



**WATER QUALITY LABORATORY  
INORGANIC ANALYSES  
PERIOD OF 01/01/2009 TO 12/31/2009  
Corbalis Treatment Plant Finished Water**

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	--	11	11	11	12	11	11	11	11	12	11	-	10
Alkalinity, Bicarbonate		mg/L	85	54	96	57	--	69	91	84	97	86	86	83	81	97	54	-	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	85	54	96	57	--	69	91	84	97	86	86	83	81	97	54	-	11
Bromate	10 P	µg/L	BQL*	--	--	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL	BQL	BQL	5	37
Bromide		mg/L	0.02	BQL	0.03	0.01	--	BQL	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	BQL	0.01	11
Carbon Dioxide		mg/L	8	5	8	4	--	3	18	13	6	11	14	13	10	18	3	-	11
Chloride	250.0 S	mg/L	25.6	25.1	26.4	46.6	--	24.2	25.3	26.9	33.9	37.3	22.3	20.6	28.9	46.6	20.6	5.0	11
Chlorine, Free		mg/L	0.3*	0.1*	0.0*	3.4*	--	2.9*	0.4*	0.3*	0.3*	0.1*	0.1*	0.0*	0.8	3.4	0.0	0.0	39
Chlorine, Total		mg/L	3.4*	3.3*	3.2*	3.8*	--	3.1*	3.3*	3.4*	3.5*	3.1*	3.3*	3.1*	3.3	3.9	2.9	0.0	39
Color	15 S	Units	1	0	0	1	--	1	1	1	1	0	1	1	1	1	0	0	11
Dissolved Oxygen		mg/L	17.0	17.9	15.5	16.2	--	12.4	13.8	15.4	14.5	15.2	13.4	--	14.9	17.9	12.4	0.0	10
Fluoride	4.0/2.0 P/S	mg/L	1.0	0.8	0.8	0.8	--	1.0	1.1	1.0	1.0	0.9	0.9	0.9	0.9	1.1	0.8	0.2	11
Hardness, Calcium		mg/L	84	74	110	58	--	70	96	94	108	96	108	93	91	110	58	-	11
Hardness, Total		mg/L	130	115	162	115	--	94	145	142	172	136	149	126	136	172	94	-	11
Methylene Blue Activated Substances	0.5 S	mg/L	--	--	--	--	--	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.050	1
N, Ammonia (Ammonia as N)		mg/L	0.74*	0.66*	0.75*	BQL*	--	BQL*	0.67*	0.68*	0.74*	0.78*	0.84*	0.75*	0.59	0.91	BQL	0.20	39
N, Nitrate (Nitrate as N)	10 P	mg/L	1.2	1.0	0.8	0.7	--	1.0	0.8	0.7	0.9	1.6	1.3	1.3	1.0	1.6	0.7	0.2	11
N, Nitrite (Nitrite as N)	1 P	mg/L	--	BQL	--	BQL	--	BQL	BQL	--	BQL	BQL	0.01	0.01	BQL	0.01	BQL	0.01	8
pH	6.5-8.5 S	Units	7.3	7.3	7.4	7.5	--	7.6	7.0	7.1	7.5	7.2	7.1	7.1	7.3	7.6	7.0	-	11
Phosphate as Phosphorous		mg/L	0.39	0.40	0.40	0.39	--	0.34	--	0.28	0.33	0.35	0.34	0.32	0.35	0.40	0.28	0.10	10
Solids, Total		mg/L	202	183	243	165	--	168	233	233	270	254	210	219	218	270	165	1	11
Solids, Total Dissolved	500 S	mg/L	190	181	240	180	--	152	232	230	260	230	225	196	213	260	152	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	318	312	392	316	--	246	373	366	436	417	351	333	354	436	246	0	11
Sulfate	250.0 S	mg/L	29.4	48.9	57.0	16.9	--	16.8	51.2	60.9	65.6	47.7	56.1	48.5	47.0	65.6	16.8	10.0	11
Taste		Units	2	2	2	3	--	2	2	2	2	1	1	1	2	3	1	1	11
Temperature		°C	7.2	9.8	10.3	13.6	--	22.7	25.6	27.1	23.0	16.1	16.4	10.8	17.5	27.1	9.8	-	11
Threshold Odor Number	3 S	Units	6	5	3	7	--	6	5	6	3	7	6	5	5	7	3	0	11
Total Organic Carbon		mg/L	1.6	1.6	1.8	2.2	--	2.2	1.6	1.8	1.9	2.7	2.2	1.8	2.0	2.7	1.6	0.5	11
Turbidity	≤ 5 P	NTU	0.10	0.10	0.15	0.10	--	0.15	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.15	0.05	0.00	11

\* Monthly result composed from an average of parameter results for Corbalis Treatment Plant finished water points of entry to distribution system.

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 01/01/2009 TO 12/31/2009  
Corbalis Treatment Plant Finished Water**

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	--	--	51.8	--	--	BQL	--	--	BQL	51.8	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	31.8	--	--	30.3	--	--	52.6	--	--	33.8	--	--	38.9	52.6	30.3	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	33.7	--	--	23.4	--	--	38.0	--	--	39.1	--	--	33.5	39.1	23.4	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	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	25.0	11
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	25.0	11
Lead	15 AL	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Magnesium		mg/L	8.7	--	--	6.6	--	--	12.1	--	--	9.8	--	--	9.5	12.1	6.6	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	0.50	2
Nickel	100 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Potassium		mg/L	2.4	--	--	2.2	--	--	2.7	--	--	5.1	--	--	3.3	5.1	2.2	1.0	4
Selenium	50 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Silicon		mg/L	2.9	--	--	3.7	--	--	1.5	--	--	2.7	--	--	2.6	3.7	1.5	1.0	4
Silver	100 S	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Sodium		mg/L	16.0	18.3	22.4	29.8	--	18.9	21.3	22.1	27.5	24.7	19.1	17.7	22.2	29.8	17.7	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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