

City of Bronson

2022 Water Quality Report

The City of Bronson is pleased to present the 2022 Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you everyday. Our constant goal is to provide you with a dependable supply of drinking water. This report will help you understand the efforts we make to continually improve the water treatment process and protect our water resources. The City of Bronson is committed to ensuring the quality of your water.

Your water comes from two groundwater wells, each over 67 feet deep drawing water from two sites at 220 and 194 North Parham Road. The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based primarily on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source is "Very High". If you would like to know more about the report or what the utility does about source water protection, please contact Chuck Buckley at (517) 369-5745 or email him at bronsonh2o@hotmail.com.

We encourage our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Council meetings. They are held on the second Monday of each month at 5PM at the City Office, located at 141 S. Matteson Street. The City of Bronson Water Department routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 1st, 2022.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million – or one ounce in 7,813 gallons of water.

Parts per billion (ppb) or Micrograms per liter (µg/l) - one part per billion – or one ounce in 7,813,000 gallons of water.

Parts per trillion (ppt) or Nanograms per liter (ng/l) - one part per trillion - or one ounce in 7,813,000,000 gallons of water.

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal – The 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 level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline. (1-800-462-4791)

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. The substances can be microbes, inorganic or organic chemicals, pesticides and herbicides and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline. (1-800-426-4791)

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 deficits in attention span and learning abilities. Adults who drink the water over many years could develop kidney problems or high blood pressure. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

UNREGULATED CONTAMINANT MONITORING 2022

Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. Monitoring helps the U.S. EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. We monitored for these contaminants and the results of monitoring are available on request.

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2022. We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen.

Contaminant	Violation Y/N	Units Of Measurement	Level Detected	Highest Level Detected	Range of Detection	Likely Source of Contamination	MCL	MCLG or MRDL	AL
Regulated Contaminants									
Arsenic Analyzed 2020	N	mg/l	<.001	<.001	N/A	Erosion of natural deposits; runoff from glass and electronics production wastes	10 mg/l	0	
Barium Analyzed 2014	N	mg/l	0.08	0.08		Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	2 mg/l	2 mg/l	
Radioactive Contaminant: Alpha emitters Gross Alpha	N	pCi/L	0.96 <3.00			Erosion of natural deposits	15 pCi/L	0	
Combined radium 226 & 228	N	pCi/L					5 pCi/L	0	
Nitrate Analyzed 2022	N	mg/l	4.62	4.91	4.6-4.91	Runoff from fertilizer use; erosion of natural deposits	10 mg/l	10 mg/l	
Fluoride Analyzed 2022	N	mg/l	0.55	0.76	.46 - .76	Erosion of natural deposits; water additive which promotes strong teeth	4 mg/l	4 mg/l	2.0 mg/l
Sodium Analyzed 2022	N	mg/l	13.6	15.8	11.9 - 15.8	Erosion of natural deposits	N/A	N/A	
TTHM Total-trihalomethanes Analyzed 2022	N	mg/l	0.00483			By-product of drinking water chlorination	0.800	N/A	

HAA5 Haloacetic Acids Analyzed 2022	N	mg/l	<0.00100			By-product of drinking water chlorination	0.600	N/A	
Chlorine Analyzed 2022	N	mg/l	.26	.51	.06 - .51	Water additive used to control microbes	4	4 MRDL	

Per- and polyfluoroalkyl substances PFAS) 7/26/2022	Violation Y/N	Unit of Measurement	Level Detected	Highest level Detected	Range of Detection	Likely Source Of Contamination	MCL	MCLG or MRDL	AL
Hexafluoropropylene oxide dimer acid (hfpo-da)	N	ppt	<2			Discharge and waste from industrial	370	N/A	
Perfluorobutane Sulfonic acid (PFBS)	N	ppt	<2			Discharge and waste from industrial facilities; stain-resistant treatments	420	N/A	
Perfluorohexane Sulfonic acid (PFHxS)	N	ppt	<2			Firefighting foam; discharge and waste from industrial facilities	51	N/A	
Perfluorohexanoic acid (PFHxA)	N	ppt	<2			Firefighting foam; discharge and waste from industrial facilities	400,000	N/A	
Perfluorononanoic acid (PFNA)	N	ppt	<2			Discharge and waste from industrial facilities; breakdown of precursor compounds	6	N/A	
Perfluorooctane Sulfonic Acid (PFOS)	N	ppt	<2 ppt			Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities	16	N/A	
Perfluorooctanoic acid (PFOA)	N	ppt	<2 ppt			Discharge and waste from industrial facilities; stain-resistant treatments	8	N/A	

Contaminants Regulated in the Distribution System	Units of						MCL	MCLG	AL
	Violation Y/N	Measurement	90 th Percentile	Level Detected	HLD	Possible Source			
Copper Analyzed 2021	N	mg/l	.3 <i>Based on 90th percentile</i>	0.0670	0.0 – .0670	Corrosion of household plumbing systems; erosion of natural deposits	1.3 mg/l	1.3mg/l	1.3 mg/l
Lead Analyzed	N	ppb	0.0 <i>Based on 90th Percentile</i>	<0.001	<.001 – <.001	Lead service lines, corrosion of household plumbing, including f	15ppb	0 ppb	0 ppb

90% Percent of our samples collected were at or below the level reported for our water.

Our water supply has 637 lead service lines and 207 service lines of unknown material out of a total of 907 service lines.

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Bronson 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://water.epa.gov/drink/info/lead>.

Although the following is a listing of detected contaminants found in the water supply, the City of Bronson has tested for over 130 different contaminants.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.