



## Annual Drinking Water Quality Report

Oakridge Water Department

Drafted June 2020 for Calendar Year 2019

The City is pleased to provide you with this year's Annual 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 to you a safe and dependable supply of drinking water. Our water source is a field of five (5) wells located near Salmon Creek south of Hills Street, and it is treated with chlorine in a continuous chlorination chamber located in the same general area.

We are pleased to report that our drinking water is safe and meets all federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Bryan Cutchen, City Administrator at (541) 782-2258. 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. The Oakridge Water System is operated by the Department of Public Works under the administration of the City Council. The Council holds regular meetings on the first and third Thursdays of each month.

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. 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, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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 water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The City of Oakridge Water System routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of new monitoring for the period of **January 1<sup>st</sup> to December 31<sup>st</sup>, 2019.**

The following table of contaminants, which is of interest to the consumer, identifies detectable constituents of your drinking water:

## TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination	Health Effect
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### Antimony

Antimony  June 2019	NO	0.554	ppb	0	6 ppb	Alloying agent used to strengthen Copper, lead, and tin. Antimony compounds are commonly used to make flame-retardant materials.	Short term exposure in excess of the maximum contaminant level (MCL) of antimony can result in irritation of the skin and lungs. Long periods of exposure in excess of the MCL can result in lung diseases, heart problems, diarrhea, severe vomiting, and stomach ulcers.
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### Beryllium

BERYLLIUM  June 2019	NO	0.242	ppb	0	4 ppb	Alloying agent used in structural materials to increase overall strength of metal.	Common health effects associated with overexposure in excess of the maximum contaminant level (MCL) of beryllium include beryllium sensitization, chronic beryllium disease (CBD), and lung cancer.
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### Barium

BARIUM  June 2019	NO	0.0035	ppm	0	2 ppm	Commonly found in natural mineral deposits as Barium Sulfate (Barite). Industrial uses include drilling fluids for oil and gas wells, paint, plastics, rubber, and glassmaking.	Potential health effects in excess of the maximum contaminant level (MCL) include difficulties in breathing, increased blood pressure, changes in heart rhythm, stomach irritation, brain swelling, muscle weakness, and damage to the liver, kidney, heart, and spleen.
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<b>Nitrate</b>							
NITRATE	NO	0.554	ppm	0	10 ppm	Runoff from fertilizer use, leakage from sewer or septic tank, erosion of natural deposits	Infants below six months who drink water containing nitrate in excess of the maximum contaminant level (MCL) could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. There is little data available for risk of getting cancer.
June 2019							

<b>Sodium</b>							
SODIUM	NO	13.4	ppm	0	20 ppm	Sodium has a variety of uses ranging from reagents in the chemical industry, additive for foods, or a component in de-icing roads/walkways.	In excess amounts, sodium increases individual risk of hypertension, heart disease, and stroke.
June 2019							

<b>Tetrachloroethylene</b>							
TETRACHLORO-ETHYLENE (PERC)						Tetrachloroethylene is a manufactured chemical that is widely used for dry cleaning of fabrics and for metal-degreasing. It is also used to make other chemicals and is used in some consumer products.	Acute exposure can result in irritation of the upper respiratory tract and eyes, kidney dysfunction, and various neurological effects. Chronic exposure can result in primarily neurological effects, such as impaired cognitive and motor neuro-behavioral performance. Exposure may also have adverse kidney, liver, immune and hematologic system, reproductive, and developmental effects, and may increase risk of getting cancer.
January 2019 (EP For Wellfield)	NO	0.79	ppb	0	5 ppb		
January 2019 (Well #4)	NO	1.02	ppb	0	5 ppb		

Disinfection Byproducts							
TTHM Total trihalomethanes  June 2019 Tested at 2 locations (Opposite ends of city)	NO	4.16 (47370 McAtee Ln)  2.43 (76285 Industrial Way)	ppb	0	80 ppb	By-product of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.

As is evident by the data, the system had **no violations**. The City is proud to bring you drinking water that meets or exceeds all Federal and State requirements and are working to ensure that no violations occur in the future. 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. Please note that we routinely test for over 100 constituents identified as being potentially harmful. We conduct our testing—a substantial expense to the ratepayers of Oakridge—only at the intervals required by the Oregon Health Department and USEPA. A complete list of all regulated constituents and their status in our water system is available for your inspection at Oakridge City Hall.

In the above table you may have found terms and abbreviations with which you may not be familiar. 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.

**Action Level (AL)** - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**Maximum Contaminant Level (MCL)** - The “Maximum Allowed” 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” 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.

**90<sup>th</sup> Percentile** – The 90<sup>th</sup> percentile is the highest result found in 90% of the samples when they are listed in order from the lowest to the highest result. EPA requires testing for lead and copper at customer’s taps most likely to contain these substances based on when the house was built. The EPA determined that if the sample results exceeded the action level, the City must take action in reducing the risk of leaching of lead and copper.

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).

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.

## Microbiological Contaminants:

(1) 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 found in more samples than allowed could be a warning of potential problems.

(2) Fecal coliform / E.Coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

**Nitrates:** 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.

**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.

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, which can be reached at (800) 426-4791.

The City of Oakridge Water Department works around the clock to provide top quality water to every tap. We ask that all our customers join with us in helping protect our water sources, which are the heart of our community, our way of life, and our children's future. Please call our office if you have questions at (541) 782-2258.

**The City of Oakridge is an equal opportunity, affirmative action institution committed to cultural diversity and compliance with the Americans with Disabilities Act.**

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