Annual Drinking Water Quality Report for 2020
Village of Elba
4 South Main St. Box 55
Elba, New York 14058
Public Water Supply ID#NY1800584

INTRODUCTION

To comply with State regulations, Village of Elba, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact the Village of Elba offices at (585) 757-6889. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings at Village Hall. The meetings are held the first Wednesday of each month at 7:00 PM.

WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves 706 people through 265 service connections. The Village is contracted with Genesee County, Through the Town of Batavia. Genesee County buys its water from two (2) sources, Monroe County Water Authority (MCWA) and the City of Batavia.

In 2020, Village water customers were charged quarterly $3.85 per 1,000 gallons used plus a Debt service charge of $17.70. Customers outside the Village were charged 1 ½ times this rate.

SOURCE WATER ASSESSMENT

CITY OF BATAVIA SOURCE WATER ASSESSMENT

A source water assessment was prepared through the New York Department of Health in 2002. It evaluated possible and actual threats to the City of Batavia's drinking water sources. The State source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface into the wells. The susceptibility rating is an estimate of the potential for contamination of the source water; it does not mean that the water delivered to consumers is, or will become contaminated. The source water assessments provide resource managers with additional information for protecting source waters in the future. The City of Batavia's water is derived from two drilled wells and the Tonawanda Creek. The source water assessment has rated these wells as having a medium-high to very high susceptibility to microbials, nitrates, petroleum products, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) to the wells and the associated industrial activity in the assessment area. In addition, the wells draw from an unconfined aquifer of unknown hydraulic conductivity. The source water assessment for the Tonawanda Creek has found an elevated susceptibility to contamination for this source of drinking water.

The amount of agricultural lands in the assessment area results in elevated potential for microbials, phosphorus, DBP precursors, and pesticides contamination. In addition, the moderate density of CAFOs (Concentrated Animal Feeding operations) in the assessment may add to the potential for contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality, based on their density in the assessment area. However, it appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination (particularly for protozoa). There is also noteworthy contamination susceptibility associated with other discrete contaminate resources; these facility types include: mines. Finally, it should be noted that relatively high flow velocities make river drinking-water supplies highly sensitive to existing and new sources of microbial contamination. While the source water assessment rates the City of Batavia's wells and the Tonawanda Creek as being susceptible to microbials, please note that the City of Batavia's water is filtered and disinfected to ensure that the finished water delivered to your home meets New York State's drinking water standards for microbial contamination. A copy of the assessment, including a map of the assessment area, can be obtained by contacting the Genesee County Health Department at (585) 344-2580, or Matt Worth at Batavia's City Hall at (585) 345-6315.

MCWA SOURCE WATER ASSESSMENT

MCWA's primary water source is Lake Ontario which is treated at the Shoremont Plant in Greece and the Webster Plant. They also operate the Corfu Plant, a small well supply in the Village of Corfu, and purchase water from the City of Rochester and the Erie County Water Authority (ECWA).

The New York State Department of Health has evaluated the susceptibility of water supplies statewide to potential contamination under the Source Water Assessment Program (SWAP). In general, the Great Lakes sources used by Shoremont and ECWA are not very susceptible because of the size and quality of the Great Lakes. Hemlock and Canadice Lakes, used by the Hemlock Plant, are also not very susceptible because of their size and controlled watersheds. The well water used by the Corfu Plant is more susceptible but the confined nature of the aquifer provides protection against the few nearby potential contaminant sources. Because storm and wastewater contamination are potential threats to any source water, the water provided to MCWA's customers undergoes rigorous treatment and testing prior to its delivery.

The Shoremont Plant and the purchased water producers all use a similar treatment process: coagulation, filtration and disinfection. Coagulants are added to clump together suspended particles, enhancing their removal during filtration. Chlorine is used to disinfect the water and to provide the residual disinfectant that preserves the

sanitary quality of the water as it travels from each plant to your home. Fluoride is also added to help prevent tooth decay. The treatment process at the Corfu Water Plant consists of filtration, softening and disinfection with chlorine.

These plants are in full compliance with all New York State and U.S. EPA operational and monitoring requirements.

For more information on the State's Source Water Assessment plan and how you can help protect the source of your drinking water, contact MCWA Customer Service at (585) 442-7200 or visit their website at www.MCWA.com.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. None of the compounds we analyzed exceeded the MCL. The table presented below depicts which compounds we detected during the 2020 calendar year. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Genesee County Health Department at (585) 344-2580.
As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. None of the compounds we analyzed for were detected in your drinking water.

City of Batavia 2020 Water Quality Summary

Substance (Unit of Measure)	Date Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source
1.4 Dioxane (ppb)	2020 quarterly	1	NA	0.021	0.021	No	Released from industrial and commercial sources and is associated with hazzardous waste sites
Nitrogen Ammonia (ppm)	8/4/2020	NA	NA	0.11	NA	No	Run off into streams from liquid organic waste products
Chloride (ppm)	8/4/2020	250	NA	146	NA	No	Naturally occurring or indicative of road salt contamination. Chlorides are in nature as salts of sodium, potassium and calcium; potassium chloride is used in the production of farming fertilizers.
Barium (ppm)	8/4/2020	2	2	0.015	NA	No	Discharge of drilling wastes; discharge from metal refineries, erosion of natural deposits
Chlorine Residual (ppm)	2020, hourly	4*	1.3*	1.03/avg.	0.75-1.32	No	By-product of drinking water chlorination
Fluoride (ppm)	8/4/2020	2.2	NA	1.1	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
	Daily	2.2	NA	yearly avg. 0.63	0.52-1.32		
Nitrate as N (ppm)	8/4/2020	10	10	0.81	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sulfate (ppm)	8/4/2020	250	NA	35	NA	No	Naturally occuring
Total Organic Carbon [TOC] (ppm)	2020, monthly	TT	NA	1.20 avg.	ND-1.9	No	Organic contaminants (natural organic substances, insecticides, herbicides, and agricultural chemicals) tha enter waterways in ranfall runoff
Sodium (ppm)	8/4/2020	TT	NA	60.2	NA	No	Naturally occurring; Road salt, Water softeners; Animal waste
Alkalinity as $CaCO^3$ (ppm)	8/4/2020	NA	NA	61.6	NA	No	Natural minerals; lime softening process
Calcium (ppm)	8/4/2020	NA	NA	37.7	NA	No	Mineral deposits
Magnesium (ppm)	8/4/2020	NA	15	18.8	NA	No	Dissolution of nickel in well water
Haloacetic Acids (ppb)	2020, quarterly	60	60	13.3	1.4 - 22.3	No	By-product of drinking water disinfection
Total Trihalomethanes [TTHMs] (ppb)	2020, quarterly	80	80	57.3	15.4 - 44.7	No	By-product of drinking water disinfection
Turbidity (NTU)	2020, daily	TT<1.0	NA	0.01	0 - 0.14	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limits) (NTU)	2020, daily	TT<0.3 NTU	NA	100%	NA	No	Soil runoff - November 2016 found the highest turbidity levels, but they were still well within tolerance levels of below 5.0 NTU
Turbidity [Distribution System] (NTU)	2019, weekly	< 5	NA	0.053	0.01 - 1.83	No	Cloudiness in water main disruptions and breaks. (See section on water main flushing)

Substance (Unit of Measure)	Date Sampled	AL	MCLG	Amount Detected 90th Percentile	Range Low-High	Sites Above AL/ Total Sites	Violation	Typical Source
Copper (ppm)	7/17/2019	1.3 ppm	1.3	0.0327	ND - 0.118	0/30	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	7/17/2019	15 ppb	0	0.0032	ND - 0.0141	0/30	No	Corrosion of household plumbing systems; erosion of natural deposits

*Turbidity is a measure of the cloudiness of the water. It is tested because it is a good indicator of the effectiveness of the filtration system. Our highest single turbidity measurement for the year occurred as indicated in the table. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. (Note that TT is dependent upon filtration method: conventional, 0.3 NTU; slow sand, 1.0 NTU; or diatomaceous earth filtration, 1.0 NTU.) Although the month as indicated in the Date column was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation. [2]The highest measurement of the monthly average distribution results for the year occurred as indicated in the table. [3]The level presented represents the 90th percentile of the 30 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal or below it. The 90th percentile is equal to or greater than 90% of the copper values detected in Batavia. Thirty samples were collected in 2019. The Action Level of 1.3 ppm for copper was not exceeded at any of the sites tested. [4]The level listed represents the 90th percentile of the 30 samples collected in 2019. The Action Level for lead was 0 of the 30 sites tested. [5]TT: 95% of samples are less than or equal to 0.3 NTU. [6]Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets. [7]This level represents the highest locational running annual average calculated from data collected.

90th Percentile - Each sample collected for lead and copper represents the 90th percentile of the total number of sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

AL (Action Level) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL (Maximum Contaminant Level) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as possible.

MCLG (Maximum Contaminant Level Goal) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA - Not applicable

ND (Not Detected) - Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Unit) - Measurement of the clarity, or turbidity, of water. It is important to keep turbidity in waters low as it is a good indicator of the effectiveness of our filtration system.

ppb (parts per billion) - One part substance per billion parts water (or micrograms per liter).

ppm (parts per million) - One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique) - A required process intended to reduce the level of a contaminant in drinking water.

Monroe County Water Authority

2020 Water Quality Monitoring Program Summary

Water Quality Monitoring Parameters				MCWA - SWTP Source - Lake Ontario			MCWA - WWTP Source - Lake Ontario			MCWA - CWTP Source - Groundwater Well(s)			Rochester Source - Hemlock Lake			ECWA - VWTP Source - Lake Erie		
	EPA / NYS MCL	EPA / NYS MCLG	UNITS	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020
Inorganics, Metals, & Physical Parameters:																		
Asbestos (Distribution System)	7	7	MF/L	ND		1 (2016)	ND		1 (2016)	ND		1 (2016)	ND		1 (2014)	ND		30 (2015)
Aluminum	NS	NS	µg/L	85.3	28 - 200	4	76	41 - 160	4	ND		4	5.3	ND - 21	4	176	150 - 400	4
Antimony	6	6	µg/L	ND		4	ND		4	ND		4	ND		1	ND		1
Arsenic	10	0	µg/L	ND		4	ND		4	ND		4	ND		4	ND		4
Barium	2	2	mg/L	0.021	0.02 - 0.023	4	0.021	0.019 - 0.023	4	0.1	0.1 - 0.11	4	0.017	0.017	1	0.021	0.021	1
Beryllium	4	4	µg/L	ND		4	ND		4	ND		4	ND		1	ND		1
Bromide	NS	NS	µg/L	0.019	0.018 - 0.02	4	0.02	0.019 - 0.02	4	NR			0.013	0.013	1	0.01	0.01	1
Cadmium	5	5	µg/L	ND		4	ND		4	ND		4	ND		1	ND		1
Calcium	NS	NS	mg/L	33.8	33 - 34	4	33.8	33 - 35	4	45.8	42 - 52	4	26.8	26 - 28	4	32.8	33 - 34	4
Chromium	100	100	µg/L	ND		4	ND		4	ND		4	ND		1	ND		1
Copper (Distribution System Samples)	NS	NS	µg/L	ND		4	ND		4	14.3	12 - 19	4	7.5	2.2 - 16	4	2.5	ND - 2.5	4
Copper (Customer Tap Samples)	AL* = 1300	1300	µg/L	160	5.3 - 200	52 (2018)	160	5.3 - 200	52 (2018)	110	4.9 - 240	20 (2018)	160	5.3 - 200	63 (2018)	110	4.9 - 240	20 (2018)
Cyanide	200	200	µg/L	ND		4	ND		4	ND		4	ND		4	ND		4
Fluoride	2.2	NA	mg/L	0.7	0.5 - 0.93	2194	0.70	0.18 - 1	2146	0.13	0.11 - 0.14	4	0.69	0.08 - 0.78	1087	0.69	0.58 - 0.8	56
Iron	300	NA	µg/L	ND		4	ND		4	ND		4	ND		3	ND		1
Lead (Distribution System)	NS	NS	µg/L	ND		4	ND		4	ND		4	ND		4	ND		4
Lead (Customer Tap Samples)	AL* = 15	0	µg/L	7.2	ND - 29	52 (2018)	7.2	ND - 29	52 (2018)	3	ND - 76	20	7.2	ND - 29	52 (2018)	3.0	ND - 76	20 (2018)
Magnesium	NS	NS	mg/L	8.5	8.5	1	8.4	8.4	1	16	16	1	6.2	6.2	1	8	8	1
Manganese	300	NA	µg/L	ND		4	ND		4	7	3.9 - 14	4	ND		4	2.7	2.7	1
Mercury	2	2	µg/L	ND		4	ND		4	ND		4	ND		4	ND		1
Nickel	100	NA	µg/L	ND		4	ND		4	ND		4	ND		4	ND		1
Nitrate	10	10	mg/L	0.28	0.21 - 0.35	4	0.31	0.23 - 0.39	4	ND		4	0.25	0.25	1	0.32	0.32	1
Nitrite	1	1	mg/L	ND		4	ND		4	ND		4	ND		1	ND		1
Potassium	NS	NS	mg/L	1.1	1.1	1	1.1	1.1	1	ND		1	1.1	1.1	1	1.1	1.1	1
Selenium	50	50	µg/L	ND		4	ND		4	ND		4	ND		1	ND		1
Silica	NS	NS	mg/L	0.44	0.34 - 0.65	4	0.45	0.33 - 0.68	4	7.88	7.6 - 8.1	4	1	0.52 - 1.4	4	0.4	0.64 - 0.56	4

Water Quality Monitoring Parameters				MCWA - SWTP Source - Lake Ontario			MCWA - WWTP Source - Lake Ontario			MCWA - CWTP Source - Groundwater Well(s)			Rochester Source - Hemlock Lake			ECWA - VWTP Source - Lake Erie		
	EPA / NYS MCL	EPA / NYS MCLG	UNITS	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020
Silver	100	NA	µg/L	ND		4	ND		4	ND		4	ND		1	ND		1
Sodium	NS	NS	mg/L	14.5	14 - 16	4	15.5	14 - 17	4	80.5	46 - 100	4	20.3	19 - 21	4	13	12 - 14	4
Sulfate	250	NA	mg/L	26.3	25 - 28	4	26.5	26 - 27	4	50	48 - 52	4	12	12	4	20.8	20 - 21	4
Thallium	2	0.5	µg/L	ND		4	ND		4	ND		4	ND		1	ND		1
Zinc	5	NA	mg/L	ND		4	ND		4	ND		4	ND		1	ND		1
Alkalinity	NS	NA	mg/L	89.8	87 - 93	4	90	89 - 91	4	253	250 - 253	4	72	67 - 73	4	92	88 - 94	4
Chloride	250	NA	mg/L	24.5	22 - 25	4	27.3	25 - 29	4	59.8	48 - 68	4	38	37 - 39	4	22.3	21 - 24	4
Color	15	NA	Color Units	ND		4	ND		4	ND		4	ND		4	ND		4
Conductivity	NS	NS	µmhos/cm	296.7	280 - 320	50	301.4	290 - 310	50	732.3	600 - 810	52	297.4	280 - 320	69	296.4	270 - 320	59
pH	NS	NS	pH units	7.48	7.25 - 8.24	366	7.5	7.23 - 7.79	359	7.4	7.33 - 7.68	187	7.87	7.02 - 8.13	366	8.01	7.56 - 8.3	1006
Total Dissolved Solids	NS	NS	mg/L	170	160 - 180	4	172.5	160 - 200	4	417.5	410 - 440	4	148	130 - 160	4	150	140 - 160	4
Total Hardness	NS	NS	mg/L	120	120	4	120	120	4	205	170 - 290	4	93	92 - 94	4	115	110 - 120	4
Total Organic Carbon	TT	NS	mg/L	1.78	1.7 - 1.9	4	1.78	1.7 - 1.8	4	1.02	0.90 - 1.3	4	2.6	2.1 - 3.6	4	1.78	1.7 - 1.9	4
Surfactants	NS	NS	mg/L	ND		4	ND		4	ND		4	ND		4	ND		4
Turbidity - Entry Point	TT **	NA	NTUs	0.04	0.02 - 0.08	2196	0.04	0.02 - 0.09	2149	0.22	0.04 - 1.77	52	0.06	0.04 - 0.1	2190	0.1	0.04 - 0.18	1006
Turbidity - Distribution System	TT ***	NA	NTUs	0.11	0.03 - 7	3778	0.11	0.03 - 7	3778	0.12	0.03 - 2.6	373	0.11	0.03 - 7	3778	0.12	0.03 - 2.6	373
Chlorine Residual - Entry Point	4	NA	mg/L	1.15	0.78 - 1.38	2196	0.77	0.46 - 0.97	2148	0.85	0.54 - 1.34	184	0.84	0.71 - 1.1	2182	1.49	1.29 - 1.64	1006
Chlorine Residual - Retail Distribution System	4 ****	NA	mg/L	0.55	ND - 1.83	3778	0.55	ND - 1.83	3778	0.53	ND - 1.27	373	0.55	ND - 1.83	3778	0.53	ND - 1.27	373
Microbiological Parameters:																		
Coliform - Retail Distribution System	TT *****	0	% Positive	2 positive samples - 0.05%		3778	2 positive samples - 0.05%		3778	1 positive sample - 0.27%		373	2 positive samples - 0.05%		3778	1 positive sample - 0.27%		373
				November: 1 positive sample - 0.39%			November: 1 positive sample - 0.39%			March: 1 positive sample - 2.86%			November: 1 positive sample - 0.39%			March: 1 positive sample - 2.86%		
Cryptosporidium (Source water prior to treatment)	TT	0	OoCysts/L	ND		4	0.004	ND - 0.05	12	NR		NR	ND		4	NR		NR
				None detectd.			March - 1 positive sample.			NR			None Detected.			NR		
Giardia Lamblia (Source water prior to treatment)	TT	0	Cysts/L	ND		4	ND		12	NR		NR	ND		4	NR		NR
				None detected.			None detected.			NR			None Detected.			NR		
Radionuclides:																		
Gross Alpha	15	0	pCi/L	ND		1 (2012)	ND		3 (2015)	ND		1 (2012)	ND		1 (2018)	ND		1 (2019)
Gross Beta	50	0	pCi/L	ND		1 (2012)	ND		3 (2015)	ND		1 (2012)	ND		1 (2018)	ND		1 (2019)
Combined Radium 226/228	5	0	pCi/L	ND		1 (2012)	ND		3 (2015)	ND		1 (2012)	1.06		1 (2018)	ND		1 (2019)
Uranium	30	0	pCi/L	ND		1 (2012)	ND		3 (2015)	ND		1 (2012)	ND		1 (2018)	NR		

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	EPA / NYS MCL	EPA / NYS MCLG	UNITS	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020
p,p' DDT	5	NA	µg/L	ND		4	ND		4	ND		4	ND		4	ND		4
PCB's Total	500	0	ng/L	ND		4	ND		4	ND		4	ND		4	ND		1
Pentachlorophenol	1	0	µg/L	ND		4	ND		4	ND		4	ND		4	ND		4
Perchlorate	NS	NS	µg/L	ND		1	ND		1	ND		1	ND		1	ND		1
Perfluorooctanesulfaonic Acid (PFOS)	10	NA	ng/L	2.55	2.5 - 2.6	2	2.65	2.5 - 2.8	2	ND		4	ND		2	ND		2
Perfluorooctanoic Acid (PFOA)	10	NA	ng/L	2.1	2.1	2	1.1	ND - 2.2	2	ND		4	ND		2	ND		2
Pichloram	50	NA	µg/L	ND		1	ND		1	ND		1	ND		1	ND		1
Propachlor	50	NA	µg/L	ND		4	ND		4	ND		4	ND		4	ND		4
Simazine	4	4	µg/L	ND		4	ND		4	ND		4	ND		4	ND		4
Total Chlordane	2	0	µg/L	ND		4	ND		4	ND		4	ND		4	ND		4
Toxaphene	3	0	µg/L	ND		4	ND		4	ND		4	ND		4	ND		4
Disinfection By-products:																		
Total Trihalomethanes (TTHMs)	80	NA	µg/L	34.7	16 - 58	52	34.7	16 - 58	52	40	18 - 63	8	34.7	16 - 58	52	40	18 - 63	8
				Maximum LRAA = 46.5			Maximum LRAA = 46.5			Maximum LRAA = 53			Maximum LRAA = 46.5			Maximum LRAA = 53		
Haloacetic Acids (HAA5)	60	NA	µg/L	9.7	ND - 22	52	9.7	ND - 22	52	10.7	3.1 - 23	8	9.7	ND - 22	52	10.7	3.1 - 23	8
				Maximum LRAA = 14.8			Maximum LRAA = 14.8			Maximum LRAA = 11.5			Maximum LRAA = 14.8			Maximum LRAA = 11.5		
Emerging Contaminants - Per & Polyfluorinated Alkyl Acids (PFAS):																		
N-ethyl Perfluorooctanesulfonamidoacetic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
N-methyl Perfluorooctanesulfonamidoacetic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
Perfluorobutanesulfonic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
Perfluorodecanoic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
Perfluorododecanoic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
Perfluoroheptanoic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
Perfluorohexanesulfonic acid	NS	NS	ng/L	1	ND - 2	2	ND		2	ND		4	ND		2	ND		2
Perfluorohexanoic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
Perfluorononanoic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
Perfluorotetradecanoic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
Perfluorotridecanoic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2
Perfluoroundecanoic acid	NS	NS	ng/L	ND		2	ND		2	ND		4	ND		2	ND		2

Water Quality Monitoring Parameters				MCWA - SWTP Source - Lake Ontario			MCWA - WWTP Source - Lake Ontario			MCWA - CWTP Source - Groundwater Well(s)			Rochester Source - Hemlock Lake			ECWA - VWTP Source - Lake Erie		
	EPA / NYS MCL	EPA / NYS MCLG	UNITS	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020	Average	Range	Samples in 2020
UCMR4 - HAA Groups: Data from 2019.				Combined Distribution System Data														
Total HAA (5)	60	NS	µg/L	14.1	0.74 - 31	60												
Total HAA (6) Br	NS	NS	µg/L	7.4	ND - 12	60												
Total HAA (9)	NS	NS	µg/L	21	0.74 - 42	60												
Bromochloroacetic acid	NS	NS	µg/L	2.2	ND - 4.4	60												
Bromodichloroacetic acid	NS	NS	µg/L	3.1	ND - 5.9	60												
Chlorodibromoacetic acid	NS	NS	µg/L	1.0	ND - 1.6	60												
Dibromoacetic acid	NS	NS	µg/L	0.5	ND - 1.4	60												
Dichloroacetic acid	NS	NS	µg/L	6.0	0.74 - 15	60												
Monobromoacetic acid	NS	NS	µg/L	ND	ND - 0.47	60												
Monochloroacetic acid	NS	NS	µg/L	ND	ND - 2.3	60												
Tribromoacetic acid	NS	NS	µg/L	0.5	ND - 2.7	60												
Trichloroacetic acid	NS	NS	µg/L	7.5	ND - 15	60												

Key Terms and Abbreviations:

MCL = Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as possible.

MCLG = Maximum Contaminant Level Goal - The level of a contaminant below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

TT = Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

AL* = Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. If >10% of results are greater than 15 µg/l for lead or 1300 µg/L for copper, remediative steps are required. In MCWA's combined retail area, 90% of the samples were less than 12 µg/L for lead and 94 µg/L for copper.

LRAA = Locational Running Annual Average - The annual average contaminant concentration at a monitoring site.

mg/L = Milligram (1/1,000 of a gram) per Liter = ppm = parts per million

NA = Not Applicable **NR** = Not Required / Not Reported **NS** = No Standard **NT** = Not Tested

Not Detected = ND = Absent or present at less than the testing method detection level. All testing methods are EPA approved with detection limits much less than the MCL.

NTU = Nephelometric turbidity Unit, a measure of the clarity of water.

µg/L = Microgram (1/1,000,000 of a gram) per Liter = ppb = parts per billion

ng/L = Nanogram (1/1,000,000,000 of a gram) per Liter = ppt = parts per trillion

pg/L = Picogram (1/1,000,000,000,000 of a gram) per Liter = ppq = parts per quadrillion

pCi/L = PicoCuries per Liter

MCWA - SWTP = Monroe County Water Authority - Shoremont Water Treatment Plant.

MCWA - WWTP = Monroe County Water Authority - Webster Water Treatment Plant.

MCWA - CWTP = Monroe County Water Authority - Corfu Water Treatment Plant.

Rochester = City of Rochester - Hemlock Water Filtration Plant. MCWA purchses water from Rochester's water system.

ECWA - VWTP = Erie County Water Authority - Van de Water Water Treatment Plant. MCWA purchases water from ECWA's water system.

MF/L = Million Fibers per Liter. A measure of the presence of asbestos fibers longer than 10 micrometers.

(year) = Most recent testing. Monitoring frequency requirements vary depending on compound.

UCMR4 = Unregulated Contaminant Monitoring Rule 4 - Periodic EPA required monitoring of up 30 unregulated water qualit parameters to establish baseline occurrence data. EPA combines this data with research to establish future regulations.

µmhos/cm = micro ohms per centimeter

Cont = Continuously monitored via online measurements.

** = 95% of measurements within a given month must be less than 0.3 NTUs.

*** = Average of monthly distribution system turbidity samples must be less than 5.0 NTUs.

**** = 95% of monthly distribution system samples must have a measurable chlorine residual.

***** = No more than 5% of monthly samples can be positive.

Note: Total Hardness is also expressed in grains per gallon. The Total Hardness of the Ontario, Hemlock, & Erie supplies are 7.3, 5.5, and 7.0 grains per gallon respectively. The Total Hardness of the Corfu supply is 14.7 grains per gallon.

TOWN OF BATAVIA - SAMPLING RESULTS

SUBSTANCE [UNITS]	MCL [MRDL]	MCLG	HIGHEST RUNNING ANN. AVG[1]	RANGE Low-High	DATE SAMPLED	MEETS EPA STANDARDS
Chlorine Residual [mg/L]	M	N/A	N/A	0.07-1.31	2020 (few times per week)	Yes
Haloacetie Acids (HAAs) [ug/L] *Batavia Consolidated PWS*	60	N/A	16.7	10.6 - 20.5	2020 (quarterly)	Yes
Haloacetie Acids (HAAs) [ug/L]	60	N/A	N/A	8.5 -11-7	8/3/20 & 11/4/20	N/A
Alexander WD#s PWS						
Haloacetie Adds (HAAs) frg/L] *Townline Water PWS*	60	N/A	19.O	11.5 - 22.1	2020 (quarterly)	Yes
Haloacetie Acids (HAAs) [ug/L] *Alabama WD#z PWS*	60	N/A	15-4	11.8 -17.8	2020 (quarterly)	N/A
Haloacetie Acids (HAAs) [ug/L] *Elba WD#2 PWS*	60	N/A	N/A-	11.1 -11.2	8/3/20 & 11/4/20	N/A
Total Trihalomethanes (TTHMs) [ug/L] *Batavia Consolidated PWS*	80	N/A	47-3	26.8 - 72.9	2020 (quarterly)	Yes
Total Trihalomethanes (TTHMs) [ug/L] *Alexander WD#2* PWS	So	N/A	N/A	81.8 – 99.1	8/3/20 & 11/4/20	N/A
Total Trihalomethanes (TTHMs) [ug/L] *Townline Water PWS*	80	N/A	52.1	32.4-68.7	2020 (quarterly)	Yes
Total Trihalomethanes (TTHMs) [ug/L] *Alabama WD#2 PWS*	80	N/A	59-1	34.8-84.5	2020 (quarterly)	Yes
Total Trihalomethanes (TTHMs) [ug/L] *Elba WD#2 PWS*	80	N/A	N/A	71.3-84.1	8/3/20 & 11/4/20	N/A
SUBSTANCE [UNITS]	**AL**	**SITES SAMPLED**	**SITES DETECTED**	**RANGE** Low-High	**DATE SAMPLED**	**MEETSEPA STANDARDS**
Asbestos Fibers [MFL] *Batavia Consolidated PWS*[2]	7-0	6	1	ND-0,2	12/29/14	Yes
SUBSTANCE [UNITS]	**AL**	**MCLG**	**90TH %TILE RESULT[3]**	**RANGE** Low-High	**DATE SAMPLED**	**MEETS EPA STANDARDS**
Copper [mg/L]	1-3	1.3	0.0708	0.0035 - 0.559	July 2018	Yes
Lead [mg/L]	*0.015*	0	0.0034	ND-0.0103	July 2018	Yes

[1]These levels represent the highest locational running annual average calculated from data collected,
[2]Alexander WD#2, Townline Water, Alabama WD#2, and Elba WD#2 PWS's do not have asbestos cement pipes in the system and are waived from asbestos fibers sampling.
[3]The ooth percentile is equal to or greater than *oo%* of the lead and copper values detected at your water system.

Table of Detected Contaminants - Village Of Elba 2020							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Nitrate	No	April 19 2016	3.06	Mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits.
Copper	No	2020	0.32 0.0035 – 0.92 (note 1)	Mg/L	1.3	1.3 AL	Short term exposure: Gastrointestinal distress. Long term exposure: Liver or kidney damage.
Lead	No	2020	<0.0010 <0.0010- <0.0010 (note 2)	Mg/L	0	0.015 AL	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight defects in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
Total THM HAA5	No	2020/QTR	54.5 18 - 124 22 11 - 38 (note 3)	Ug/L Ug/L	n/a n/a	80 ug/L 60 ug/L	By-product of drinking water chlorination.
Barium	No	12/16/14	0.078	Mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Gross Alpha	No	6/9/2014	0.3	pCi/L	0	15	Erosion of natural deposits.
Radium-228	No	6/9/2014	0.3	pCi/L	0	15	Erosion of natural deposits.
Chlorine Residual	No	2020	0.36	Mg/L	n/a	4	Water additive used to control microbes.

Notes:

1-2 – The level represents the 90th percentile of the 10 sites tested. The AL was not exceeded at any of the sites listed.

3 – These levels represent the highest locational running annual average calculated from data collected.

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the tables, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. A single TTHM sample collected on August 5, 2020 measured 124 ug/l however a violation did not occur. A violation occurs if the average of the four most recent sets of quarterly samples at a particular monitoring location exceed 80 ug/l.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2020, our system was in compliance with applicable State drinking water operating requirements. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. We constantly test for various contaminants in the water supply to comply with regulatory requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seed advice from their health care provider about their drinking water. EPA/CDC guidelines from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Village of Elba is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

As you can see by the table, our system had no violations, but we have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.