Gaston 2021 Water Quality Summary

INORGANIC	DATE	RESULT	MCL	MCLG	Violates	SOURCES
BARIUM	2018	0.37 MG/L	2.0 MG/L	2.0 MG/L	No	Erosion of natural deposits
Nitrate	2020	<1.0 mg/L	10 mg/L	10 mg/L	No	Run off from Fertilizer use; Leaching from Septic tanks; sewage; Erosion of Natural deposits
FLUORIDE	2018	0.22 MG/L	4.0 MG/L	4.0 MG/L	No	Erosion of natural deposits.

Contaminant (Units)	Date Sampled	Gaston Result	Action Level	Maximum Contaminant Level Goal	Violates	Major Sources In Drinking Water
Copper (ppm) 90th% Value	**2021**	**0.38 mg/L**	**1.3 mg/L**	**1.3 mg/L**	**No**	**Corrosion of Household Plumbing Systems; Erosion of Natural Deposits; Leaching from wood Preservatives.**
Lead (ppm) 90th% Value	**2021**	**4.5 ppb**	**15 ppb**	**0 ppb**	**No**	**Corrosion of Household Plumbing Systems; Erosion of Natural Deposits; Leaching from wood Preservatives.**

DISINFECTION BYPRODUCTS

Date	Contaminant	MCL	Units	Result	Violates	Likely Sources
2021	Total Haloacetic Acid (HAA5)	60	ppb	13	N	By-Product of Drinking Water Disinfection
2021	Total Triba-lomethanes (tthm)	80	ppb	7	N	By-Product of Drinking Water Disinfection

RADIOLOGICAL CONTAMINANTS

Date	Contaminant	MCL	MCLG	Results	Violates	Likely Sources
6/2/2020	combined radium 226/228	5	0	0.8	N	Erosion of natural deposits.
6/2/2020	Gross Alpha exc. Radon and Uranium	15	0	0.39	N	Erosion of natural deposits

DISINFECTION

Date	Contaminant	MRDL	MRDLG	Results	Violates	Likely Sources
2021	Chlorine	4	4	1.32	N	Erosion of natural deposits.

VIOLATIONS

Volatile Organic compounds and Inorganic Compounds Monitoring

Violation type	Violation begin	Violation end	Violation Explanation
Monitoring Routine Minor	1/1/2021	12/31/2021	We failed to complete all Required tests of our drinking Water for the contaminant And period indicated.

***Testing was done 1/24/2022 with no MCL Violations**

GASTON WATER WORKS
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of where your water comes from, what contaminants are tested for, and how the results match up to the Environmental Protection Agency (EPA) and State Standards.

Your water comes from a groundwater source. There are two wells sunk approximately 300 feet deep. The water treatment plant is an iron and manganese removal plant and has a firm capacity of 144,000 gallons per day. The water is pumped from the wells through a filter at the treatment plant where iron and manganese are removed. Chlorine is added to safeguard against microbial contaminants such as viruses and bacteria. After filtration and disinfection the water moves directly to the distribution system and into two elevated storage tanks. One 100,000 gallon and one 60,000 tank provides storage and fire protection for the residents of Gaston.

Contaminants that may be present in source water before we treat it 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 metal, which can be naturally occurring or a result of urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

***Organic Chemical Contaminants,** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

***Pesticides and Herbicides,** which may come from a variety of sources such as agriculture and residential uses.

***Radioactive Contaminants,** which are naturally occurring.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA regulations.

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. We 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 or at http://www.epa.gov/safewater/lead.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 the advice from their health care providers. EPA and CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (1-800-426-4791).

Drinking Water including Bottled Water, reasonably can 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 risks can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800-426-4791).

WATER QUALITY DATA

The table with this report lists all of the drinking water contaminants that we detected during the 2021 Calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

Unless otherwise noted, the data presented in this table are from testing done January 1 through December 31, 2020. The state requires us to monitor for certain contaminants less than once per year because the concentration of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Terms and Abbreviations used in the Table:

Maximum Contaminant Level Goal (MCLG): the level of a contaminant in drinking water below which there is known or expected risk.

Maximum Contaminant Level (MCL): the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

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

ND: not detected at testing limit. **Mg/l:** milligrams per liter. **PPM:** parts per million, a measure for concentration equivalent to milligrams per liter. **PPB:** parts per billion. **Ug/l:** micrograms per liter. **pCi/L:** picocuries per liter, a measure for radiation.

MRDL: Maximum Residual Disinfectant Level, the highest level of disinfectant allowed in drinking water.

MRDLG: Maximum Residual Disinfectant Level Goal, the level of drinking water disinfectant below which there is no known or expected risk to health.

TT: Treatment Technique, a required process

intended to reduce the level of a contaminant in drinking water.

If you have any questions regarding the quality of your drinking water, please do not hesitate to call: **Ray Gillespie (Operator in Responsible Charge)** (765) 358-4355.