



**WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2013 TO 12/31/2013
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	11	12	-	11	12	11	-	10
Alkalinity, Bicarbonate		mg/L	76	89	64	69	73	-	96	92	91	82	122	-	85	122	64	-	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	76	89	64	69	73	-	96	92	91	82	122	-	85	122	64	-	10
Bromate	10 P	µg/L	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	7*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL	8	BQL	5	45
Bromide		mg/L	0.02	0.02	0.02	0.02	0.01	-	0.01	0.01	0.03	0.02	0.04	-	0.02	0.04	0.01	0.01	10
Carbon Dioxide		mg/L	12	9	6	7	6	-	10	6	9	7	6	-	8	12	6	-	10
Chloride	250.0 S	mg/L	21.9	20.7	19.1	17.8	24.9	-	23.1	23.0	29.5	39.6	30.6	-	25.0	39.6	17.8	5.0	10
Chlorine, Free		mg/L	0.2*	0.1*	0.1*	0.1*	0.1*	-	0.3*	0.2*	0.3*	0.2*	0.1*	-	0.9	3.5	0.0	0.0	37
Chlorine, Total		mg/L	3.7*	3.7*	3.7*	3.4*	3.6*	-	3.5*	3.6*	3.8*	3.6*	3.3*	-	3.6	4.2	3.1	0.0	37
Color	15 S	Units	0	1	0	1	0	-	1	1	0	1	1	<5	1	1	0	0/5(Dec)	11
Dissolved Oxygen		mg/L	15.0	16.1	14.3	12.9	12.5	-	10.6	12.5	12.9	14.1	17.9	-	13.9	17.9	10.6	0.0	10
Fluoride	4.0/2.0 P/S	mg/L	0.6	0.7	0.7	0.7	0.7	-	0.7	0.7	0.7	0.7	0.8	-	0.7	0.8	0.6	0.2	10
Hardness, Calcium		mg/L	94	103	76	75	68	-	96	97	91	77	135	-	91	135	68	-	10
Hardness, Total		mg/L	127	140	101	102	94	-	139	133	138	114	188	-	128	188	94	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	ND	-	-	-	-	-	ND	ND	ND	0.05	1
N, Ammonia (Ammonia as N)		mg/L	0.95*	0.94*	0.90*	BQL*	BQL*	-	0.75*	0.79*	0.74*	-	0.75*	-	0.61	1.06	BQL	0.20	32
N, Nitrate (Nitrate as N)	10 P	mg/L	1.3	1.6	1.1	0.9	1.0	-	0.9	0.9	0.4	0.4	1.1	1.1	1.0	1.6	0.4	0.2	11
N, Nitrite (Nitrite as N)	1 P	mg/L	-	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	BQL	0.01	0.01	BQL	0.01	BQL	0.01	10
pH	6.5-8.5 S	Units	7.1	7.3	7.3	7.3	7.4	-	7.3	7.5	7.3	7.4	7.6	-	7.4	7.6	7.1	-	10
Phosphate as Phosphorous		mg/L	0.30	0.37	0.34	0.37	0.32	-	0.31	0.29	0.32	0.32	0.33	-	0.33	0.37	0.29	0.10	10
Orthophosphate as PO ₄		mg/L	0.93	1.13	1.04	1.12	0.97	-	0.94	0.89	0.99	0.97	1.01	-	1.00	1.13	0.89	0.31	10
Solids, Total		mg/L	192	226	147	169	180	-	220	216	240	213	285	-	209	285	147	1	10
Solids, Total Dissolved	500 S	mg/L	-	252	100	170	-	-	262	216	232	180	282	-	212	282	100	1	8
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	BQL	BQL	-	BQL	BQL	BQL	1	10
Specific Conductivity		µmhos/cm	336	359	281	266	259	-	385	358	383	333	478	-	344	478	259	0	10
Sulfate	250.0 S	mg/L	51.2	47.7	33.6	34.9	17.9	-	43.6	43.5	48.0	25.8	66.7	-	41.3	66.7	17.9	5.0	10
Taste		Units	2	2	3	2	2	-	2	2	3	2	2	-	2	3	2	1	10
Temperature		°C	8.9	7.2	9.3	15.6	19.2	-	25.9	25.0	23.4	20.5	12.8	-	16.8	25.9	7.2	-	10
Threshold Odor Number	3 S	Units	1	3	1	1	7	-	3	1	3	1	4	-	3	7	1	0	10
Total Organic Carbon		mg/L	1.7	1.5	1.5	1.3	1.3	-	1.8	2.0	1.8	2.1	1.8	-	1.7	2.1	1.3	0.5	10
Turbidity	≤ 5 P	NTU	0.10	0.10	0.10	0.10	0.10	-	0.10	0.10	0.05	0.10	0.05	-	0.09	0.10	0.05	0.05	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 01/01/2013 TO 12/31/2013
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	-	-	45.5	-	-	BQL	-	-	BQL	45.5	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	35.3	-	-	37.6	-	-	47.6	-	-	29.3	-	-	37.4	47.6	29.3	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	39.5	-	-	30.8	-	-	39.0	-	-	28.8	-	-	34.5	39.5	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	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	9.1	-	-	6.8	-	-	10.5	-	-	9.2	-	-	8.9	10.5	6.8	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	-	-	1.8	-	-	3.1	-	-	3.4	-	-	2.6	3.4	1.8	1.0	4
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Silicon		mg/L	1.4	-	-	1.7	-	-	2.5	-	-	1.6	-	-	1.8	2.5	1.4	1.0	4
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Sodium		mg/L	15.0	12.8	11.8	10.7	13.7	-	14.9	14.6	17.4	21.7	20.3	-	15.3	21.7	10.7	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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