Fairfax Water

WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2014 TO 12/31/2014
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	10	10	11	10	-	-	10	-	11	11	11	-	11	11	10	-	8
Alkalinity, Bicarbonate	mg/L	34	33	46	32	-	-	52	-	59	64	66	-	48	66	32	0	8
Alkalinity, Carbonate	mg/L	0	0	0	0	-	-	0	-	0	0	0	-	0	0	0	0	8
Alkalinity, Hydroxyl	mg/L	0	0	0	0	-	-	0	-	0	0	0	-	0	0	0	0	8
Alkalinity, Phenolphthalein	mg/L	0	0	0	0	-	-	0	-	0	0	0	-	0	0	0	0	8
Alkalinity, Total	mg/L	34	33	46	32	-	-	52	-	59	64	66	-	48	66	32	0	8
Bromate	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5	12
Bromide	mg/L	0.02	0.03	0.04	0.02	0.01	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.01	0.01	12
Carbon Dioxide	mg/L	3	4	2	4	-	-	13	-	12	5	5	-	6	13	2	-	8
Chloride	mg/L	41.8	75.7	80.8	31.7	-	-	23.6	-	28.7	35.5	35.0	-	44.1	80.8	23.6	5.0	8
Color	Units	87	86	32	98	-	-	43	-	15	30	40	-	54	98	15	0	8
Dissolved Oxygen	mg/L	11.4	11.7	11.8	8.3	-	-	3.9	-	2.4	5.9	6.5	-	8.1	11.8	2.4	0.0	8
Fluoride	mg/L	BQL	BQL	BQL	BQL	-	-	BQL	-	0.3	0.3	0.3	-	BQL	0.3	BQL	0.2	8
Hardness, Calcium	mg/L	36	43	62	33	-	-	47	-	62	74	76	-	54	76	33	10	8
Hardness, Total	mg/L	55	65	86	47	-	-	68	-	83	100	98	-	75	100	47	10	8
Methylene Blue Activated Substances	mg/L	-	-	-	-	-	-	ND	-	-	-	-	-	ND	ND	ND	0.05	1
N, Ammonia (Ammonia as N)	mg/L	BQL	BQL	BQL	BQL	-	-	0.23	-	BQL	BQL	BQL	-	BQL	0.23	BQL	0.20	8
N, Nitrate (Nitrate as N)	mg/L	0.94	0.84	0.73	0.41	-	-	0.65	-	0.91	-	1.33	-	0.83	1.33	0.41	0.20	7
N, Nitrite (Nitrite as N)	mg/L	BQL	BQL	BQL	BQL	-	-	0.02	-	-	0.03	0.06	-	0.02	0.06	BQL	0.01	7
pH	Units	7.3	7.2	7.7	7.2	-	-	6.9	-	7.0	7.4	7.4	-	7.3	7.7	6.9	-	8
Phosphate as Phosphorous	mg/L	BQL	BQL	BQL	BQL	-	-	BQL	-	BQL	BQL	BQL	-	BQL	BQL	BQL	0.10	8
Orthophosphate as PO4	mg/L	BQL	BQL	BQL	BQL	-	-	BQL	-	BQL	BQL	BQL	-	BQL	BQL	BQL	0.31	8
Solids, Total	mg/L	159	225	264	160	-	-	154	-	167	214	221	-	196	264	154	1	8
Solids, Total Dissolved	mg/L	-	180	250	184	-	-	154	-	158	198	210	-	191	250	154	1	7
Solids, Total Suspended	mg/L	BQL	10	4	6	-	-	4	-	2	5	5	-	4	10	BQL	1	8
Specific Conductivity	µmhos/cm	249	369	429	196	-	-	223	-	281	350	355	-	307	429	196	0	8
Sulfate	mg/L	14.7	17.3	23.9	12.1	-	-	19.9	-	28.9	45.4	44.6	-	25.9	45.4	12.1	5.0	8
Temperature	°C	3.2	4.5	6.1	13.0	-	-	24.4	-	23.1	16.4	13.5	-	13.0	24.4	3.2	-	8
Threshold Odor Number	Units	10	8	10	14	-	-	12	-	14	11	12	-	11	14	8	0	8
Total Organic Carbon	mg/L	4.7	3.9	3.1	6.7	-	-	5.1	-	4.4	3.8	3.9	-	4.5	6.7	3.1	0.5	8
Turbidity	NTU	14	23	7.8	16	-	-	4.9	-	2.5	5.2	6.7	-	10	23	2.5	0.05	8

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: 010915143705

Fairfax Water

WATER QUALITY LABORATORY
METAL ANALYSES
PERIOD OF 01/01/2014 TO 12/31/2014
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	922	-	-	619	-	-	52.5	-	-	162	-	-	439	922	52.5	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	32.1	-	-	29.7	-	-	38.2	-	-	40.4	-	-	35.1	40.4	29.7	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	14.5	-	-	-	-	-	20.3	-	-	31.0	-	-	21.9	31.0	14.5	1.0	3
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	25.0	8
Iron	µg/L	849	1070	468	835	-	-	395	-	94.7	255	348	-	539	1070	94.7	25.0	8
Lead	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	2.0	4
Magnesium	mg/L	4.3	-	-	4.0	-	-	4.9	-	-	7.2	-	-	5.1	7.2	4.0	1.0	4
Manganese	µg/L	58.5	59.5	89.1	53.6	-	-	980	-	189	100	164	-	212	980	53.6	25.0	8
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	2.7	-	-	2.4	-	-	3.7	-	-	5.6	-	-	3.6	5.6	2.4	1.0	4
Selenium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Silicon	mg/L	5.5	-	-	3.9	-	-	3.7	-	-	3.6	-	-	4.2	5.5	3.6	1.0	4
Silver	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Sodium	mg/L	22.6	39.0	45.2	19.1	-	-	16.2	-	20.6	25.5	25.7	-	26.7	45.2	16.2	1.0	8
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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