Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2020 TO 12/31/2020

Distribution Site Representing Griffith Treatment Plant

Date Report Generated: 12/10/2020

Parameter	MCL[1]	Units[2]	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Quant Limit[3]
Aggressive Index Number		Units	11	11	11	11	11	11	11	11	11	11	11	-	N/A
Alkalinity, Bicarbonate		mg/L	56	43	50	58	44	58	59	66	54	66	48	-	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	56	43	50	58	44	58	59	66	54	66	48	-	0
Bromide		mg/L	0.02	0.01	0.01	0.01	BQL	BQL	BQL	0.01	BQL	0.01	BQL	-	0.01
Carbon Dioxide		mg/L	7	3	3	3	3	5	6	4	3	3	2	-	N/A
Chloride	250 S	mg/L	43.9	36.5	39.7	44.4	28.6	30.5	32.3	34.4	26.9	32.0	27.0	-	5.0
Chlorine, Free		mg/L	0.1	0.1	2.6	3.0	2.8	2.5	0.2	0.3	0.2	0.3	0.2	-	0.0
Chlorine, Total		mg/L	2.3	2.6	2.9	3.1	3.1	2.6	3.0	3.2	3.4	3.7	3.5	-	0.0
Color	15 S	Units	0	0	0	0	0	0	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	18.7	14.1	16.7	15.5	16.6	11.8	16.0	10.8	13.0	13.6	13.7	-	0.0
Fluoride	4.0 P / 2.0 S	mg/L	0.6	0.6	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.8	BQL**	0.4	0.2
Hardness, Calcium		mg/L	65	43	55	68	39	52	54	58	38	53	40	-	10
Hardness, Total		mg/L	91	59	76	92	54	73	74	75	51	71	53	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)		mg/L	0.68	0.68	BQL	BQL	BQL	BQL	0.57	0.58	0.83	0.94	0.80	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	1.29	0.84	0.87	0.94	0.75	1.15	0.95	0.84	0.80	1.30	0.57	-	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	7.5	7.6	7.6	7.4	7.4	7.3	7.5	7.5	7.6	7.6	-	N/A
Phosphate as Phosphorous		mg/L	0.42	0.45	0.48	0.43	0.47	0.44	0.46	0.45	0.49	0.48	0.49	-	0.10
Orthophosphate as PO_4		mg/L	1.28	1.37	1.46	1.32	1.43	1.36	1.39	1.37	1.49	1.46	1.50	-	0.31
Solids, Total		mg/L	204	138	177	219	140	161	142	163	141	287	140	-	1
Solids, Total Dissolved	500 S	mg/L	282	128	170	204	144	166	140	216	128	186	150	-	1
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	338	251	294	346	224	280	292	303	230	297	224	-	0
Sulfate	250 S	mg/L	30.3	17.5	25.1	34.1	14.0	22.6	21.6	26.6	13.1	22.3	13.5	-	5.0
Taste		Units	2	2	2	3	2	2	2	2	2	2	2	-	1
Temperature		°C	14.8	16.3	11.8	15.1	16.1	20.8	24.4	25.1	24.7	22.0	16.0	-	N/A
Threshold Odor Number	3 S	Units	7	6	12	1	8	8	1	12	8	12	8	-	0
Total Organic Carbon		mg/L	2.0	1.9	1.6	1.5	2.0	2.0	1.8	1.7	2.1	2.2	2.7	-	0.5
Turbidity	≤ 5 P	NTU	0.10	0.05	0.05	0.10	0.15	0.10	0.10	0.10	0.10	0.05	0.15	-	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

** Out of service for maintenance

Water Quality Laboratory

Metal Analyses

Period of 01/01/2020 TO 12/31/2020

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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	-	-	32.3	-	-	32.4	-	-	29.7	-	-	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	24.7	-	-	27.0	-	-	20.9	-	-	21.0	-	-	1.0
Chromium	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	1300 AL	µg/L	26.5	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	31.1	-	25.0
Lead	15 AL	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium		mg/L	6.4	-	-	6.8	-	-	7.8	-	-	5.5	-	-	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	3.3	-	-	3.2	-	-	9.0	-	-	4.1	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	3.6	-	-	2.2	-	-	12.3	-	-	5.2	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	26.8	23.2	25.4	27.6	20.3	22.6	28.2	27.7	25.1	27.2	19.4	-	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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