Fairfax Water

WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2011 TO 12/31/2011
Distribution Site Representing Griffith Treatment Plant

Parameter	MCL [1]	Units [2]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit [3]	# of Tests
Aggressive Index Number		Units	11	11	11	11	11	--	11	12	11	11	11	11	11	12	11	-	11
Alkalinity, Bicarbonate		mg/L	62	49	39	51	48	--	68	81	48	49	55	60	55	81	39	-	11
Alkalinity, Carbonate		mg/L	0	0	0	0	0	--	0	0	0	0	0	0	0	0	0	-	11
Alkalinity, Hydroxyl		mg/L	0	0	0	0	0	--	0	0	0	0	0	0	0	0	0	-	11
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	0	--	0	0	0	0	0	0	0	0	0	-	11
Alkalinity, Total		mg/L	62	49	39	51	48	--	68	81	48	49	55	60	55	81	39	-	11
Bromide		mg/L	0.02	0.03	0.01	0.01	0.01	--	0.02	0.02	BQL	0.01	0.01	0.02	0.02	0.03	0.01	0.01	11
Carbon Dioxide		mg/L	3	3	2	3	4	--	3	1	3	3	4	5	3	5	1	-	11
Chloride	250.0 S	mg/L	43.8	132.4	50.0	51.6	39.8	--	45.1	50.8	30.7	35.3	31.8	36.8	49.8	132.4	30.7	5.0	11
Chlorine, Free		mg/L	0.3	0.1	0.1	2.4	2.6	--	0.4	0.3	0.2	0.2	0.1	0.0	0.6	2.6	0.0	0.0	11
Chlorine, Total		mg/L	2.9	2.8	2.7	2.6	2.8	--	2.4	3.1	2.7	3.1	2.8	2.3	2.7	3.1	2.3	0.0	11
Color	15 S	Units	0	1	1	1	1	--	1	1	0	0	1	0	1	1	0	0	11
Dissolved Oxygen		mg/L	16.0	20.3	21.4	16.8	17.7	--	--	17.0	16.2	12.9	19.0	17.4	17.5	21.4	12.9	0.0	10
Fluoride	4.0/2.0 P/S	mg/L	0.6	0.6	0.7	0.7	0.7	--	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.6	0.2	11
Hardness, Calcium		mg/L	66	74	40	50	43	--	62	77	37	49	43	72	56	77	37	-	11
Hardness, Total		mg/L	98	113	61	77	55	--	85	101	55	68	67	97	80	113	55	-	11
Methylene Blue Activated Substances	0.5 S	mg/L	--	--	--	--	--	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.05	1
N, Ammonia (Ammonia as N)		mg/L	0.78	--	0.58	BQL	BQL	--	0.60	0.77	0.72	0.75	0.69	0.65	0.55	0.78	BQL	0.20	10
N, Nitrate (Nitrate as N)	10 P	mg/L	2.1	1.2	0.9	0.7	0.5	--	1.1	1.0	1.4	1.2	1.1	1.4	1.1	2.1	0.5	0.2	11
N, Nitrite (Nitrite as N)	1 P	mg/L	0.01	0.06	0.01	0.01	BQL	--	0.01	0.01	0.01	0.01	BQL	BQL	0.01	0.06	BQL	0.01	11
pH	6.5-8.5 S	Units	7.6	7.5	7.5	7.5	7.4	--	7.6	8.3	7.5	7.5	7.4	7.4	7.6	8.3	7.4	-	11
Phosphate as Phosphorous		mg/L	0.34	0.36	0.37	0.35	0.32	--	0.29	0.32	0.29	0.32	0.34	0.34	0.33	0.37	0.29	0.10	11
Solids, Total		mg/L	217	358	164	191	184	--	196	243	159	178	175	227	208	358	159	1	11
Solids, Total Dissolved	500 S	mg/L	214	295	158	173	163	--	189	218	124	160	157	150	182	295	124	1	11
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1	11
Specific Conductivity		µmhos/cm	380	654	312	327	284	--	349	447	247	271	--	325	360	654	247	0	10
Sulfate	250.0 S	mg/L	36.7	30.9	17.5	21.7	16.2	--	25.2	34.7	18.5	21.1	18.3	34.2	25.0	36.7	16.2	5.0	11
Taste		Units	3	2	2	3	2	--	2	3	2	2	3	2	2	3	2	1	11
Temperature		°C	13.0	15.3	17.0	17.3	20.3	--	26.3	26.3	24.3	22.5	19.8	19.5	20.1	26.3	13.0	-	11
Threshold Odor Number	3 S	Units	4	3	6	6	8	--	4	1	5	1	1	3	4	8	1	0	11
Total Organic Carbon		mg/L	2.8	2.5	2.2	2.4	2.4	--	2.3	2.1	2.6	2.4	3.0	2.4	2.5	3.0	2.1	0.5	11
Turbidity	≤ 5 P	NTU	0.05	0.15	0.05	0.25	0.10	--	0.10	0.10	0.05	0.05	0.05	0.45	0.13	0.45	0.05	0.00	11

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

Report No: 011212121700

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Parameter	MCL [1]	Units [2]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit [3]	# of Tests
Aluminum	50-200 S	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	25.0	4
Antimony	6 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Arsenic	10 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Barium	2000 P	µg/L	26.4	--	--	25.9	--	--	34.4	--	--	BQL	--	--	BQL	34.4	BQL	25.0	4
Beryllium	4 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Cadmium	5 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Calcium		mg/L	29.4	--	--	22.1	--	--	24.3	--	--	19.1	--	--	23.7	29.4	19.1	1.0	4
Chromium	100 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Copper	1300 AL	µg/L	BQL	BQL	BQL	BQL	27.1	--	BQL	BQL	28.9	BQL	29.3	BQL	BQL	29.3	BQL	25.0	11
Iron	300 S	µg/L	BQL	29.5	BQL	BQL	BQL	--	BQL	BQL	31.7	BQL	BQL	BQL	BQL	31.7	BQL	25.0	11
Lead	15 AL	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Magnesium		mg/L	6.5	--	--	5.7	--	--	5.4	--	--	4.4	--	--	5.5	6.5	4.4	1.0	4
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	25.0	11
Mercury	2 P	µg/L	BQL	--	--	--	BQL	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.50	3
Nickel	100 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Potassium		mg/L	5.2	--	--	3.3	--	--	4.5	--	--	4.3	--	--	4.3	5.2	3.3	1.0	4
Selenium	50 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Silicon		mg/L	4.2	--	--	3.2	--	--	3.7	--	--	3.6	--	--	3.7	4.2	3.2	1.0	4
Silver	100 S	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Sodium		mg/L	30.8	66.6	28.8	32.9	27.1	--	33.9	39.2	25.2	25.1	13.8	25.4	31.7	66.6	13.8	1.0	11
Thallium	2 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Zinc	5000 S	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	25.0	4

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