



Water Quality Laboratory

Inorganics Analyses

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

Distribution Site Representing Griffith Treatment Plant

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	42	38	54	58	65	69	76	61	69	57	-	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	42	38	54	58	65	69	76	61	69	57	-	0
Bromide		mg/L	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.01	0.02	0.01	-	0.01
Carbon Dioxide		mg/L	3	2	2	3	5	5	6	5	5	4	4	-	N/A
Chloride	250 S	mg/L	37.3	37.4	79.4	73.8	63.2	61.4	57.8	60.8	41.1	44.0	38.1	-	5.0
Chlorine, Free		mg/L	0.1	0.0	0.2	3.1	3.4	3.1	0.3	0.1	0.3	0.3	0.2	-	0.0
Chlorine, Total		mg/L	3.3	3.3	3.4	3.4	3.5	3.4	3.3	2.8	3.3	3.6	3.3	-	0.0
Color	15 S	Units	0	0	0	0	0	0	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	16.2	18.5	16.9	13.3	12.5	13.8	10.9	11.4	10.9	11.6	12.6	-	0.0
Fluoride	4.0 P / 2.0 S	mg/L	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.8	0.6	0.6	0.2
Hardness, Calcium		mg/L	38	44	41	60	60	70	62	72	53	59	55	-	10
Hardness, Total		mg/L	54	62	57	83	86	95	86	96	69	80	76	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)		mg/L	0.78	0.82	0.65	BQL	BQL	BQL	0.78	0.64	0.73	0.77	0.64	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	0.93	0.97	0.57	0.75	0.77	1.14	0.84	0.76	0.96	1.30	1.08	-	0.20
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.01	-	0.01
pH	6.5 - 8.5 S	Units	7.5	7.7	7.5	7.6	7.4	7.4	7.4	7.5	7.4	7.5	7.5	-	N/A
Phosphate as Phosphorous		mg/L	0.48	0.54	0.53	0.48	0.49	0.42	0.45	0.42	-	0.45	0.47	-	0.10
Orthophosphate as PO ₄		mg/L	1.47	1.65	1.61	1.47	1.50	1.28	1.36	1.29	-	1.38	1.42	-	0.31
Solids, Total		mg/L	138	166	191	248	223	264	220	249	164	205	193	-	1
Solids, Total Dissolved	500 S	mg/L	144	128	184	192	232	214	184	184	164	190	172	-	1
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	254	265	377	420	390	420	393	428	308	349	309	-	0
Sulfate	250 S	mg/L	16.3	19.1	13.0	24.0	24.6	29.1	25.1	31.2	21.1	27.6	28.1	-	5.0
Taste		Units	2	3	2	2	3	2	2	2	2	2	2	-	1
Temperature		°C	8.3	5.6	9.8	13.5	16.8	22.5	23.9	25.1	24.5	22.5	16.7	-	N/A
Threshold Odor Number	3 S	Units	6	1	12	8	8	8	6	8	1	1	1	-	0
Total Organic Carbon		mg/L	1.2	1.3	1.4	1.6	1.7	2.0	2.0	1.8	2.0	2.1	2.3	-	0.5
Turbidity	≤ 5 P	NTU	0.10	0.10	0.10	0.10	0.05	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

- Not sampled

* Analysis pending



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Metal Analyses

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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	-	-	34.7	-	-	34.0	-	-	28.4	-	-	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	15.5	-	-	23.6	-	-	24.4	-	-	23.7	-	-	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	68.6	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	4.7	-	-	6.4	-	-	6.3	-	-	5.7	-	-	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	2.4	-	-	2.8	-	-	3.6	-	-	4.5	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	4.4	-	-	2.7	-	-	3.6	-	-	4.0	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	23.7	23.1	43.9	42.1	37.6	38.5	38.2	39.8	29.9	32.6	25.6	-	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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