



Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2018 TO 12/31/2018

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 12/21/2018

Parameter	Units ¹	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Quant Limit ²
Aggressive Index Number	Units	12	11	11	11	10	10	10	10	10	10	11	-	N/A
Alkalinity, Bicarbonate	mg/L	81	76	54	56	41	40	47	35	45	42	62	-	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	81	76	54	56	41	40	47	35	45	42	62	-	0
Bromate	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5
Bromide	mg/L	0.05	0.05	0.03	0.03	0.02	0.01	0.02	0.01	0.02	0.02	0.03	0.02	0.01
Carbon Dioxide	mg/L	3	4	5	2	13	13	9	7	9	8	6	-	N/A
Chloride	mg/L	49.0	56.7	58.4	64.6	34.6	15.8	18.7	8.5	15.1	10.4	23.7	-	5.0
Color	Units	10	10	25	25	45	60	40	55	35	45	25	-	0
Dissolved Oxygen	mg/L	11.9	11.3	11.0	11.7	6.6	3.5	3.9	5.2	3.2	5.1	6.8	-	0.0
Fluoride	mg/L	0.4	0.4	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.2
Hardness, Calcium	mg/L	108	102	67	68	43	36	40	26	38	27	63	-	10
Hardness, Total	mg/L	142	138	92	96	61	50	55	35	55	43	89	-	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	-	0.20
N, Nitrate (Nitrate as N)	mg/L	1.84	1.67	0.96	0.91	0.47	0.55	0.49	0.41	0.58	0.58	1.24	-	0.20
N, Nitrite (Nitrite as N)	mg/L	0.01	BQL	BQL	BQL	BQL	0.02	0.03	0.01	0.04	-	0.03	-	0.01
pH	Units	7.8	7.6	7.3	7.7	6.8	6.8	7.0	7.0	7.0	7.0	7.3	-	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	286	289	225	253	152	110	134	90	122	126	179	-	1
Solids, Total Dissolved	mg/L	266	294	192	206	140	112	130	60	146	110	178	-	1
Solids, Total Suspended	mg/L	4	3	5	4	2	2	2	4	2	2	5	-	1
Specific Conductivity	µmhos/cm	488	499	365	412	244	164	188	117	173	142	277	-	0
Sulfate	mg/L	63.6	57.5	25.3	29.0	15.2	9.7	11.3	6.5	12.9	8.2	28.4	-	5.0
Temperature	°C	5.9	5.2	8.7	11.0	16.9	23.2	23.4	25.6	25.3	20.8	14.6	-	N/A
Threshold Odor Number	Units	11	12	7	12	11	10	12	12	12	11	10	-	0
Total Organic Carbon	mg/L	3.6	3.8	4.3	4.9	7.1	8.1	6.8	8.1	5.7	7.0	5.1	-	0.5
Turbidity	NTU	2.8	5.5	6.6	3.6	3.5	4.2	2.8	8.7	3.3	6.3	6.6	-	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 01/01/2018 TO 12/31/2018

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

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Parameter	Units ¹	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Quant Limit ²
Aluminum	µg/L	37.6	-	-	113	-	-	-	-	-	167	-	-	25.0
Antimony	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	µg/L	38.2	-	-	34.6	-	-	25.6	-	-	25.6	-	-	25.0
Beryllium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium	mg/L	44.0	-	-	27.2	-	-	15.2	-	-	13.1	-	-	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	91.5	210	374	227	263	476	234	617	297	462	447	-	25.0
Lead	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium	mg/L	9.4	-	-	7.2	-	-	4.4	-	-	4.0	-	-	1.0
Manganese	µg/L	71.0	51.6	70.5	36.5	56.5	144	195	96.8	264	85.5	198	-	25.0
Mercury	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium	mg/L	7.3	-	-	4.1	-	-	3.3	-	-	3.6	-	-	1.0
Selenium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon	mg/L	1.9	-	-	2.0	-	-	4.3	-	-	5.6	-	-	1.0
Silver	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium	mg/L	34.5	36.3	30.9	37.1	21.1	10.8	11.7	6.7	10.5	7.9	18.2	-	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