

## CONTAMINANT MONITORING TEST RESULTS

Contaminant	Last Test Date	Violation Yes/No	Level Detected	MCLG	MCL	Likely Source of Contamination	Comments
Turbidity	December 2018	No	Highest Single Measurement 0.08 NTU	N/A	TT <= 0.3 NTU in at least 95% of samples each month	Soil runoff	Turbidity measures the cloudiness of water and is a good indicator of the effectiveness of our filtration system. 100% of our samples were below the MCL.
Copper	September 2018	No	0.56 ppm	1.3 ppm	AL = 1.3 ppm	Corrosion of household plumbing; erosion of natural deposits; wood preservative leaching	Lead and Copper are tested every 3 years; samples are taken directly from a selection of customer's taps.
Lead	September 2018	No	13 ppb	0 ppb	AL = 15 ppb	Corrosion of household plumbing systems; Erosion of natural deposits	None of the tests sites for Lead and Copper exceeded the action levels (AL).
Fluoride	December 2018	No	Average = 0.7 ppm Range = 0.1 - 1 ppm	4 ppm	4 ppm	Erosion of natural deposits; water additive which promotes strong teeth	Fluoride is added to our water during the treatment process; Fluoride levels are monitored daily.
Nitrate	February 2018	No	0.336 ppm	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural resources	Nitrate is tested for every year at the entrance to our distribution system.
Sodium	March 2016	No	8.5 ppm	Not Regulated	Not Regulated	Erosion of natural deposits; saltwater intrusion; residual of drinking water treatment process	Sodium and other inorganic contaminants are tested for every 9 years at the entrance to our distribution system
Total Trihalomethanes (TTHM)	November 2018	No	Running Annual Average 47 ppb Range = 44 - 50 ppb	N/A	80 ppb	By product of drinking water disinfection	Disinfection Byproducts are tested annually; compliance with the MCL's are based on annual running averages.
Haloacetic Acids (HAA5)	November 2018	No	Running Annual Average 33 ppb Range = 32 - 33 ppb	N/A	60 ppb	By product of drinking water disinfection	Disinfection Byproduct samples are taken at location representing the maximum residence time of the water in the distribution system.
Chlorine	December 2018	No	Highest Annual Average 0.84 ppm Range = 0.4-1.2 ppm	4 ppm (MRDLG)	MRDL = 4.0 ppm	Water additive used to control microbes	Chlorine levels are tested daily; Chlorine samples are taken at the same time and at the same place as Total Coliform samples.



P.O. Box 250  
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VALUED CUSTOMER



# 2019 WATER QUALITY REPORT

2018 YEAR END

## Water Quality Standards

We're very pleased to provide you with this year's Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been to provide you with a safe and dependable supply of drinking water. This is accomplished by continually monitoring our water for various contaminants and pollutants to ensure that we meet or exceed regulatory standards. Specifically, ten samples per month are collected to check for bacteriological organisms; water is monitored daily to ensure we are maintaining a proper disinfectant level, proper fluoride level, and that the turbidity level is acceptable; samples are collected based on a schedule provided by the Oregon Health Authority to test for disinfection byproducts, lead and copper, inorganic and organic compounds, pesticides and herbicides, and radiological contaminants.

## Our Source

The City of Warrenton's water is supplied by the Lewis and Clark River, Big South Fork and Little South Fork of the Lewis and Clark River and Camp C Creek. The State has performed a source assessment on the City's water supply. This assessment is used to identify potential sources of contamination for the drinking water. The State has determined that the primary source of contamination for our source is from soil erosion from clear cutting and rock pits. For more information about this assessment, please contact us at (503) 861-0912.

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 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.

## Treating the Water

The 5 1/2 miles of raw water transmission pipes deliver water from our sources to either the 16 million gallon raw water reservoir or directly to the treatment plant. The raw water first goes through a pretreatment system and then through a membrane filtration system called continuous microfiltration. After filtration, the water is disinfected with chlorine that is generated on site.

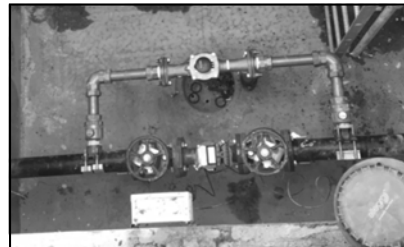
## Pipes and Reservoirs

The City of Warrenton has two treated water reservoirs with a total volume of 7 million gallons, which provide both optimum system pressure and water supply redundancy to all parts of our water delivery area. Approximately, 94 miles of potable water pipe make up our treated water distribution and transmission systems. The water system supplies the City of Warrenton and portions of the county outside the City limits, primarily to the south of Warrenton.

## Contact Us

The City of Warrenton values our customers and works hard to ensure your satisfaction. If you would like to learn more about issues effecting your drinking water and community, please attend a City Commission meeting. Meetings are held the second and fourth Tuesdays of every month. More information can be found at [www.ci.warrenton.or.us](http://www.ci.warrenton.or.us)

If you have questions or comments about this report or other issues regarding your drinking water please contact our Water Quality Technician, Brian Crouter, at (503) 861-0912.



## Important Health Information from the EPA

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 (1-800-426-4791).

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 City of Warrenton 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 <http://www.epa.gov/safewater/lead>.

## Water Quality Results

The City of Warrenton routinely monitors the drinking water for contaminants as directed by State and Federal laws and rules. The data in the results table are for the monitoring period of January 1, 2018 to December 31, 2018, unless otherwise noted. Although Warrenton's water supply and distribution are tested for all regulated and some unregulated contaminants, only the contaminants that were detected are included in this report.

## Key to Test Result Abbreviations

**Parts per million (ppm):** One part per million would be the equivalent of one drop of water in approximately 130 gallons.

**Parts per billion (ppb):** One part per billion would be the equivalent of one drop of water in approximately 130,000 gallons.

**Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water (turbidity). Turbidity in excess of 5 NTU is just noticeable to the average person.

**Variations:** State permission not to meet an MCL or a treatment technique under certain conditions.

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

**Maximum Contaminant Level (MCL):** 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 Contamination 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.

**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.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.