



Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2015 TO 12/31/2015

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 12/28/2015

Parameter	Units ¹	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Quant Limit ²
Aggressive Index Number	Units	11	11	11	11	10	11	10	10	10	11	11	-	N/A
Alkalinity, Bicarbonate	mg/L	54	42	37	41	42	53	42	55	65	50	60	-	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	54	42	37	41	42	53	42	55	65	50	60	-	0
Bromate	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5
Bromide	mg/L	0.03	0.03	0.04	0.03	0.03	0.04	0.02	0.03	0.04	0.03	0.03	0.03	0.01
Carbon Dioxide	mg/L	4	3	4	3	8	11	17	14	21	8	8	-	N/A
Chloride	mg/L	52.6	53.8	132.5	73.7	47.1	56.5	30.9	33.0	38.8	28.7	34.1	-	5.0
Color	Units	35	35	65	35	40	20	40	25	20	35	25	-	0
Dissolved Oxygen	mg/L	12.4	11.2	11.9	9.5	5.2	6.1	3.6	4.1	4.9	7.2	6.1	-	0.0
Fluoride	mg/L	BQL	BQL	BQL	BQL	BQL	0.2	BQL	BQL	0.3	0.2	0.3	-	0.2
Hardness, Calcium	mg/L	67	51	64	58	48	63	42	51	71	55	70	-	10
Hardness, Total	mg/L	93	71	91	79	67	87	54	72	92	72	93	-	10
Methylene Blue Activated Substances	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)	mg/L	BQL	BQL	BQL	0.66	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.20
N, Nitrate (Nitrate as N)	mg/L	1.11	0.80	0.88	0.71	0.42	0.80	0.57	0.56	1.06	1.10	1.46	-	0.20
N, Nitrite (Nitrite as N)	mg/L	BQL	BQL	BQL	BQL	0.02	0.03	0.05	0.03	0.06	0.03	0.03	-	0.01
pH	Units	7.4	7.4	7.3	7.4	7.0	7.0	6.7	6.9	6.8	7.1	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	222	186	321	228	181	-	155	172	213	163	203	-	1
Solids, Total Dissolved	mg/L	232	-	302	182	128	-	142	170	206	190	214	-	1
Solids, Total Suspended	mg/L	4	-	5	2	13	-	2	2	2	2	3	-	1
Specific Conductivity	µmhos/cm	367	306	572	386	268	362	225	270	348	274	337	-	0
Sulfate	mg/L	29.3	21.8	19.6	19.2	17.3	26.8	14.8	19.7	30.7	26.0	37.2	-	5.0
Temperature	°C	3.9	4.0	4.4	11.6	16.1	19.9	22.7	23.8	25.3	16.5	15.1	-	N/A
Threshold Odor Number	Units	18	25	11	10	13	4	9	10	8	14	18	-	0
Total Organic Carbon	mg/L	3.6	4.2	-	4.5	5.9	4.6	6.5	6.0	5.1	5.0	4.9	-	0.5
Turbidity	NTU	9.0	16	21	8.3	8.8	3.5	5.4	4.2	2.5	5.6	4.7	-	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 01/01/2015 TO 12/31/2015

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

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Parameter	Units ¹	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Quant Limit ²
Aluminum	µg/L	364	-	-	512	-	-	175	-	-	155	-	-	25.0
Antimony	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	µg/L	37.3	-	-	39.2	-	-	31.6	-	-	34.5	-	-	25.0
Beryllium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium	mg/L	27.6	-	-	23.3	-	-	16.7	-	-	21.9	-	-	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	581	909	1320	581	1280	137	388	297	108	384	229	-	25.0
Lead	µg/L	2.4	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium	mg/L	7.1	-	-	6.8	-	-	4.7	-	-	5.6	-	-	1.0
Manganese	µg/L	61.8	71.1	98.9	58.0	348	266	269	488	365	84.9	132	-	25.0
Mercury	µg/L	BQL	-	-	-	-	-	BQL	-	-	-	-	-	0.50
Nickel	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium	mg/L	3.6	-	-	3.0	-	-	3.4	-	-	4.5	-	-	1.0
Selenium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon	mg/L	4.6	-	-	4.6	-	-	4.2	-	-	3.7	-	-	1.0
Silver	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium	mg/L	30.1	29.5	72.6	42.0	27.5	31.8	18.6	21.1	25.1	19.2	23.1	-	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