



**WATER QUALITY LABORATORY  
INORGANIC ANALYSES  
PERIOD OF 01/01/2007 TO 12/31/2007  
Distribution Site Representing Griffith Treatment Plant**

Parameter	MCL <sup>1</sup>	Units <sup>2</sup>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit	# of Tests
Aggressive Index Number		Units	11	11	11	10	10	11	11	11	11	11	11	--	11	11	10	-	11
Alkalinity, Bicarbonate		mg/L	54	46	36	37	34	53	76	82	83	83	78	--	60	83	34	-	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	54	46	36	37	34	53	76	82	83	83	78	--	60	83	34	-	11
Bromide		mg/L	0.02	BQL	BQL	BQL	0.01	0.01	0.02	0.02	0.03	0.03	0.03	--	0.02	0.03	BQL	0.01	11
Carbon Dioxide		mg/L	3	5	2	4	2	4	5	6	5	5	8	--	4	8	2	-	11
Chloride	250.0 S	mg/L	32.3	32.1	53.4	49.2	33.4	38.4	50.8	58.0	61.8	66.2	66.2	--	49.3	66.2	32.1	5.0	11
Chlorine, Free		mg/L	0.2	0.2	0.2	3.9	3.7	3.3	0.3	0.3	0.2	0.2	0.3	--	1.2	3.9	0.2	0.0	11
Chlorine, Total		mg/L	3.9	3.9	4.3	4.2	3.9	3.4	3.4	3.3	3.4	4.2	3.8	--	3.8	4.3	3.3	0.0	11
Color	15 S	Units	1	2	8	3	2	2	0	0	0	1	2	--	2	8	0	0	11
Dissolved Oxygen		mg/L	37.0	25.2	--	22.6	21.3	13.5	12.5	16.5	16.1	20.9	10.4	--	19.6	37.0	10.4	0.0	10
Fluoride	4.0/2.0 P/S	mg/L	1.0	1.0	0.9	0.9	1.0	0.9	0.9	1.0	1.0	1.0	1.0	--	1.0	1.0	0.9	0.2	11
Hardness, Calcium		mg/L	63	48	42	45	35	48	119	90	106	102	98	--	72	119	35	-	11
Hardness, Total		mg/L	86	68	55	56	42	70	105	134	122	126	130	--	90	134	42	-	11
Methylene Blue Activated Substances	0.5 S	mg/L	--	--	--	--	--	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.050	1
N, Ammonia (Ammonia as N)		mg/L	1.09	0.91	1.10	BQL	--	BQL	0.76	1.01	0.99	1.02	0.70	--	0.76	1.10	BQL	0.05	10
N, Nitrate (Nitrate as N)	10 P	mg/L	2.0	1.1	0.8	0.8	0.6	0.8	0.7	0.6	0.7	0.8	1.9	--	1.0	2.0	0.6	0.2	11
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	0.01	BQL	--	--	--	BQL	BQL	BQL	0.01	0.01	--	BQL	0.01	BQL	0.01	8
pH	6.5-8.5 S	Units	7.5	7.3	7.5	7.3	7.5	7.4	7.5	7.4	7.5	7.5	7.3	--	7.4	7.5	7.3	-	11
Phosphate as Phosphorous		mg/L	0.69	0.78	0.77	0.77	0.76	0.69	0.65	0.81	0.71	0.75	0.70	--	0.73	0.81	0.65	0.20	11
Solids, Total		mg/L	188	158	225	184	118	147	254	259	293	320	322	--	224	322	118	1	11
Solids, Total Dissolved	500 S	mg/L	178	148	200	--	127	178	--	279	285	317	297	--	223	317	127	1	9
Solids, Total Suspended		mg/L	BQL	BQL	--	BQL	--	BQL	--	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	1	8
Specific Conductivity		µmhos/cm	288	267	321	291	206	281	413	462	500	517	508	--	369	517	206	0	11
Sulfate	250.0 S	mg/L	28.0	22.4	15.9	17.0	12.6	21.5	40.4	50.6	58.5	60.4	68.5	--	36.0	68.5	12.6	5.0	11
Taste		Units	1	--	2	2	3	2	2	4	3	2	2	--	2	4	1	1	10
Temperature		°C	14.5	14.5	17.7	16.2	17.1	22.7	28.1	25.5	23.0	22.9	20.7	--	20.3	28.1	14.5	-	11
Threshold Odor Number	3 S	Units	3	6	5	7	6	3	6	3	2	7	0	--	4	7	0	0	11
Total Organic Carbon		mg/L	2.2	2.2	2.4	2.2	2.4	2.4	2.4	2.3	2.3	2.3	2.3	--	2.3	2.4	2.2	0.5	11
Turbidity	≤5 P	NTU	0.15	0.10	0.60	0.15	0.15	0.15	0.15	0.15	0.15	0.10	0.25	--	0.19	0.60	0.10	0.00	11

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

<sup>1</sup> Environmental Protection Agency/Virginia Department of Health established levels for drinking water

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

<sup>2</sup> mg/L=milligrams per liter, µg/L=micrograms per liter



**WATER QUALITY LABORATORY  
METAL ANALYSES  
PERIOD OF 01/01/2007 TO 12/31/2007  
Distribution Site Representing Griffith Treatment Plant**

Parameter	MCL <sup>1</sup>	Units <sup>2</sup>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit	# of Tests
Aluminum	50-200 S	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	35.8	--	--	BQL	35.8	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	25.8	--	--	25.0	--	--	34.8	--	--	29.4	--	--	28.8	34.8	25.0	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	--	--	--	15.6	--	--	32.4	--	--	39.2	--	--	29.1	39.2	15.6	0.5	3
Chromium	100 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Copper	1300 AL	µg/L	BQL	BQL	BQL	BQL	BQL	29.4	BQL	BQL	BQL	BQL	BQL	--	BQL	29.4	BQL	25.0	11
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	60	11
Lead	15 AL	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Magnesium		mg/L	5.7	--	--	4.3	--	--	6.4	--	--	7.1	--	--	5.9	7.1	4.3	0.5	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	0.50	2
Nickel	100 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Potassium		mg/L	3.8	--	--	3.0	--	--	6.0	--	--	10.1	--	--	5.7	10.1	3.0	0.5	4
Selenium	50 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Silicon		mg/L	5	--	--	BQL	--	--	BQL	--	--	4	--	--	BQL	5	BQL	4	4
Silver	100 S	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Sodium		mg/L	22.5	19.8	31.4	29.0	23.0	25.9	36.8	44.6	44.8	51.0	54.5	--	34.8	54.5	19.8	5.0	11
Thallium	2 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Zinc	5000 S	µg/L	25.2	--	--	33.7	--	--	BQL	--	--	BQL	--	--	BQL	33.7	BQL	25.0	4

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