



**WATER QUALITY LABORATORY  
INORGANIC ANALYSES  
PERIOD OF 01/01/2010 TO 12/31/2010  
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	Average	Max	Min	Quant <sup>3</sup> Limit	# of Tests
Aggressive Index Number		Units	11	11	11	11	11	11	11	11	11	11	11	10	11	11	10	-	12
Alkalinity, Bicarbonate		mg/L	68	60	60	75	97	82	87	71	68	84	90	58	75	97	58	-	12
Alkalinity, Carbonate		mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	12
Alkalinity, Hydroxyl		mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	12
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	12
Alkalinity, Total		mg/L	68	60	60	75	97	82	87	71	68	84	90	58	75	97	58	-	12
Bromate	10 P	µg/L	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL	6	BQL	5	48
Bromide		mg/L	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.01	0.02	0.02	0.03	BQL	0.02	0.03	BQL	0.01	12
Carbon Dioxide		mg/L	5	12	6	8	10	10	14	14	14	13	14	12	11	14	5	-	12
Chloride	250.0 S	mg/L	34.9	17.6	23.8	30.5	32.8	23.9	34.2	33.0	38.3	31.7	34.4	21.1	29.7	38.3	17.6	5.0	12
Chlorine, Free		mg/L	0.2*	0.2*	0.2*	3.2*	3.2*	3.2*	0.4*	0.3*	0.3*	0.3*	0.2*	0.2*	1.0	3.4	0.1	0.0	48
Chlorine, Total		mg/L	3.5*	3.0*	3.2*	3.4*	3.4*	3.4*	3.1*	3.2*	3.4*	3.3*	3.2*	3.2*	3.3	3.7	2.9	0.0	48
Color	15 S	Units	0	0	0	1	2	2	1	1	0	1	0	0	1	2	0	0	12
Dissolved Oxygen		mg/L	--	17.4	15.5	15.5	12.9	--	12.0	16.7	13.4	15.6	15.0	--	14.9	17.4	12.0	0.0	9
Fluoride	4.0/2.0 P/S	mg/L	0.9	0.9	0.9	1.0	1.1	0.9	1.0	1.0	1.1	1.1	0.8	0.8	1.0	1.1	0.8	0.2	12
Hardness, Calcium		mg/L	77	76	69	79	88	109	98	79	66	85	86	57	81	109	57	-	12
Hardness, Total		mg/L	109	118	111	124	131	146	151	113	131	124	136	91	124	151	91	-	12
Methylene Blue Activated Substances	0.5 S	mg/L	--	--	--	--	--	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.050	1
N, Ammonia (Ammonia as N)		mg/L	0.71*	0.61*	0.67*	BQL*	BQL*	BQL*	0.70*	0.71*	0.67*	0.52*	--	--	0.46	0.84	BQL	0.20	40
N, Nitrate (Nitrate as N)	10 P	mg/L	1.5	1.6	1.2	0.7	1.0	0.9	0.6	1.5	BQL	0.9	0.4	1.4	1.0	1.6	BQL	0.2	12
N, Nitrite (Nitrite as N)	1 P	mg/L	0.01	0.02	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.02	BQL	0.01	12
pH	6.5-8.5 S	Units	7.4	7.0	7.3	7.3	7.3	7.2	7.1	7.0	7.0	7.1	7.1	7.0	7.2	7.4	7.0	-	12
Phosphate as Phosphorous		mg/L	0.39	0.40	0.32	0.32	0.30	0.30	0.28	0.31	0.32	0.36	0.30	0.42	0.34	0.42	0.28	0.10	12
Solids, Total		mg/L	186	159	163	188	227	243	261	226	240	220	256	156	210	261	156	1	12
Solids, Total Dissolved	500 S	mg/L	210	150	135	232	214	214	250	211	230	214	256	156	206	256	135	1	12
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1	12
Specific Conductivity		µmhos/cm	315	275	273	328	366	383	408	372	434	378	420	271	352	434	271	0	12
Sulfate	250.0 S	mg/L	27.0	33.5	26.7	28.2	38.6	62.5	71.2	42.4	70.2	41.6	46.4	29.5	43.2	71.2	26.7	5.0	12
Taste		Units	2	1	2	2	1	2	2	2	2	2	2	2	2	2	1	1	12
Temperature		°C	5.2	8.4	13.3	16.7	19.3	24.1	27.4	28.0	24.3	18.9	16.7	10.6	17.7	28.0	5.2	-	12
Threshold Odor Number	3 S	Units	3	7	6	4	5	8	6	7	4	7	8	4	6	8	3	0	12
Total Organic Carbon		mg/L	1.6	1.4	1.3	1.6	1.6	1.5	1.8	2.7	2.2	2.4	2.1	2.2	1.9	2.7	1.3	0.5	12
Turbidity	≤ 5 P	NTU	0.05	0.05	0.10	0.05	0.10	0.15	0.05	0.10	0.05	0.10	0.05	0.15	0.08	0.15	0.05	0.00	12

\* 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

<sup>3</sup>Quant Limit = Quantitation Limit = Lowest level of measurement.



**WATER QUALITY LABORATORY  
METAL ANALYSES  
PERIOD OF 01/01/2010 TO 12/31/2010  
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	Average	Max	Min	Quant <sup>3</sup> Limit	# of Tests
Aluminum	50-200 S	µg/L	BQL	--	--	BQL	--	--	28.4	--	--	BQL	--	--	BQL	28.4	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	27.2	--	--	39.2	--	--	48.1	--	--	35.3	--	--	37.5	48.1	27.2	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	29.3	--	--	28.8	--	--	35.4	--	--	34.5	--	--	32.0	35.4	28.8	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	BQL	25.0	12
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	25.0	12
Lead	15 AL	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Magnesium		mg/L	7.2	--	--	8.1	--	--	13.1	--	--	9.1	--	--	9.4	13.1	7.2	1.0	4
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	25.0	12
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	2.1	--	--	2.1	--	--	3.1	--	--	3.4	--	--	2.7	3.4	2.1	1.0	4
Selenium	50 P	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Silicon		mg/L	4.5	--	--	2.4	--	--	3.3	--	--	2.5	--	--	3.2	4.5	2.4	1.0	4
Silver	100 S	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Sodium		mg/L	22.1	13.1	15.7	21.6	21.5	17.9	27.7	22.4	29.7	21.3	25.1	15.4	21.1	29.7	13.1	1.0	12
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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