Fairfax Water

WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2013 TO 12/31/2013
Occoquan Reservoir – Griffith Water Treatment Plant Source

Parameter	Units [1]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit [2]	# of Tests
Aggressive Index Number	Units	11	10	10	11	10	-	10	10	10	11	11	-	10	11	10	-	10
Alkalinity, Bicarbonate	mg/L	44	34	33	53	41	-	47	35	55	63	52	-	46	63	33	-	10
Alkalinity, Carbonate	mg/L	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	-	10
Alkalinity, Hydroxyl	mg/L	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	-	10
Alkalinity, Phenolphthalein	mg/L	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	-	10
Alkalinity, Total	mg/L	44	34	33	53	41	-	47	35	55	63	52	-	46	63	33	-	10
Bromate	µg/L	-	-	-	-	-	-	-	-	-	-	BQL	BQL	BQL	BQL	BQL	5	2
Bromide	mg/L	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.01	0.03	0.04	0.02	0.03	0.02	0.04	0.01	0.01	12
Carbon Dioxide	mg/L	4	3	4	5	8	-	9	11	14	10	7	-	8	14	3	-	10
Chloride	mg/L	29.1	23.3	27.0	43.8	24.6	-	19.9	10.8	20.2	31.2	20.2	-	25.0	43.8	10.8	5.0	10
Color	Units	64	101	100	29	58	-	42	66	34	60	35	-	59	101	29	0	10
Dissolved Oxygen	mg/L	9.6	10.4	9.6	9.6	5.5	-	4.3	6.8	4.0	3.8	5.6	-	6.9	10.4	3.8	0.0	10
Fluoride	mg/L	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	0.2	0.4	0.2	-	BQL	0.4	BQL	0.2	10
Hardness, Calcium	mg/L	47	37	32	59	40	-	45	29	55	84	54	-	48	84	29	-	10
Hardness, Total	mg/L	65	53	47	84	57	-	63	40	74	107	73	-	66	107	40	-	10
Methylene Blue Activated Substances	mg/L	-	-	-	-	-	-	ND	-	-	-	-	-	ND	ND	ND	0.05	1
N, Ammonia (Ammonia as N)	mg/L	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	0.24	-	BQL	-	BQL	0.24	BQL	0.20	9
N, Nitrate (Nitrate as N)	mg/L	0.8	0.8	0.6	0.5	0.7	-	0.9	0.5	0.7	1.8	0.9	-	0.8	1.8	0.5	0.2	10
N, Nitrite (Nitrite as N)	mg/L	-	BQL	BQL	BQL	0.02	-	0.02	0.01	0.03	0.01	0.09	-	0.02	0.09	BQL	0.01	9
pH	Units	7.3	7.3	7.2	7.3	7.0	-	7.0	6.8	6.9	7.1	7.2	-	7.1	7.3	6.8	-	10
Phosphate as Phosphorous	mg/L	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	0.10	10
Orthophosphate as PO4	mg/L	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	0.31	10
Solids, Total	mg/L	158	132	136	202	149	-	135	89	166	237	154	-	156	237	89	1	10
Solids, Total Dissolved	mg/L	-	174	86	190	-	-	172	104	146	198	158	-	154	198	96	1	8
Solids, Total Suspended	mg/L	1	2	3	4	2	-	2	3	2	4	2	-	3	4	1	1	10
Specific Conductivity	µmhos/cm	246	183	198	318	207	-	224	135	240	333	237	-	232	333	135	0	10
Sulfate	mg/L	23.5	16.5	14.3	30.2	17.1	-	19.9	10.0	26.8	47.9	28.3	-	23.5	47.9	10.0	5.0	10
Temperature	°C	6.6	6.2	9.2	13.4	18.2	-	24.4	23.9	22.1	20.3	11.5	-	15.6	24.4	6.2	-	10
Threshold Odor Number	Units	4	8	7	6	1	-	7	7	9	9	10	-	7	10	1	0	10
Total Organic Carbon	mg/L	5.8	5.5	5.2	3.5	6.5	-	6.0	6.5	5.5	4.4	5.2	-	5.4	6.5	3.5	0.5	10
Turbidity	NTU	9.7	21	26	3.8	4.0	-	2.8	7.5	2.8	3.5	4.7	-	8.6	27	2.8	0.05	10

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

Report No: 012314140212

Fairfax Water

WATER QUALITY LABORATORY
METAL ANALYSES
PERIOD OF 01/01/2013 TO 12/31/2013
Occoquan Reservoir – Griffith Water Treatment Plant Source

Parameter	Units [1]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit [2]	# of Tests
Aluminum	µg/L	463	-	-	186	-	-	74.8	-	-	102	-	-	206	463	74.8	25.0	4
Antimony	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	2.0	4
Arsenic	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	2.0	4
Barium	µg/L	28.6	-	-	33.9	-	-	29.8	-	-	49.0	-	-	35.3	49.0	28.6	25.0	4
Beryllium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	2.0	4
Cadmium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	2.0	4
Calcium	mg/L	19.7	-	-	23.3	-	-	18.2	-	-	32.9	-	-	23.5	32.9	18.2	1.0	4
Chromium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Copper	µg/L	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	25.0	10
Iron	µg/L	706	1300	1550	258	353	-	226	746	154	211	337	-	584	1550	154	25.0	10
Lead	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	2.0	4
Magnesium	mg/L	5.3	-	-	6.0	-	-	4.5	-	-	6.4	-	-	5.6	6.4	4.5	1.0	4
Manganese	µg/L	74.1	101	85.6	74.5	45.2	-	188	290	251	222	176	-	151	290	45.2	25.0	10
Mercury	µg/L	BQL	-	-	-	-	-	BQL	-	-	-	-	-	BQL	BQL	BQL	0.50	2
Nickel	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Potassium	mg/L	3.7	-	-	2.8	-	-	3.5	-	-	6.0	-	-	4.0	6.0	2.8	1.0	4
Selenium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Silicon	mg/L	4.5	-	-	2.5	-	-	3.8	-	-	3.4	-	-	3.6	4.5	2.5	1.0	4
Silver	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Sodium	mg/L	20.1	13.9	16.5	24.9	15.1	-	13.4	7.6	14.1	22.8	14.8	-	16.3	24.9	7.6	1.0	10
Thallium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	2.0	4
Zinc	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	25.0	4

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

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