## 2023 Annual Drinking Water Quality Report Mendon City

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources have been determined to be from groundwater sources. Our water sources are Upper & Lower Springs, Cobblestone Well, Booster Station Well, and Coldwater Well. The Cobblestone, Booster Station, and Coldwater Wells are blended during the summer months of June-September. This results in a post-blend Nitrate level that is within EPA guidelines.

The Drinking Water Source Protection Plan for Mendon City is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. Our sources have been determined to have a low level of susceptibility from potential contamination sources. We have also developed management strategies to further protect our sources from contamination. Please contact us if you have questions or concerns about our source protection plan.

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first. If you'd like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

This report shows our water quality and what it means to you our customer.

If you have any questions about this report or concerning your water utility, please contact Kirk Taylor at 435-770-6138. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Thursday of each month at 6:00 pm at the Mendon Station.

Mendon City routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2023. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In the following 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:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

**ND/Low - High** - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter (ug/l)* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

*Parts per quadrillion (ppq) or Picograms per liter (picograms/l)* - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*Millirems per year (mrem/yr)* - measure of radiation absorbed by the body.

*Million Fibers per Liter (MFL)* - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**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 treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level (MCL)* - 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 (MCLG)* - The "Goal" (MCLG) is 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 contaminants.

*Date*- Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates may seem out-dated.

**Waivers** (W)- Because some chemicals are not used or stored in areas around drinking water sources, some water systems have been given waivers that exempt them from having to take certain chemical samples, these waivers are also tied to Drinking Water Source Protection Plans.

## Microbiological Contaminants:

**Total Coliform.** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

## Inorganic Contaminants:

**Nitrate.** Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and bluebaby syndrome.

Nitrate 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.

As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

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 from their health care providers about drinking water. 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 (800-426-4791).

**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. Mendon City 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 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, 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.

We at Mendon City work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

## **TCR Tables**

Coliform Bacteria	Violation	+ Sample Count		MCLG	MCL	Year Sampled	Likely Source of Contamination
	Y/N						
Coliform Bacteria	N	0		0	5	2023	Naturally present in the environment

Microbiological	Violation	+ Sample Count		MCLG	MCL	Year Sampled	Likely Source of Contamination
Contaminants	Y/N						
Fecal coliform and E.coli	N	0		None	None	2023	Human and animal fecal waste

Lead and Copper	Violation	Level Detected	Unit	MCLG	MCL	Year Sampled	Likely Source of Contamination
Zeud und Coppei	Y/N	ND/Low-High	Measurement				
Copper	N	0.0076-0.182	ppm	1.3	1.3	2023	Erosion of natural deposits; Leaching from wood
							preservatives; Corrosion of household plumbing
							systems.
Lead	N	ND-0.003	ppm	0	0.015	2023	Corrosion of household plumbing systems, erosion
							of natural deposits

Disinfection By-products	Violation	Level Detected	Unit Measurement	MCLG	MCL	Year Sampled	Likely Source of Contamination
	Y/N	ND/Low-High					
Total Trihalomethanes	N	.8-2.0	ppb	0	80	2023	By-product of drinking water disinfection
Total Haloacetic Acids	N	ND	ppb	0	60	2023	By-product of drinking water disinfection

Inorganic Contaminants	Violation	Level Detected ND/Low-High	Unit	MCLG	MCL	Year Sampled	Likely Source of Contamination
	Y/N		Measurement				
Cyanide, Total	N	ND	mg/L	0.2	0.2	2022	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride	N	0.138-0.392	mg/L	4	4	2022	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	N	.33-7.85	mg/L	10	10	2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sulfate	N	10.8-14.4	mg/L	250	250	2022	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
Total Dissolved Solids (TDS)	N	336-480	mg/L	1000	1000	2022	Erosion of natural deposits
Turbidity	N	.28-449	NTU	5	5	2022	Soil runoff

Metals	Violation	Level Detected	Unit	MCLG	MCL	Year Sampled	Likely Source of Contamination
	Y/N	ND/Low-High	Measurement				
Arsenic	N	0.0047-0.022	mg/L	0.01	0.01	2022	Erosion of natural deposits; runoff from orchards;
Barium	N	0.035-0.068	mg/L	2	2	2022	Discharge of drilling wastes; discharge from metal
Selenium	N	0.0005	mg/L	0.05	0.05	2022	
Sodium	N	17.9-73.7	mg/L	None	None	2022	Discharge from petroleum and metal refineries;

Radioactive	Violation	Level Detected	Unit	MCLG	MCL	Year Sampled	Likely Source of Contamination
Contaminants	Y/N	ND/Low-High	Measurement				
Gross Alpha	N	3.0 +/- 1.1	pCi/L	15	15	2022	Erosion of natural deposits
Gross Beta	N	7.1 +/- 1.8	pCi/L			2022	Erosion of natural deposits
Radium-228	N	0.75 +/- 0.42	pCi/L	5	5	2022	Erosion of natural deposits