Fairfax Water

Water Quality Laboratory

Inorganics Analyses

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

Distribution Site Representing Griffith Treatment Plant

Date Report Generated: 12/20/2016

Parameter	MCL[1]	Units[2]	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[3]
Aggressive Index Number		Units	12	11	11	11	11	11	12	12	12	12	12	-	N/A
Alkalinity, Bicarbonate		mg/L	59	54	35	55	60	61	68	74	81	73	74	-	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	59	54	35	55	60	61	68	74	81	73	74	-	0
Bromide		mg/L	0.02	0.02	0.01	0.02	0.01	BQL	0.02	0.02	0.02	0.02	0.03	-	0.01
Carbon Dioxide		mg/L	0	3	2	2	2	4	3	2	3	2	2	-	N/A
Chloride	250 S	mg/L	35.4	85.6	56.9	65.6	59.1	48.0	46.9	48.7	52.2	55.0	55.1	-	5.0
Chlorine, Free		mg/L	0.1	0.2	0.2	2.6	2.4	1.1	0.2	0.3	0.3	0.2	0.2	-	0.0
Chlorine, Total		mg/L	3.0	3.2	3.2	2.8	2.8	1.3	2.5	2.6	2.7	3.0	2.5	-	0.0
Color	15 S	Units	0	0	0	0	0	0	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	16.7	16.8	18.4	17.1	19.6	14.5	12.8	15.4	11.6	15.5	14.9	-	0.0
Fluoride	4.0/2.0 P/S	mg/L	0.7	0.7	0.6	0.8	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.2
Hardness, Calcium		mg/L	55	63	33	67	64	60	106	71	83	94	96	-	10
Hardness, Total		mg/L	75	86	44	90	87	80	86	96	109	118	121	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)		mg/L	0.64	0.69	0.65	BQL	BQL	BQL	0.66	0.70	0.71	0.69	0.68	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	0.99	1.20	0.69	1.01	0.80	1.05	1.01	0.99	1.20	2.54	2.33	-	0.20
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.01
pH	6.5 - 8.5 S	Units	8.5	7.6	7.5	7.7	7.7	7.5	7.7	7.8	7.8	7.9	7.9	-	N/A
Phosphate as Phosphorous		mg/L	0.27	0.29	0.38	0.43	0.36	0.39	0.36	0.41	-	0.49	0.44	-	0.10
Orthophosphate as PO_4		mg/L	0.82	0.88	1.14	1.32	1.09	1.19	1.11	1.26	-	1.49	1.34	-	0.31
Solids, Total		mg/L	179	256	152	222	240	184	208	230	248	280	277	-	1
Solids, Total Dissolved	500 S	mg/L	174	264	184	214	200	194	202	235	257	253	305	-	1
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	297	449	291	404	373	356	384	392	438	483	480	-	0
Sulfate	250 S	mg/L	24.4	26.5	13.5	32.5	29.1	24.3	28.3	34.0	39.3	55.3	56.0	-	5.0
Taste		Units	2	2	2	2	2	3	2	2	2	2	2	-	1
Temperature		°C	18.2	17.1	18.7	18.0	18.9	23.1	26.6	27.0	26.9	23.1	22.2	-	N/A
Threshold Odor Number	3 S	Units	4	5	10	6	10	3	9	-	11	1	1	-	0
Total Organic Carbon		mg/L	2.2	1.6	1.6	1.5	1.8	2.1	2.0	2.0	2.2	2.1	2.2	-	0.5
Turbidity	≤ 5 P	NTU	0.05	0.05	0.05	0.05	0.05	0.05	0.10	0.05	0.10	0.10	0.10	-	0.05

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

[1]Environmental Protection Agency/Virginia Department of Health established levels for drinking water at points of entry to the water distribution system

P = Primary - enforceable, S = Secondary - non-enforceable, AL = Action Level on specific taps, MCL = Maximum Contaminant Level

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

[3]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

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Parameter	MCL[1]	Units[2]	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[3]
Aluminum	50 - 200 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0
Antimony	6 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	10 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	2000 P	µg/L	BQL	-	-	36.8	-	-	34.2	-	-	35.3	-	-	25.0
Beryllium	4 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	5 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium		mg/L	21.2	-	-	24.8	-	-	25.4	-	-	36.3	-	-	1.0
Chromium	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	1300 AL	µg/L	BQL	BQL	BQL	BQL	BQL	31.0	30.0	30.1	26.0	BQL	26.8	-	25.0
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Lead	15 AL	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium		mg/L	5.8	-	-	6.3	-	-	6.5	-	-	7.4	-	-	1.0
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Mercury	2 P	µg/L	BQL	-	-	-	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium		mg/L	3.2	-	-	3.1	-	-	4.0	-	-	6.4	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	4.9	-	-	3.5	-	-	4.2	-	-	3.6	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	24.8	46.7	33.9	36.7	36.0	31.5	35.6	38.0	41.1	40.3	39.1	-	1.0
Thallium	2 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Zinc	5000 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0

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