Fairfax Water

Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2016 TO 12/31/2016

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 12/19/2016

Parameter	Units[1]	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Quant Limit[2]
Aggressive Index Number	Units	11	11	10	11	11	11	11	11	11	11	11	-	N/A
Alkalinity, Bicarbonate	mg/L	56	37	31	54	53	55	58	65	71	69	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	56	37	31	54	53	55	58	65	71	69	72	-	0
Bromate	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5
Bromide	mg/L	0.03	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.01
Carbon Dioxide	mg/L	4	3	4	4	7	7	12	13	4	9	7	-	N/A
Chloride	mg/L	25.6	55.1	41.0	55.0	45.4	37.6	36.4	37.6	40.9	43.6	43.8	-	5.0
Color	Units	30	40	50	10	30	30	20	20	15	35	30	-	0
Dissolved Oxygen	mg/L	10.2	10.3	9.6	9.2	6.0	4.9	4.4	4.6	4.9	4.1	4.7	-	0.0
Fluoride	mg/L	BQL	BQL	BQL	0.2	BQL	BQL	0.2	0.2	0.3	0.4	0.4	-	0.2
Hardness, Calcium	mg/L	54	40	30	65	58	57	60	69	79	91	92	-	10
Hardness, Total	mg/L	75	58	43	89	81	79	82	96	106	118	122	-	10
Methylene Blue Activated Substances	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.20	BQL	BQL	BQL	-	0.20
N, Nitrate (Nitrate as N)	mg/L	1.02	0.74	0.61	0.93	0.66	0.99	0.82	0.71	0.92	2.44	2.15	-	0.20
N, Nitrite (Nitrite as N)	mg/L	BQL	BQL	BQL	BQL	0.02	0.01	0.01	0.03	0.03	0.01	0.06	-	0.01
pH	Units	7.4	7.4	7.2	7.4	7.2	7.2	7.0	7.0	7.5	7.2	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	170	217	169	213	205	162	189	206	224	251	251	-	1
Solids, Total Dissolved	mg/L	176	220	176	194	182	186	189	213	220	254	271	-	1
Solids, Total Suspended	mg/L	4	20	6	3	2	1	2	2	3	8	3	-	1
Specific Conductivity	µmhos/cm	250	297	223	362	308	303	320	331	361	433	439	-	0
Sulfate	mg/L	24.6	14.0	11.6	31.4	26.4	24.4	27.0	33.0	36.3	54.1	55.4	-	5.0
Temperature	°C	7.7	5.8	12.1	12.9	15.2	19.8	22.7	25.2	25.7	19.0	17.2	-	N/A
Threshold Odor Number	Units	6	6	7	11	7	13	7	-	11	4	8	-	0
Total Organic Carbon	mg/L	4.7	4.6	5.3	3.3	4.5	4.7	4.5	4.5	4.7	4.4	3.9	-	0.5
Turbidity	NTU	11	37	45	3.3	5.4	2.4	2.9	2.1	2.8	5.6	6.0	-	0.05

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

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

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

- Not sampled

* Analysis pending

Fairfax Water

Water Quality Laboratory

Metal Analyses

Period of 01/01/2016 TO 12/31/2016

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 12/19/2016

Parameter	Units[1]	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Quant Limit[2]
Aluminum	µg/L	702	-	-	125	-	-	52.8	-	-	151	-	-	25.0
Antimony	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	µg/L	32.7	-	-	34.7	-	-	32.7	-	-	53.9	-	-	25.0
Beryllium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium	mg/L	22.3	-	-	25.0	-	-	25.2	-	-	37.5	-	-	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	878	2040	2220	143	348	141	137	94.5	109	283	315	-	25.0
Lead	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium	mg/L	6.3	-	-	6.4	-	-	6.6	-	-	7.8	-	-	1.0
Manganese	µg/L	69.4	75.3	72.4	44.5	100	103	126	300	494	252	355	-	25.0
Mercury	µg/L	BQL	-	-	-	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium	mg/L	3.3	-	-	3.2	-	-	3.9	-	-	6.4	-	-	1.0
Selenium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon	mg/L	6.8	-	-	3.8	-	-	4.3	-	-	4.0	-	-	1.0
Silver	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium	mg/L	16.8	29.8	23.2	29.0	25.8	21.7	24.2	25.5	28.6	31.8	31.1	-	1.0
Thallium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Zinc	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0

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

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

[2]Quant Limit = Quantitation Limit : lowest level of measurement

- Not sampled

* Analysis pending