



Water Quality Laboratory

Inorganics Analyses

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

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 1/04/2023

Parameter	Units ¹	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Limit ²
Aggressive Index Number	Units	11	11	11	11	10	10	11	11	11	11	11	-	N/A
Alkalinity, Bicarbonate	mg/L	72	54	50	57	37	51	59	62	66	68	72	-	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	72	54	50	57	37	51	59	62	66	68	72	-	0
Bromate	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1	5
Bromide	mg/L	0.04	0.03	0.02	0.03	0.02	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.01
Carbon Dioxide	mg/L	4	7	3	5	6	8	9	12	17	9	9	-	N/A
Chloride	mg/L	45.3	115.9	73.6	66.8	27.5	33.7	34.1	30.7	34.0	38.2	39.9	-	5.0
Color	Units	15	25	25	15	55	40	30	25	15	10	10	-	0
Dissolved Oxygen	mg/L	10.5	10.5	10.5	9.1	7.5	7.4	3.8	4.2	3.5	4.5	6.4	-	0.0
Fluoride	mg/L	0.3	BQL	BQL	BQL	BQL	BQL	0.2	BQL	0.2	0.3	0.3	-	0.2
Hardness, Calcium	mg/L	85	61	64	67	34	45	65	57	68	81	85	-	10
Hardness, Total	mg/L	116	90	91	97	50	66	88	77	102	110	115	-	10
Methylene Blue Activated Substances	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.21	BQL	BQL	BQL	-	0.20
N, Nitrate (Nitrate as N)	mg/L	1.79	1.00	1.47	0.79	0.47	0.76	1.25	0.64	0.70	1.78	1.53	-	0.20
N, Nitrite (Nitrite as N)	mg/L	0.01	BQL	0.01	BQL	0.01	0.03	0.02	0.04	0.09	0.03	0.09	-	0.01
pH	Units	7.6	7.2	7.5	7.4	7.1	7.1	7.1	7.0	6.9	7.2	7.2	-	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	240	306	247	231	140	155	213	180	198	226	245	-	1
Solids, Total Dissolved	mg/L	232	260	242	224	114	122	164	96	182	210	240	-	1
Solids, Total Suspended	mg/L	4	2	6	3	3	11	2	2	3	3	4	-	1
Specific Conductivity	µmhos/cm	408	518	402	408	193	241	312	276	313	370	391	-	0
Sulfate	mg/L	47.2	21.9	26.3	28.4	11.2	15.9	26.2	20.8	26.4	39.9	44.2	-	5.0
Temperature	°C	6.8	5.3	9.3	12.1	16.3	19.7	22.5	24.7	23.9	19.6	15.2	-	N/A
Threshold Odor Number	Units	12	8	6	12	12	8	12	12	8	8	8	-	0
Total Organic Carbon	mg/L	3.9	4.7	4.0	3.6	7.7	6.3	5.7	5.8	5.0	4.4	3.8	-	0.5
Turbidity	NTU	3.8	18	7.5	3.3	13	3.0	3.1	3.4	4.5	3.0	4.1	-	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 01/01/2022 TO 12/31/2022

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 1/04/2023

Parameter	Units ¹	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Limit ²
Aluminum	µg/L	85.9	-	-	91.8	-	-	42.8	-	-	56.7	-	-	25.0
Antimony	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	µg/L	31.8	-	-	37.6	-	-	35.5	-	-	43.1	-	-	25.0
Beryllium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium	mg/L	32.8	-	-	27.0	-	-	26.5	-	-	31.7	-	-	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	200	605	445	213	758	217	285	211	345	174	193	-	25.0
Lead	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium	mg/L	7.7	-	-	7.5	-	-	6.6	-	-	6.9	-	-	1.0
Manganese	µg/L	76.4	50.3	79.2	55.0	35.4	228	384	511	760	144	278	-	25.0
Mercury	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium	mg/L	6.3	-	-	4.2	-	-	5.1	-	-	6.7	-	-	1.0
Selenium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon	mg/L	3.2	-	-	2.8	-	-	4.0	-	-	4.0	-	-	1.0
Silver	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium	mg/L	26.3	61.2	39.1	37.3	16.0	18.4	22.6	19.1	21.5	23.9	25.8	24.7	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