2023 JPUD Annual Consumer Confidence Report: Quilcene Water System, Water ID # AB292N

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Agency (EPA)			
Drinking Water Hotline			

The Quilcene water system is owned, operated, and managed by PUD No.1 of Jefferson County. Your District Commissioner is Dan Toepper. If you wish to attend a board meeting, the PUD board currently meets remotely via Zoom and at its conference room at 310 Four Corners Road every first and third Tuesday and second Tuesday in December. For details, go to jeffpud.org for more information on how to attend.

Your water comes from one well: Source 01 is 165 feet deep in sands and gravels. The well is located on the grounds of the United States Forest Service (USFS) Ranger Station in Quilcene. The PUD has a senior water right application pending to expand the water system with another source and increase in the number of connections available in Quilcene. The PUD will install a new 100,000-gallon water tank this year that will provide commercial fire flow.

SourceSusceptibility RatingSO1 ABR399Moderate

Health Effects

Below are the water quality testing results for the Quilcene water sources for calendar year 2022. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as person 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791). Some health effects linked to prolonged exposure to unhealthful levels of contaminants are in the tables below.

Lead in Your Drinking Water

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. The PUD 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 the 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.

PFAS Testing Data:

Quilcene source water was initially tested for per and polyfluoroalkyl substances (PFAS) otherwise known as "forever chemicals in late 2022. However, due to high testing demand and the limited number of labs available nationally, sample results are still pending. Due to the rural location of the well and based on other similar sources we have tested, we expect all 25 PFAS tested will be below the sample method detection limit or less than 2 parts per trillion.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally-occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water 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 metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas production, mining or farming.	 Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. 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. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for human health.
Definitions:	
mg/L: milligrams per liter or parts per million (ppm).	Maximum Contaminant Level (MCL): The highest level
μ /L: microgram per liter or parts per billion (ppb).	of a contaminant allowed in drinking water. MCLs are
μ /L: microgram per liter or parts per billion (ppb).	of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best
µ/L: microgram per liter or parts per billion (ppb). Ng/L: nanogram per liter or parts per trillion (ppt)	of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology. Maximum Contaminant Level Goal (MCLG): The level of
μ/L: microgram per liter or parts per billion (ppb). Ng/L: nanogram per liter or parts per trillion (ppt) pCi/L: Pico curies per liter, measure of radioactivity	of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology. Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a
µ/L: microgram per liter or parts per billion (ppb). Ng/L: nanogram per liter or parts per trillion (ppt) pCi/L: Pico curies per liter, measure of radioactivity ppm: parts per million or milligrams per liter.	of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology. Maximum Contaminant Level Goal (MCLG): 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. Action Level (AL): The concentration of a contaminant
 μ/L: microgram per liter or parts per billion (ppb). Ng/L: nanogram per liter or parts per trillion (ppt) pCi/L: Pico curies per liter, measure of radioactivity ppm: parts per million or milligrams per liter. Presence/Absence: Indicates positive/negative test for 	of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology. Maximum Contaminant Level Goal (MCLG): 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. Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other
 μ/L: microgram per liter or parts per billion (ppb). Ng/L: nanogram per liter or parts per trillion (ppt) pCi/L: Pico curies per liter, measure of radioactivity ppm: parts per million or milligrams per liter. Presence/Absence: Indicates positive/negative test for 	of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology. Maximum Contaminant Level Goal (MCLG): 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. Action Level (AL): The concentration of a contaminant

Water Quality Testing in Last 5 years:	
Testing Type	Testing Date
Microorganisms	Monthly
Nitrate	Annual
Arsenic	2016
Lead & Copper	2019
Inorganic Potential Health Effects from Long-Term	2016
Exposure Above the MCL	
Radionuclide	2020
Volatile Organic Potential Health Effects from Long-Term	2021
Exposure Above the MCL	
Synthetic Organic Potential Health Effects from Long-	2016
Term Exposure Above the MCL (herb., insect., pest.)	
Per and Polyfluoroalkyl Substances (PFAS)	2022 (results pending)

Regulated Primary Contaminants						
Microorganisms (Distribution)	MCLG	MCL	Your Water Results	Sample Date	Violation (Y/N)	Potential Health Effects from Long-Term Exposure Above the MCL
Total Coliform Bacteria	Absence	Presence	Absence	1 time per month	N	Not a health threat in itself; it is used to indicate whether other potentially harmful bacteria may be present
Primary Inorganic Contaminants	MCLG	MCL	Your Water Results	Sample Date	Violation (Y/N)	Potential Health Effects from Long-Term Exposure Above the MCL
Nitrate	10 mg/l	10 mg/L	ND	10/11/2022	N	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 blue-baby syndrome.
Arsenic	Zero	10 ppb	3 ppb	1/14/2016	N	Skin damage or problems with circulatory systems, and may have increased risk of getting cancer

Lead and Copper (Distribution) Lead	MCLG (ppb) Zero	Action Level (ppb) 15	Your water results 2 homes	Sample Date 9/22/2022	Violation (Y/N) No	Potential Health Effects from Long-Term Exposure Above the MCL Infants and children: Delays
			tested ND, 3 tested from 1 to 2 ppb			in physical or mental development; children could show slight deficits in attention span and learning abilities. Adults: Kidney problems; high blood pressure
Copper	1300	1300	5 homes tested ND	9/22/2022	No	Short term exposure: Gastrointestinal distress Long term exposure: Liver or kidney damage. People with Wilson's Disease should consult their personal doctor if the amount of copper in their water exceeds the action level
Volatile Organic Contaminants	MCLG	MCL	Your Water Results	Sample Date	Violation (Y/N)	Potential Health Effects from Long-Term Exposure Above the MCL
VOC (56 total)	Various	Various	ND	10/7/2021	N	Various, liver and kidney problems, increased risk of cancer
Radionuclides (Source 1)	MCLG	MCL	Your Water Results	Sample Date	Violation (Y/N)	Potential Health Effects from Long-Term Exposure Above the MCL
Gross Alpha	Zero	15 pCi/L	ND	5/29/2020	N	Increased risk of cancer
Radium 228	Zero	5 pCi/L	ND	5/29/2020	N	Increased risk of cancer

Unregulated Secondary Contaminants						
Inorganic	MCLG	Recommended Standard	Your Water Results	Sample Date	Violation (Y/N)	Potential Health Effects from Long- Term Exposure
Chloride (mg/L)	NA	250 mg/L	57.5 mg/L	7/7/2021	N	Dehydration, cardiac disease, gastro-intestinal problems

All PUD water system water quality data for sources and distribution can be found at the WA Department of Health Sentry Internet website at <u>https://fortress.wa.gov/doh/eh/portal/odw/si/</u>. Search "Quilcene".