/L	16.7	19.4	13.0	24.3	24.6	29.1	25.1	31.7	20.9	27.6	27.2	-	5.0
Taste		Units	2	2	2	2	3	2	2	2	2	2	2	-	1
Temperature		°C	12.7	9.9	13.9	16.2	18.2	22.0	23.2	24.2	23.8	22.3	17.9	-	N/A
Threshold Odor Number	3 S	Units	6	6	6	12	8	8	6	8	1	1	1	-	0
Total Organic Carbon		mg/L	1.3	1.3	1.4	1.6	1.7	1.9	2.0	1.8	1.9	2.1	2.3	-	0.5
Turbidity	≤ 5 P	NTU	0.10	0.05	0.05	0.10	0.10	0.10	0.10	0.05	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

[4]Monthly result composed from an average of parameter results for finished water points of entry to distribution system

* Analysis pending

Fairfax Water

Water Quality Laboratory

Metal Analyses

Period of 01/01/2021 TO 12/31/2021

Griffith Treatment Plant Finished Water

Date Report Generated: 12/22/2021

Parameter	MCL[1]	Units[2]	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	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	-	-	39.0	-	-	34.1	-	-	28.5	-	-	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	15.9	-	-	23.3	-	-	24.2	-	-	23.6	-	-	1.0
Chromium	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	1300 AL	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	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	4.9	-	-	6.5	-	-	6.4	-	-	5.8	-	-	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	-	-	2.7	-	-	3.6	-	-	4.5	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	4.5	-	-	2.8	-	-	3.6	-	-	4.1	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	23.3	23.4	44.2	42.1	37.5	38.6	38.3	40.0	29.6	32.5	25.5	-	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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[2]mg/L = milligrams per liter, µg/L = micrograms per liter

[3]Quant Limit = Quantitation Limit : lowest level of measurement

- Not sampled

* Analysis pending