



Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2022 TO 12/31/2022

Griffith Treatment Plant Finished Water

Date Report Generated: 1/04/2023

Parameter	MCL ¹	Units ²	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Quant Limit ³
Aggressive Index Number		Units	11	11	11	11	11	11	11	11	11	11	11	-	N/A
Alkalinity, Bicarbonate		mg/L	68	48	50	58	43	54	68	68	76	73	75	-	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	68	48	50	58	43	54	68	68	76	73	75	-	0
Bromate ⁴	10 P	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5
Bromide		mg/L	0.02	0.02	0.02	0.02	BQL	0.01	0.02	0.01	0.02	0.01	0.01	-	0.01
Carbon Dioxide		mg/L	5	5	2	4	4	5	7	7	6	5	6	-	N/A
Chloride	250 S	mg/L	56.0	128.8	83.5	80.7	38.6	47.2	48.4	44.3	46.8	48.4	49.5	-	5.0
Chlorine, Free ⁴		mg/L	0.1	0.1	0.2	3.5	3.4	3.2	0.1	0.1	0.2	0.2	0.1	-	0.0
Chlorine, Total ⁴		mg/L	3.5	3.7	3.5	3.8	3.5	3.4	3.5	3.7	3.6	3.6	3.5	-	0.0
Color	15 S	Units	0	0	0	0	0	0	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	16.1	16.7	13.6	15.0	17.2	16.3	14.2	13.6	14.7	13.4	16.4	-	0.0
Fluoride	4.0 P / 2.0 S	mg/L	0.7	0.7	0.7	0.8	0.6	0.8	0.7	0.7	0.7	0.7	0.7	-	0.2
Hardness, Calcium		mg/L	82	62	63	67	37	45	63	57	67	80	84	-	10
Hardness, Total		mg/L	110	89	86	96	53	65	86	79	88	107	113	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N) ⁴		mg/L	1.00	0.83	0.74	BQL	BQL	BQL	0.74	0.79	0.76	0.70	0.73	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	1.74	1.01	1.42	0.91	0.50	0.93	1.45	0.94	0.95	1.85	1.68	-	0.20
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	BQL	0.01	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.01
pH	6.5 - 8.5 S	Units	7.4	7.3	7.7	7.5	7.3	7.3	7.3	7.3	7.4	7.5	7.4	-	N/A
Phosphate as Phosphorous		mg/L	0.44	0.48	0.45	0.49	0.47	0.47	0.47	0.46	0.45	0.45	0.47	-	0.10
Orthophosphate as PO ₄		mg/L	1.34	1.46	1.37	1.49	1.44	1.45	1.42	1.40	1.37	1.36	1.43	-	0.31
Solids, Total		mg/L	237	310	245	240	149	164	212	200	209	239	254	-	1
Solids, Total Dissolved	500 S	mg/L	236	272	224	240	128	142	208	156	218	234	246	-	1
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	435	562	446	446	260	295	368	343	377	413	431	-	0
Sulfate	250 S	mg/L	46.2	23.1	25.8	30.4	11.3	16.7	27.7	21.8	26.6	40.4	44.8	-	5.0
Taste		Units	2	2	2	2	2	2	2	2	2	2	2	-	1
Temperature		°C	12.7	12.5	15.0	14.9	18.3	21.0	22.9	24.8	23.7	20.4	17.8	-	N/A
Threshold Odor Number	3 S	Units	1	8	8	6	6	6	1	1	6	8	6	-	0
Total Organic Carbon		mg/L	2.0	2.1	1.8	1.8	2.4	2.3	2.3	2.1	1.9	2.4	1.9	-	0.5
Turbidity	≤ 5 P	NTU	0.05	0.05	0.10	0.10	0.10	0.10	0.10	0.05	0.10	0.05	0.10	-	0.05

BQL = The lowest quantitation limit of all analyses for the particular parameter: Below Quantitation Limit

¹Environmental 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

²mg/L = milligrams per liter, µg/L = micrograms per liter, µmhos/cm = micromhos per centimeter, NTU = Nephelometric Turbidity Units

³Quant Limit = Quantitation Limit : lowest level of measurement, N/A = not applicable

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

* Analysis pending



Water Quality Laboratory

Metal Analyses

Period of 01/01/2022 TO 12/31/2022

Griffith Treatment Plant Finished Water

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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	31.6	-	-	32.3	-	-	37.6	-	-	32.6	-	-	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	32.1	-	-	25.8	-	-	25.1	-	-	32.0	-	-	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	7.8	-	-	7.1	-	-	6.1	-	-	6.7	-	-	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	6.5	-	-	4.5	-	-	5.1	-	-	6.9	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	3.2	-	-	2.5	-	-	3.8	-	-	3.8	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	33.7	64.2	45.6	42.3	26.7	30.0	33.3	32.9	33.8	33.8	32.5	-	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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- Not sampled

* Analysis pending