2023 Consumer Confidence Water Quality Report for Calendar Year 2022



City of North Newton
Public Water Supply ID# KS2007906

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Additional information:
EPA's Safe Drinking Water Hotline800-426-4791
https://www.epa.gov/safewater
https://www.cdc.gov

You are invited to attend any North Newton City Council meeting to ask questions. These are held the second Monday of each month at 7:00 P.M. in City Hall.



April 2023

North Newton is happy to present the annual water quality report. Included in this brochure is information about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to keeping you, our customers, informed of the efforts that are made continually to improve your water system.

IMPORTANT HEALTH INFORMATION

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, those with HIV/AIDS or other system disorders, some elderly, and infants may be particularly at risk of infection. These people should seek advice about drinking water from their health care providers. The U.S. EPA/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 800-426-4791.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. Our water is treated according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The sources of drinking water (tap and bottled) 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 activity.

Your water is treated to remove several contaminants and a disinfectant is added to protect you against microbial contaminants. The Safe Drinking Water Act required states to develop a Source Water Assessment for each public water supply that treats and distributes raw source water in order to identify potential contamination sources.

WATER QUALITY DATA

The tables on the reverse side list all of the drinking water contaminants which were detected during the 2022 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these 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.

THE BOTTOM LINE: THE WATER PROVIDED TO YOU IS SAFE.

TERMS & ABBREVIATIONS

AL (Action Level): the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Lang (Langelier Index): used to determine how corrosive drinking water is. -0- indicates non-corrosive. MCL (Maximum Contaminant Level): the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the goal as feasible using the best available treatment technology. ppb: parts per billion or micrograms per liter (μg/L). ppm: parts per million or milligrams per liter (mg/L). Running Annual Average: an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs. SMCL (Secondary Maximum Contaminant Level): recommended level for a contaminant that is not regulated and has no MCL. UMHOS/CM: electrical conductivity measures the rate at which a small electrical current flow through a solution, usually measured in micromhos per centimeter. 90th Percentile: Value is calculated by first putting all samples in order from lowest to highest and numbering them. Multiply number of samples by .09. The sample result with the number corresponding to this calculation is the 90th percentile.

Your water is a blend of groundwater from four wells owned by North Newton and is treated at our own treatment facility. The tables on this page list all of the drinking water contaminants detected during the mandated monitoring periods.

| Disinfection Byproducts - 2022 | Highest Running Annual Average | Range | MCL | Typical Source |
|--------------------------------|-----------------------------------|-------|-----|---|
| TOTAL TRIHALOMETHANES | 7 ppb | 6.8 | 80 | By-product of drinking water chlorination |

| Metal – Monitoring Period | 90 th Percentile | Range | AL | Sites over AL | Below EPA Limits? | Typical Source |
|---------------------------|-----------------------------|--------|-----|---------------|-------------------|---------------------------------|
| COPPER, FREE - 2022 | 0.88 ppm | .04697 | 1.3 | 0 | Yes | Corrosion of household plumbing |
| LEAD - 2022 | 1.1 ppb | 0-1.5 | 15 | 0 | Yes | Corrosion of household plumbing |

| Chlorine/Chloramines - Max. Disinfection Level | | Monitoring Period Average | Running Annual Average | |
|--|-----------|---------------------------|------------------------|--|
| | 2022-2022 | 1.000 mg/L | 0.8 mg/L | |

If present, elevated levels of <u>LEAD</u> can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from material and components associated with service lines and home plumbing. When your water has been sitting for several hours, minimize the lead exposure risk by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, have your water tested. For more information call the Safe Drinking Water Hotline or go to https://www.epa.gov/safewater/lead. <u>COPPER</u> 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. Over many years people could suffer liver or kidney damage. People with Wilson's Disease should consult their doctor. Some people who drink water containing <u>FLUORIDE</u> in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years of age. <u>NITRATE</u> in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

| Regulated Contaminants - Collection Date * | Highest Value | Range | MCL | Below EPA Limits? | Typical Source | |
|--|---------------|--------|-----|-------------------|---|--|
| ARSENIC - 5/10/21 | 4.1 ppb | 4.1 | 10 | Yes | Erosion of natural deposits | |
| BARIUM – 5/10/21 | 0.24 ppm | 0.24 | 2 | Yes | Discharge from metal refineries | |
| CHROMIUM – 5/10/21 | 2.2 ppb | 2.2 | 100 | Yes | Discharge from steel & pulp mills | |
| FLUORIDE – 4/18/22 | 0.43 ppm | 0-0.43 | 4 | Yes | Erosion of natural deposits; water additive | |
| NITRATE – 1/18/22 | 7.6 ppm | 7.6 | 10 | Yes | Runoff from fertilizer use | |
| SELENIUM – 5/10/21 | 4.1 ppb | 4.1 | 50 | Yes | Erosion of natural deposits | |

POSSIBLE CONTAMINANTS IN SOURCE WATER BEFORE TREATMENT:

<u>Microbial contaminants</u> – such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. <u>Inorganic contaminants</u> – such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming. <u>Pesticides and herbicides</u> – may come from a variety of sources such as storm water runoff, agriculture and residential users. <u>Radioactive contaminants</u> – can be naturally occurring or the result of mining activity. <u>Organic contaminants</u> – including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can come from gas stations, urban storm water runoff, and septic systems.

WHAT IS "HARD WATER"? If substantial amounts of either calcium or magnesium, both nontoxic minerals, are present in drinking water, the water is said to be hard. Hard water does not dissolve soap readily, so making lather for washing and cleaning is difficult. Our water is considered very hard. Water containing little calcium or magnesium is called soft water.

North Newton's 250 mg/L = 14.62 grains per gallon

Coliform Bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with disease-causing organisms. When coliform bacteria are found special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the City will notify the public.

Our water system tested a minimum of two samples per month in accordance with the Revised Total Coliform Rule for microbiological contaminants. No violations occurred during the 2022 calendar year.

| Secondary Contaminants – No Federal MCL Established; Collection Date * | Highest Value | SMCL |
|--|---------------|------|
| ALKALINITY, TOTAL – 5/10/21 | 230 mg/L | 300 |
| CALCIUM – 5/10/21 | 76 mg/L | 200 |
| CHLORIDE – 5/10/21 | 26 mg/L | 250 |
| CONDUCTIVITY @ 25 C UMHOS/CM - 5/10/21 | 640 umhos/cm | 1500 |
| CORROSIVITY – 5/10/21 | 0.12 Lang | 0 |
| HARDNESS, TOTAL (as CACO3) – 5/10/21 | 250 mg/L | 400 |
| MAGNESIUM – 5/10/21 | 14 mg/L | 150 |
| NICKEL – 5/10/21 | 0.0048 mg/L | 0.1 |
| PH - 11/30/21 | 7.7 PH | 8.5 |
| PHOSPHORUS, TOTAL – 5/10/21 | 0.27 mg/L | 5 |
| POTASSIUM – 5/10/21 | 1.4 mg/L | 100 |
| SILICA – 11/30/21 | 31 mg/L | 50 |
| SODIUM – 5/10/21 | 39 mg/L | 100 |
| SULFATE – 5/10/21 | 34 mg/L | 250 |
| TOTAL DISSOLVED SOLIDS – 5/10/21 | 400 mg/L | 500 |
| ZINC – 5/10/21 | 0.024 mg/L | 5 |

^{*} Because of sampling schedules, results may be older than one year.