



Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2019 TO 12/31/2019

Corbalis Treatment Plant Finished Water

Date Report Generated: 1/06/2020

Parameter	MCL <sup>1</sup>	Units <sup>2</sup>	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Quant Limit <sup>3</sup>
Aggressive Index Number		Units	11	11	11	11	11	11	11	11	11	11	11	-	N/A
Alkalinity, Bicarbonate		mg/L	66	71	72	76	63	93	96	108	118	119	116	-	0
Alkalinity, Carbonate		mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Hydroxyl		mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Total		mg/L	66	71	72	76	63	93	96	108	118	119	116	-	0
Bromate <sup>4</sup>	10 P	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5
Bromide		mg/L	BQL	0.02	0.02	0.01	BQL	BQL	0.02	BQL	0.02	0.03	0.01	-	0.01
Carbon Dioxide		mg/L	5	9	7	8	10	9	10	9	12	12	23	-	N/A
Chloride	250 S	mg/L	19.7	48.7	31.3	31.1	21.4	28.6	22.5	23.6	26.0	29.9	24.6	-	5.0
Chlorine, Free <sup>4</sup>		mg/L	0.2	0.2	0.1	3.4	3.2	3.4	0.4	0.4	0.3	0.3	0.2	-	0.0
Chlorine, Total <sup>4</sup>		mg/L	3.5	3.6	3.6	3.6	3.5	3.6	3.6	3.9	3.8	3.8	4.0	-	0.0
Color	15 S	Units	0	0	0	0	0	0	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	14.1	14.6	12.9	14.4	13.1	12.4	10.5	11.8	11.2	11.6	14.6	-	0.0
Fluoride	4.0 P / 2.0 S	mg/L	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	-	0.2
Hardness, Calcium		mg/L	60	73	74	73	60	85	96	104	115	119	120	-	10
Hardness, Total		mg/L	81	105	103	105	83	122	135	144	170	178	165	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N) <sup>4</sup>		mg/L	0.82	0.82	0.85	BQL	BQL	BQL	0.85	0.97	0.90	0.89	0.92	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	1.48 <sup>4</sup>	1.68	1.34	1.08 <sup>4</sup>	1.09	1.09	1.58 <sup>4</sup>	1.03	1.06	1.11 <sup>4</sup>	1.34	-	0.20
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.01
pH	6.5 - 8.5 S	Units	7.4	7.2	7.3	7.3	7.1	7.3	7.3	7.4	7.3	7.3	7.0	-	N/A
Phosphate as Phosphorous		mg/L	0.43	0.44	0.40	0.42	0.43	0.40	0.40	0.39	0.35	0.33	0.41	-	0.10
Orthophosphate as PO <sub>4</sub>		mg/L	1.31	1.34	1.23	1.29	1.31	1.21	1.23	1.19	1.06	1.01	1.25	-	0.31
Solids, Total		mg/L	164	208	176	163	127	188	195	222	252	253	226	-	1
Solids, Total Dissolved	500 S	mg/L	196	220	164	186	144	178	190	226	246	244	258	-	1
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	238	368	310	308	239	336	344	383	425	448	411	-	0
Sulfate	250 S	mg/L	15.8	22.9	24.8	21.6	15.7	25.0	31.3	41.5	52.7	57.9	47.1	-	5.0
Taste		Units	2	2	2	2	2	2	2	2	2	2	2	-	1
Temperature		°C	10.6	6.7	11.1	15.8	19.3	23.9	26.2	28.0	27.0	25.4	15.0	-	N/A
Threshold Odor Number	3 S	Units	-	4	8	7	8	4	4	1	3	1	6	-	0
Total Organic Carbon		mg/L	1.3	1.2	1.3	1.3	2.0	1.5	1.5	1.4	1.3	1.2	1.9	-	0.5
Turbidity	≤ 5 P	NTU	0.05	0.10	0.10	0.05	0.05	0.10	0.10	0.05	0.10	0.10	0.05	-	0.05

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 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

<sup>2</sup>mg/L = milligrams per liter, µg/L = micrograms per liter, µmhos/cm = micromhos per centimeter, NTU = Nephelometric Turbidity Units

<sup>3</sup>Quant Limit = Quantitation Limit : lowest level of measurement, N/A = not applicable

<sup>4</sup>Monthly result composed from an average of parameter results for finished water points of entry to distribution system

- Not sampled

\* Analysis pending



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Metal Analyses

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Aluminum	50 - 200 S	µg/L	BQL	-	-	BQL	-	-	58.8	-	-	48.7	-	-	25.0
Antimony	6 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	10 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	2000 P	µg/L	28.4	-	-	42.1	-	-	46.1	-	-	49.1	-	-	25.0
Beryllium	4 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	5 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium		mg/L	24.2	-	-	30.5	-	-	39.0	-	-	47.3	-	-	1.0
Chromium	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	1300 AL	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Lead	15 AL	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium		mg/L	6.3	-	-	8.6	-	-	9.2	-	-	15.5	-	-	1.0
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Mercury	2 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium		mg/L	2.1	-	-	2.1	-	-	2.9	-	-	3.5	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	4.5	-	-	2.3	-	-	3.0	-	-	1.7	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	11.2	26.9	17.0	17.7	12.8	16.5	13.2	14.4	16.6	18.4	16.3	-	1.0
Thallium	2 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Zinc	5000 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0

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