

A vertical blue bar on the left side of the page contains a high-speed photograph of water splashing, with various droplets and bubbles visible against a light blue background. The rest of the page is white.

Our Drinking Water is SAFE!

**Sand Creek
2021 Consumer Confidence Report**

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality 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 source is a well located on Elizabeth Parkway.

This report shows our water quality and what it means.

CONTACT INFORMATION:

If you have any questions about this report or concerning your water utility, please contact Chris Spross with Churchill County at 775-423-7627. We want our valued customers to be informed about their water utility. A copy of this Consumer Confidence Report will also be available on the Churchill County's website.

Please continue to conserve water. If you see anyone tampering with any part of the water system, please be sure they are authorized. If you do not feel comfortable approaching the individual, please contact either SPB Utility Services, Inc. at 775-329-7757 or the Churchill County Sheriff's Department at 775-423-3116. The security of our water system is of high importance and it is required by law.

Sand Creek routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2021. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

DEFINITIONS:

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:

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

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 - 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.

Variations & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions. (Only systems with a variance or exemption are REQUIRED to include this definition. In addition, it is REQUIRED to provide an explanation of the reasons for the variance or exemption, date issued, status or remediation.)

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

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

Maximum Contaminant Level (MCL) - (mandatory language) 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) - (mandatory language) 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) - (mandatory language) 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) - (mandatory language) 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.

Contaminants							
Contaminant	Level Detected	Range of Detection	Unit of Measure	MCL	MCLG	Violation	Likely Source
Disinfection Byproducts							
Haloacetic Acids (HAA5) Collection Date: 08/04/21	7.9	7.9	ug/L	60		N	By-product of drinking water chlorination.
Total Trihalomethanes (TTHMs) Collection Date: 08/04/21	5.9	5.9	ug/L	80	n/a	N	By-product of drinking water chlorination
Inorganic Chemicals							
Arsenic Collection Dates: 01/21/21-10/07/21	6	2-6	ppb	10	0	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium Collection Date: 05/11/16	0.031	0.031	mg/L	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper Collection Dates: 07/14/20-07/17/20	0.13	0.008-0.13	mg/L	1.3	1.3	N	Corrosion of household plumbing systems, erosion of natural deposits and leaching from wood preservatives.
Fluoride Collection Date: 05/15/19	0.2	0.2	mg/L	2	4	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Radionuclides							
Alpha Particles Collection Dates: 05/10/17	0.383	0.383	pCi/L	15	0	N	Decay of natural and man-made deposits
Beta Particles and Photon Emitters Collection Date: 05/10/17	6.34	6.34	pCi/L	50	0	N	Decay of natural and man-made deposits.
Radium 226 Collection Date: 05/10/17	0.107	0.107	pCi/L	5	0	N	Erosion of natural deposits
Radium 228 Collection Date: 05/10/17	0.117	0.117	pCi/L	5	0	N	Erosion of natural deposits
Secondary Contaminants							
Chloride Collection Date: 05/15/19	15	15	mg/L	400		N	Runoff/leaching from natural deposits; seawater influence
Magnesium Collection Date: 05/15/19	2.2	2.2	mg/L	150		N	
Odor Collection Date: 05/15/2019	3	3	TON	3		N	
pH Collection Date: 05/15/19	8.19	8.19	mg/L	8.5		N	
Sodium Collection Date: 05/15/19	48	48	mg/L	200	20	N	Erosion of natural deposits
Sulfate Collection Date: 05/15/19	47	47	mg/L	500		N	Runoff/leaching from natural deposits; industrial wastes
TDS Collection Date: 05/15/19	230	230	mg/L	1000		N	Runoff/leaching from natural deposits

HEALTH EFFECTS:

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a

mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Your water is treated at the Sand Creek Water plant by adsorption, accomplished by passing a greensand filtration media. Greensand is a product manufactured by treating glauconite with manganous sulfate potassium permanganate. Greensand has the ability to absorb and catalyze the oxidation of iron and manganese. Using greensand as an absorptive media, arsenic, hydrogen sulfide, manganese radium and other elements can be removed from drinking water to meet EPA requirements.

Your water is also treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien.

Some people may be more vulnerable to contaminants 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 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 (800-426-4791).

While your water meets the EPA's standard for Lead, *if present at elevated levels* this contaminant 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. Your Water System 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 drinking 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>.

The state has completed an assessment of our source water. The Sand Creek Public Water System is currently in compliance with all state and federal safe drinking water requirements. The water system operates one well along with an arsenic treatment plant to provide safe drinking water to the water users. Routine safe drinking water monitoring has detected elevated levels of naturally occurring arsenic above the current maximum contaminant level. The Aquifer is considered to have a high vulnerability to arsenic contamination. Ethylbenzene and Xylene have been detected above the detection limit. The Aquifer is considered to have a moderate vulnerability to VOC contamination. The water system is considered to have a low vulnerability to IOC (excluding arsenic), SOC, microbiological and radionuclide contamination.

Please call our office if you have questions. We at Sand Creek Water 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.