

**ANNUAL WATER CONSUMER CONFIDENCE REPORT (CCR) FOR THE CITY OF RUFUS
FOR CALENDAR YEAR 2021**

The City of Rufus is pleased to present to you our annual water CCR.
This report is an annual requirement of the Environmental Protection Agency.
Our water sources are two wells that draw from aquifers in the Deschutes basin.
We are pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact **Public Works Director, Ron Jensen at 739-2460**. 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 City Council meetings. They are held on **the second Wednesday of every month, at 7:00 p.m., at the Rufus City Hall**.

The City of Rufus 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 1, 2021 to December 31, 2021.
Test Results will be available at City Hall.

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.

MCLGs allow for a margin of safety.

Well # 3

TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants						
SODIUM 07/24/08	N	1. PPM	22.3 PPM	0	0	EROSION OF NATURAL DEPOSITS.
BARIUM 07/27/18	N	.0002 PPM	.0215 PPM	2 PPM	2 PPM	DISCHARGE OF DRILLING WASTES; DISCHARGE FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS
SULFATE 08/15/06	N	.5 PPM	13 PPM		250 PPM	EROSION OF NATURAL DEPOSITS
FLUORIDE 07/24/18	N	.2 PPM	.666 PPM	4 PPM	4 PPM	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE WHICH PROMOTES STRONG TEETH DISCHARGE FROM FERTILIZER AND ALUMINUM FACTORIES
System Disinfection Byproducts						
TOTAL TRIHALMOETHANES (TTHMS) 08/15/17	N	. 5 PPB	.0197 PPB	0 PPB	80 PPB	BY-PRODUCT OF DRINKING WATER CHLORINATION
HALOACETIC ACID (HAA5) 8/15/17	N	1 PPB	1.8 PPB	NA	60 PPB	BY-PRODUCT OF DRINKING WATER CHLORINATION
COPPER 8/15/19	N	50 PPB	.51 PPB	0 PPB	1300 ppb	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS. EROSION OF NATURAL DEPOSITS LEACHING FROM WOOD PRESERVATIVES
LEAD 8/15/19	N	2 PPB	2 PPB	0 PPB	15 PPB	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS; LEACHING FROM

Well #1**TEST RESULTS**

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
GROSS ALPHA EMITTERS 04/15/17	N	2.05 Pcl/l	.93	Pcl/l	0	Erosion of natural deposits
COMBINED RADIUM 4/15/17	N	.880 Pcl/l	.096 + or - .987	O	5	Erosion of natural deposits
NITRATE 03/15/21 CORRECTED ON 4/22	Y	.1 PPM	4.11 2022 MEASUREMENT	10 PPM	10 PPM	RUN OFF FROM FERTILIZER USE; LEAKING SEPTIC TNKS & SEWAGE; EROSION OF NATURAL DEPOSITS
NITRITE 10/24/17	N	.1 PPM	.167 PPM	1 PPM	1 PP,	RUN OFF FROM FERTILIZER USE; LEAKING SEPTIC TNKS & SEWAGE; EROSION OF NATURAL DEPOSITS
ARSENIC 10/24/2017	N	.1 PPB	1.51 PPB	0	10PPB	EROSION OF NATURAL DEPOSITS; RUN OFF FROM ORCHARDS; RUN OFF FROM GLASS & ELECTRONICS PRODUCTION WASTE
FLUORIDE 10/24/17	N	.1 PPM	.374 PPM	4 PPM	4 PPM	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE WHICH PROMOTES STRONG TEETH; DISCHARGE FROM FERTILIZER AND ALUMINUM FACTORIES
SODIUM 10/24/17	N	0	16.7 PPM	0	0	EROSION OF NATURAL DEPOSITS

Lead. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels. MAINTENANCE NOTICE: The City of Rufus will be testing for other contaminants this year. For questions or concerns please call the Public Works Director, Ron Jensen at 541-739-2460.

Lead and Copper tests were taken from five different households in Rufus. All five tested well below the EPA limits. “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. City of Rufus 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 or at “www.epa.gov/safewater/lead.”

Infants and children who drink water that contains 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 this water over many years could develop kidney problems or high blood pressure. 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 compounds associated with service lines and home plumbing. The City of Rufus 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 or at www.epa.gov/safewater/lead

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals 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 at 1-800-426-4791.

Arsenic: Some people who drink water that contains arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Nitrate: Infants below the age of six months who drink water that contains nitrate in excess of the MCL could become seriously ill and if untreated could die. Symptoms include shortness of breath and blue baby 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.

THMs (Total Trihalomethanes): People who drink water containing trihalomethanes in excess of the MCL over many years have an increased risk of getting cancer.

MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

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.

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 - (mandatory language) The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal - (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.

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 drinking water disinfectant below which there is no know or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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).

IF YOU HAVE ANY QUESTIONS REGARDING THIS REPORT OR IF YOU WOULD LIKE TO RECEIVE A LIST OF 40 CONTAMINANTS TESTED FOR PLEASE CALL THE CITY OF RUFUS AT 739-2321

Households should have an emergency supply of water. A good rule of thumb is each household should store a minimum of one gallon of water per person, per day for fourteen days, plus extra water for pets.