



**WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2012 TO 12/31/2012
Corbalis Treatment Plant Finished Water**

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	--	11	11	12	11	--	11	12	11	-	10
Alkalinity, Bicarbonate		mg/L	72	78	59	88	78	100	--	90	92	110	62	--	83	110	59	-	10
Alkalinity, Carbonate		mg/L	0	0	0	0	0	0	--	0	0	0	0	--	0	0	0	-	10
Alkalinity, Hydroxyl		mg/L	0	0	0	0	0	0	--	0	0	0	0	--	0	0	0	-	10
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	0	0	--	0	0	0	0	--	0	0	0	-	10
Alkalinity, Total		mg/L	72	78	59	88	78	100	--	90	92	110	62	--	83	110	59	-	10
Bromate	10 P	µg/L	BQL *	BQL *	BQL *	BQL *	BQL *	BQL *	BQL *	BQL *	BQL *	BQL *	BQL *	BQL *	BQL	BQL	BQL	5	44
Bromide		mg/L	0.02	0.01	0.01	0.02	0.01	0.02	--	0.02	0.01	0.02	BQL	--	0.01	0.02	BQL	0.01	10
Carbon Dioxide		mg/L	7	8	7	22	12	13	--	11	9	9	5	--	10	22	5	-	10
Chloride	250.0 S	mg/L	21.8	17.6	22.0	18.2	16.1	25.6	--	27.9	26.0	28.0	22.9	--	22.6	28.0	16.1	5.0	10
Chlorine, Free		mg/L	0.1 *	0.1 *	0.1 *	3.3 *	3.3 *	2.6 *	--	0.3 *	0.2 *	0.2 *	0.2 *	--	1.0	3.3	0.0	0.0	36
Chlorine, Total		mg/L	3.3 *	3.3 *	3.3 *	3.5 *	3.6 *	2.8 *	--	3.5 *	3.6 *	3.6 *	3.6 *	--	3.4	3.8	2.8	0.0	36
Color	15 S	Units	0	--	0	1	0	0	--	0	2	0	0	--	0	2	0	0	9
Dissolved Oxygen		mg/L	14.3	14.6	13.6	12.7	10.7	12.2	--	12.1	14.8	13.6	15.5	--	13.4	15.5	10.7	0.0	10
Fluoride	4.0/2.0 P/S	mg/L	0.7	0.6	0.5	0.7	0.7	0.7	--	0.7	0.6	0.7	0.7	--	0.7	0.7	0.5	0.2	10
Hardness, Calcium		mg/L	74	98	65	99	79	105	--	99	94	119	61	--	89	119	61	-	10
Hardness, Total		mg/L	107	134	92	142	105	148	--	139	136	167	85	--	126	167	85	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	--	--	--	--	--	--	--	BQL	--	--	--	--	BQL	BQL	BQL	0.05	1
N, Ammonia (Ammonia as N)		mg/L	0.91 *	0.89 *	0.82 *	BQL *	BQL *	BQL *	--	0.72 *	--	0.73 *	0.83 *	--	0.54	0.98	BQL	0.20	32
N, Nitrate (Nitrate as N)	10 P	mg/L	1.3	1.4	1.0	0.9	1.1	1.1	--	0.9	0.9	1.3	1.5	1.6	1.2	1.6	0.9	0.2	11
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.01	11
pH	6.5-8.5 S	Units	7.3	7.3	7.2	6.9	7.1	7.2	--	7.2	7.3	7.4	7.4	--	7.2	7.4	6.9	-	10
Phosphate as Phosphorous		mg/L	0.37	0.34	0.34	0.29	0.32	0.27	--	0.27	0.28	0.28	0.32	--	0.31	0.37	0.27	0.10	10
Solids, Total		mg/L	167	199	132	236	173	226	--	280	220	249	152	--	203	280	132	1	10
Solids, Total Dissolved	500 S	mg/L	88	184	134	246	166	224	--	284	192	182	130	--	183	284	88	1	10
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	1	10
Specific Conductivity		µmhos/cm	294	335	240	357	285	408	--	390	404	437	260	--	341	437	240	0	10
Sulfate	250.0 S	mg/L	28.9	46.2	25.3	49.3	27.8	46.2	--	47.8	45.0	54.0	18.6	--	38.9	54.0	18.6	5.0	10
Taste		Units	3	2	2	2	2	2	--	2	2	2	2	--	2	3	2	1	10
Temperature		°C	8.6	6.7	9.5	17.6	24.1	26.5	--	27.0	25.0	19.2	15.1	--	17.9	27.0	6.7	-	10
Threshold Odor Number	3 S	Units	6	1	1	6	7	3	--	6	1	1	1	--	3	7	1	0	10
Total Organic Carbon		mg/L	1.3	1.2	1.7	1.7	2.0	1.8	--	2.2	2.4	2.3	2.4	--	1.9	2.4	1.2	0.5	10
Turbidity	≤ 5 P	NTU	0.05	0.20	0.20	0.25	0.15	0.15	--	0.15	0.15	0.10	0.15	--	0.16	0.25	0.05	0.00	10

* 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.

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



**WATER QUALITY LABORATORY
METAL ANALYSES
PERIOD OF 01/01/2012 TO 12/31/2012
Corbalis Treatment Plant Finished Water**

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	--	--	--	38.3	--	30.7	--	--	BQL	38.3	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	29.0	--	--	45.7	--	--	--	32.8	--	40.8	--	--	37.1	45.7	29.0	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	31.8	--	--	39.8	--	--	--	38.7	--	48.4	--	--	39.7	48.4	31.8	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	28.9	26.9	BQL	--	BQL	BQL	BQL	BQL	--	BQL	28.9	BQL	25.0	10
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	25.0	10
Lead	15 AL	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Magnesium		mg/L	8.6	--	--	9.7	--	--	--	10.3	--	10.9	--	--	9.9	10.9	8.6	1.0	4
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	25.0	10
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	2.2	--	--	2.1	--	--	--	3.2	--	3.5	--	--	2.8	3.5	2.1	1.0	4
Selenium	50 P	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Silicon		mg/L	4.7	--	--	BQL	--	--	--	2.6	--	1.2	--	--	2.1	4.7	BQL	1.0	4
Silver	100 S	µg/L	BQL	--	--	BQL	--	--	--	BQL	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Sodium		mg/L	16.9	12.0	13.6	13.3	13.5	17.0	--	18.7	18.7	19.4	13.4	--	15.7	19.4	12.0	1.0	10
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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