



Water Quality Laboratory

Inorganics Analyses

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

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 12/22/2021

Parameter	Units ¹	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Limit ²
Aggressive Index Number	Units	10	11	10	11	11	11	10	11	10	11	11	-	N/A
Alkalinity, Bicarbonate	mg/L	43	45	37	52	56	60	61	70	50	59	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	43	45	37	52	56	60	61	70	50	59	56	-	0
Bromate	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5
Bromide	mg/L	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.01
Carbon Dioxide	mg/L	7	4	4	5	11	15	15	14	16	3	7	-	N/A
Chloride	mg/L	22.9	25.7	69.8	64.7	53.0	51.6	47.8	51.0	28.4	31.6	27.2	-	5.0
Color	Units	25	15	30	15	20	20	15	7.5	30	25	30	-	0
Dissolved Oxygen	mg/L	11.6	12.3	10.1	8.6	7.1	4.2	4.0	5.7	3.0	7.1	5.6	-	0.0
Fluoride	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.2	BQL	0.2	BQL	-	0.2
Hardness, Calcium	mg/L	40	44	41	60	61	69	63	71	50	58	52	-	10
Hardness, Total	mg/L	57	64	58	83	86	95	85	98	65	80	74	-	10
Methylene Blue Activated Substances	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.20
N, Nitrate (Nitrate as N)	mg/L	0.90	0.93	0.54	0.70	0.69	0.99	0.70	0.62	0.90	1.20	0.94	-	0.20
N, Nitrite (Nitrite as N)	mg/L	BQL	BQL	BQL	BQL	0.01	0.02	0.02	0.04	0.04	0.04	0.01	-	0.01
pH	Units	7.1	7.4	7.3	7.3	7.0	6.9	6.9	7.0	6.8	7.6	7.2	-	N/A
Phosphate as Phosphorous	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	-	0.10
Orthophosphate as PO ₄	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	-	0.31
Solids, Total	mg/L	144	141	188	231	227	211	205	225	147	187	184	-	1
Solids, Total Dissolved	mg/L	148	142	172	190	194	192	200	196	128	178	146	-	1
Solids, Total Suspended	mg/L	4	1	2	2	2	1	2	6	1	BQL	3	-	1
Specific Conductivity	µmhos/cm	206	226	339	382	353	372	341	379	246	289	253	-	0
Sulfate	mg/L	15.0	17.9	11.7	22.9	23.4	28.1	23.7	31.2	19.8	26.4	27.7	-	5.0
Temperature	°C	6.5	3.6	9.6	13.6	16.3	21.3	22.9	24.6	24.2	21.9	14.4	-	N/A
Threshold Odor Number	Units	12	12	6	8	12	8	12	8	12	12	12	-	0
Total Organic Carbon	mg/L	3.1	2.9	4.1	3.3	3.7	3.9	4.1	4.0	5.2	5.0	5.5	-	0.5
Turbidity	NTU	15	7.0	14	2.9	1.6	1.6	6.3	6.2	3.9	1.5	5.8	-	0.05

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

¹mg/L = milligrams per liter, µg/L = micrograms per liter, µmhos/cm = micromhos per centimeter, NTU = Nephelometric Turbidity Units

²Quant Limit = Quantitation Limit : lowest level of measurement, N/A = not applicable

- Not sampled

* Analysis pending



Water Quality Laboratory

Metal Analyses

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

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Parameter	Units ¹	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Limit ²
Aluminum	µg/L	614	-	-	69.5	-	-	44.2	-	-	BQL	-	-	25.0
Antimony	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	µg/L	27.7	-	-	34.9	-	-	33.1	-	-	32.5	-	-	25.0
Beryllium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium	mg/L	17.0	-	-	23.2	-	-	23.6	-	-	25.0	-	-	1.0
Chromium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Iron	µg/L	892	527	872	194	83.7	56.7	125	249	188	48.1	369	-	25.0
Lead	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium	mg/L	5.2	-	-	6.5	-	-	6.3	-	-	6.1	-	-	1.0
Manganese	µg/L	59.4	105	66.0	61.1	58.1	48.6	99.4	373	137	136	74.9	-	25.0
Mercury	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium	mg/L	2.4	-	-	2.8	-	-	3.4	-	-	4.4	-	-	1.0
Selenium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon	mg/L	6.0	-	-	2.9	-	-	3.5	-	-	4.2	-	-	1.0
Silver	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium	mg/L	15.1	15.8	40.2	34.2	30.9	30.6	27.4	30.2	18.6	21.6	15.9	15.4	1.0
Thallium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Zinc	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0

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¹mg/L = milligrams per liter, µg/L = micrograms per liter

²Quant Limit = Quantitation Limit : lowest level of measurement

- Not sampled

* Analysis pending