



Water Quality Laboratory

Inorganics Analyses

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

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 12/10/2020

Parameter	Units ¹	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Limit ²
Aggressive Index Number	Units	10	10	11	11	10	11	10	10	10	11	10	-	N/A
Alkalinity, Bicarbonate	mg/L	56	40	51	58	42	53	54	65	46	60	40	-	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	40	51	58	42	53	54	65	46	60	40	-	0
Bromate	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	5
Bromide	mg/L	0.03	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.03	0.01	0.02	0.01
Carbon Dioxide	mg/L	14	8	2	3	4	8	17	16	12	9	6	-	N/A
Chloride	mg/L	34.4	24.6	28.7	34.6	15.5	20.5	21.3	23.1	12.4	18.9	11.5	-	5.0
Color	Units	25	35	25	15	45	25	25	25	45	30	60	-	0
Dissolved Oxygen	mg/L	11.1	10.4	11.0	9.9	7.5	5.1	4.6	2.7	4.8	4.6	6.0	-	0.0
Fluoride	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.2	BQL	BQL	BQL	-	0.2
Hardness, Calcium	mg/L	63	39	56	66	36	51	52	56	38	56	32	-	10
Hardness, Total	mg/L	90	60	77	93	54	75	74	73	51	77	47	-	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	1.27	0.81	0.84	0.89	0.70	1.06	0.78	0.62	0.74	1.22	0.49	-	0.20
N, Nitrite (Nitrite as N)	mg/L	BQL	BQL	BQL	BQL	BQL	0.02	0.04	0.02	0.01	0.04	BQL	-	0.01
pH	Units	6.9	7.0	7.7	7.6	7.3	7.1	6.8	6.9	6.9	7.1	7.1	-	N/A
Phosphate as Phosphorous	mg/L	BQL	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	BQL	-	0.31
Solids, Total	mg/L	194	132	147	185	121	145	134	149	121	162	118	-	1
Solids, Total Dissolved	mg/L	194	136	178	148	94	146	148	152	120	178	124	-	1
Solids, Total Suspended	mg/L	3	2	4	4	2	3	2	2	BQL	1	4	-	1
Specific Conductivity	µmhos/cm	302	204	259	310	172	237	240	247	162	243	150	-	0
Sulfate	mg/L	29.2	15.9	24.6	33.0	12.3	21.3	20.2	25.0	11.3	22.7	10.7	-	5.0
Temperature	°C	6.7	7.7	11.8	14.4	17.5	19.9	23.9	23.7	23.9	20.7	13.9	-	N/A
Threshold Odor Number	Units	23	12	8	12	12	12	12	8	8	12	12	-	0
Total Organic Carbon	mg/L	3.6	4.3	3.2	2.8	5.7	4.8	4.1	4.4	6.5	5.6	7.5	-	0.5
Turbidity	NTU	4.5	12	3.0	2.2	7.9	2.6	3.0	2.8	2.8	2.5	12	-	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 01/01/2020 TO 12/31/2020

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Parameter	Units ¹	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Limit ²
Aluminum	µg/L	173	-	-	50.3	-	-	31.9	-	-	51.6	-	-	25.0
Antimony	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	µg/L	33.9	-	-	29.9	-	-	30.4	-	-	40.8	-	-	25.0
Beryllium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium	mg/L	24.8	-	-	27.5	-	-	21.0	-	-	23.1	-	-	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	325	689	211	138	598	217	128	142	300	219	865	-	25.0
Lead	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium	mg/L	6.7	-	-	7.0	-	-	5.5	-	-	6.0	-	-	1.0
Manganese	µg/L	99.4	95.1	60.7	53.8	42.0	299	226	208	302	283	67.6	-	25.0
Mercury	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium	mg/L	3.4	-	-	3.3	-	-	3.2	-	-	4.2	-	-	1.0
Selenium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon	mg/L	4.1	-	-	2.5	-	-	3.2	-	-	5.6	-	-	1.0
Silver	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium	mg/L	21.8	15.4	19.7	21.8	11.6	14.6	14.8	16.9	9.9	15.3	8.5	-	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