



**WATER QUALITY LABORATORY
INORGANIC ANALYSES
PERIOD OF 01/01/2014 TO 12/31/2014
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	10	11	11	-	-	11	-	11	12	12	-	11	12	10	-	8
Alkalinity, Bicarbonate		mg/L	110	51	69	82	-	-	96	-	108	119	135	-	96	135	51	0	8
Alkalinity, Carbonate		mg/L	0	0	0	0	-	-	0	-	0	0	0	-	0	0	0	0	8
Alkalinity, Hydroxyl		mg/L	0	0	0	0	-	-	0	-	0	0	0	-	0	0	0	0	8
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	-	-	0	-	0	0	0	-	0	0	0	0	8
Alkalinity, Total		mg/L	110	51	69	82	-	-	96	-	108	119	135	-	96	135	51	0	8
Bromate	10 P	µg/L	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL*	BQL	BQL	BQL	5	43
Bromide		mg/L	0.02	0.02	0.02	BQL	-	-	BQL	-	0.03	0.02	0.03	-	0.02	0.03	BQL	0.01	8
Carbon Dioxide		mg/L	17	13	14	6	-	-	10	-	11	6	5	-	10	17	5	-	8
Chloride	250.0 S	mg/L	24.7	36.0	19.7	20.3	-	-	32.3	-	35.3	27.6	32.1	-	28.5	36.0	19.7	5.0	8
Chlorine, Free		mg/L	0.2*	0.1*	0.1*	0.1*	-	-	0.2*	-	0.3*	0.2*	0.1*	-	0.6	3.3	0.0	0.0	27
Chlorine, Total		mg/L	3.1*	3.2*	3.1*	3.3*	-	-	3.6*	-	3.9*	4.0*	4.0*	-	3.5	4.2	2.9	0.0	27
Color	15 S	Units	0	2	1	0	-	-	0	-	0	2	0	-	1	1	0	0	8
Dissolved Oxygen		mg/L	16.7	15.0	16.3	14.2	-	-	11.6	-	14.1	13.8	14.5	-	14.5	16.7	11.6	0.0	8
Fluoride	4.0/2.0 P/S	mg/L	0.7	0.6	0.7	0.7	-	-	0.7	-	0.7	0.7	0.7	-	0.7	0.7	0.6	0.2	8
Hardness, Calcium		mg/L	119	62	82	86	-	-	81	-	110	113	131	-	98	131	62	10	8
Hardness, Total		mg/L	165	83	106	113	-	-	122	-	168	160	179	-	137	179	83	10	8
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	ND	-	-	-	-	-	ND	ND	ND	0.05	1
N, Ammonia (Ammonia as N)		mg/L	0.80*	0.81*	0.74*	BQL*	-	-	0.72*	-	0.96*	0.89*	0.77*	-	0.69	1.06	BQL	0.20	27
N, Nitrate (Nitrate as N)	10 P	mg/L	2.03	1.31	1.10	1.02	-	-	0.78	-	0.94	0.84	0.85	1.07	1.10	2.03	0.78	0.20	9
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	BQL	BQL	BQL	-	-	BQL	-	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.01	9
pH	6.5-8.5 S	Units	7.1	6.9	7.0	7.4	-	-	7.3	-	7.3	7.6	7.7	-	7.3	7.7	6.9	-	8
Phosphate as Phosphorus		mg/L	0.31	0.31	0.31	0.33	-	-	0.31	-	0.32	0.29	0.31	-	0.31	0.33	0.29	0.10	8
Orthophosphate as PO ₄		mg/L	0.94	0.97	0.94	1.02	-	-	0.96	-	0.98	0.88	0.94	-	0.95	1.02	0.88	0.31	8
Solids, Total		mg/L	248	164	181	189	-	-	225	-	277	257	280	-	228	280	164	1	8
Solids, Total Dissolved	500 S	mg/L	-	148	164	242	-	-	222	-	268	270	292	-	229	292	148	1	7
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	-	-	BQL	-	BQL	BQL	BQL	-	BQL	BQL	BQL	1	8
Specific Conductivity		µmhos/cm	412	280	279	281	-	-	330	-	445	417	479	-	365	479	279	0	8
Sulfate	250.0 S	mg/L	45.2	27.2	33.5	29.5	-	-	25.3	-	56.9	48.5	59.7	-	40.7	59.7	25.3	5.0	8
Taste		Units	3	2	1	4	-	-	2	-	1	1	2	-	2	4	1	1	8
Temperature		°C	5.8	8.3	9.3	15.0	-	-	26.0	-	22.3	17.9	15.3	-	15.0	26.0	5.8	-	8
Threshold Odor Number	3 S	Units	7	8	6	6	-	-	1	-	5	1	1	-	4	8	1	0	8
Total Organic Carbon		mg/L	1.3	1.3	1.4	1.5	-	-	1.8	-	1.5	1.9	2.0	-	1.6	2.0	1.3	0.5	8
Turbidity	≤ 5 P	NTU	0.10	0.05	0.05	0.05	-	-	0.10	-	0.10	0.10	0.05	-	0.08	0.10	0.05	0.05	8

* 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 01/01/2014 TO 12/31/2014
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	-	-	56.5	-	-	49.6	-	-	26.5	56.5	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	38.7	-	-	38.2	-	-	42.2	-	-	40.2	-	-	39.8	42.2	38.2	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	46.2	-	-	33.4	-	-	31.9	-	-	47.4	-	-	39.7	47.4	31.9	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	25.0	8
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	-	-	BQL	-	BQL	BQL	BQL	-	BQL	BQL	BQL	25.0	8
Lead	15 AL	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	2.0	4
Magnesium		mg/L	10.1	-	-	7.6	-	-	10.3	-	-	11.5	-	-	9.9	11.5	7.6	1.0	4
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	-	-	BQL	-	BQL	BQL	BQL	-	BQL	BQL	BQL	25.0	8
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	-	-	1.8	-	-	3.1	-	-	3.6	-	-	2.7	3.6	1.8	1.0	4
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Silicon		mg/L	2.3	-	-	1.3	-	-	3.4	-	-	1.4	-	-	2.1	3.4	1.3	1.0	4
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	BQL	BQL	BQL	5.0	4
Sodium		mg/L	14.0	17.5	11.7	11.4	-	-	18.7	-	21.9	21.2	24.5	-	17.6	24.5	11.4	1.0	8
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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