CITY OF WINLOCK

2019 Annual Water Quality Report

April 2019

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Terms Simlpified How Can I Relate to PPM's & PPB'S?	
Parts per million (ppm)	Parts per billion (ppb)
3 drops in 42 gallons	1 drop in 14,000 gallons
1 second in 12 days	1 second in 32 years
1 penny in $10,000	1 penny in $10,000,000
1 inch in 16 miles	1 inch in 16,000 miles

If you have any questions or comments regarding this report, please contact your water system operator.

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City Of Winlock
P.O Box 777
Winlock, WA 98569
Water System ID# 97500C
(360)520-5589
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About this Report

The purpose of this report is to provide information about the quality of the City of Winlock's drinking water that was serviced in 2019. This report can be very technical in nature at times but is full of important information regarding your drinking water.

The City of Winlock's water system has always had the goal of providing safe and dependable drinking water. The City of Winlock is able to report that it has met all State and Federal standards for drinking water provided in 2019.

Where does my Water come from?

The City of Winlock gets its water from 4 wells. **Eureka 1** located at the corner of Nevil and 505. **Well 603** is located up at the twin towers on St Helens st, **Eureka 3** is located up off on Ne second street in an undeveloped part of the woods, and **Baichtel 2** is located off of cemetery rd. near bay rd.
We are having a fifth well-constructed about 1 mile east of the grand prairie estates.

Important Terms

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

90th Percentile - Average of all sample site data for lead or copper; Example: In 9 out of 10 houses sampled, 9 were below contaminant levels.

Disinfection By-Products (DBP'S) – Organic compounds resulting from the interaction with natural organic matter in water supplies.

Maximum Contaminant Level (MCL) – The highest level of a contaminant allowed in drinking water.

Maximum Contaminant Level Goal (MCLG) – The maximum goal level for a contaminant in drinking water, below which there is no known or expected risk to health. MCGL's allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) – The highest level of disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG) – The level of drinking water disinfectant, below which there is no known or expected risk to health.

Parts per Million (ppm) Parts per Billion (ppb) – A part per million means that one part of a particular contaminant is present for every million parts of water. Similarly, parts per billion indicate the amount of contaminant per billion parts of water.

Picocuries per Liter (pCi/L) - A measure of radioactivity in one liter of water.

Not Applicable (N/A) – Means that the EPA has not established standards for these substances.

No Detection (ND) – Indicates that results were not detected at a level greater than or equal to the SRL.

Why are there Contaminants in my Drinking Water?

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 at (1-800-426-4791). The sources of drinking water (for both tap and bottled water) include: rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material; thus, can pick up substances resulting from the presence of animals or human activity.

Do I Need to take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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; people 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).

Waivers

DOH has reduced monitoring requirements for glyphosate, herbicides, insecticides, general pesticides and volatile organic contaminants. For a full disclosure of the testing dates please call Rodney Cecil at the City of Winlock 360-520-5589. **NOTE: we did conduct a herbicide test on Eureka #1 in 2018 and the results were a ND.**

Water Quality Results

The tables below list all the drinking water contaminants that we detected during the calendar year of this report. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk, unless otherwise noted. DOH and the EPA requires monitoring for certain contaminants less than once per year, because the concentrations of these contaminants shouldn't vary significantly from year-to-year. Some of the data, though representative of the water quality, is more than one year old. **To obtain a list of all the testing we conducted this year contact the water department manager Rodney Cecil.**

2019 Water Quality Results						
Substance	Units	EPA Regulations		Our Drinking Water Results		
		Ideal Level/Goal (MCLG)	Maximum Allowable (MCL)	Highest Result	Average Value	Comply
Nitrate	ppm	10	10	1.45	.90	Yes
Small amounts of Nitrate come from natural Sources. We tested all 4 well sites .						
Total Coli form Bacteria	Number of Detections	1	2 per month	0	0	Yes
Total-coli form is used to monitor microbial quality in the water system. NOTE: Total coliform is bacteria that is naturally present in the environment and is used as an indicator that other potentially harmful bacteria may be present. Winlock has a minimum of 2 samples to collect each month. We conducted our testing requirement as required by our coli form monitoring plan. We did have 1 total coliform hit that was negative for fecal or e coli. Total coliform can include any matter in the drinking water and is not considered dangerous. We conducted our retesting and we received a satisfactory lab result on 10-11-19						
Disinfectant Residual	ppm	Less than 4.0, Min .20	4.0	.28	.24	Yes
Chlorine is added to drinking water for disinfection. We strive to maintain a residual of .20 in our system at all						

2016 Radium Testing						
Substance	Units	Ideal Level/Goal (MCLG)	Maximum Allowable (MCL)	Range/Other	Average Value	Comply
Radium 228	pCi/L	0	3	ND	ND	Yes
Radioactive contaminants, can occur naturally, or result from oil, gas production and mining activities. We conducted test at the eureka 1 site and had a ND. We also conducted a gross alpha test and the baitchell site and had a no detect. This is tested every 6 years.						

2019 Monitoring Results						
Lead & Copper		EPA Regulations		Your water Results		
Substance	Units	Ideal Level/Goal (MCLG)	Action Level (AL)	90th % Level	Sites Exceeding the Action Level	Is Our Water Safe?
Lead	ppm	.015	.015	.0017	1 out of 10	Yes
Copper	ppm	1.3	1.3	.346	0 out of 10	Yes

Lead and Copper sources are from the corrosion from household plumbing and erosion of natural deposits from the environment.
The data represents the combined sample results for 2019.
This test is done every 3 years.

Inorganic Chemical Monitoring for 2019					
		EPA Regulations		Our Drinking Water Results	
Substance	Units	Ideal Level/Goal (MCLG)	Maximum Allowable (MCL)	Highest Result	Comply?
Barium	ppm	2	2	<.10	Yes
Chloride	ppm	N/A	250	4.1	Yes
Sulfate	ppm	N/A	250	1.3	Yes
Zinc	ppm	N/A	5	<.20	Yes
Arsenic	ppm	.002	.01	<.0010	Yes
Nickel	ppm	.04	.1	<.0050	Yes
Fluoride	ppm	.2	4	<.20	Yes
Beryllium	ppm	.003	.004	<.00030	Yes
Thallium	ppm	.002	.002	<.0010	Yes
Mercury	ppm	.0005	.002	<.00020	Yes

Inorganic chemical are salts and metals, they can occur naturally, or result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming. 2018 test was conducted on baitchell well , eureka 3 and 603 wells. Other IOC tests results are available by contacting the water department. The test for 2019 was conducted on the Eureka # 1 well and the results are listed above
This test is done every 9 years

Disinfection By- products

The chemical disinfectant of choice in drinking water is chlorine, used since the early 1900's to inactivate or chemically kill microorganisms. However, chlorine is a very active substance and it reacts with certain organic compounds to form other compounds, known as disinfection by-products (DBP's). The most common DBP's formed when chlorine is used, are Trihalomethanes (THM) and Halo acetic acids (HAA5). Some of these compounds have been linked to potential health effects. DBP's are regulated by the EPA and DOH. **The City of Winlock did test for HAA5 and TTHM in 2019 with a ND in the both the TTHM and HAA5 tests Testing locations are out at the Grand Prairie development and at the Cardinal Glass Site.**

Additional Information on other Contaminates that may be in your Drinking Water.

Copper in drinking water is an essential nutrient, but some people who drink water containing elevated levels of copper in a relatively short amount of time could experience gastrointestinal distress. Some people with Wilson's disease should consult their doctor.

Lead in drinking water is rarely the sole cause of lead poisoning, but if present, elevated levels of lead can cause serious health problems; especially for women who are pregnant and young children. Lead in drinking water comes primarily from materials and components associated with household plumbing. The more time water has been sitting in pipes, the more dissolved metals, such as lead, it may contain. To help reduce potential exposure to lead, If your water has been sitting for 6 hours or more, flush water through the tap for 30 seconds to 2 minutes until the water is noticeably colder, before using for drinking or cooking. Hot water is more likely to contain higher levels of lead than cold water.

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 for advice from your health care provider.

To obtain more information on water quality issues, you can contact any the following agencies:

City Of Winlock
Water System operator: Rodney Cecil
Address: P.O Box 777, Winlock WA 98569
Telephone: (360) 520-5589
Water System ID#: 97500C
Source of Water: Groundwater
Email: winws@toledotel.com

U.S. Environmental Protection Agency
Safe Drinking Water Hotline: 1-800-426-4797
Website: www.water.epa.gov

Washington State Department of Health
Regional DOH Office: (360) 236-3030
Website: www.doh.wa.gov/ehp/dw

Water Conservation and Efficiency

Water conservation and efficiency topics are held in the sustainability meetings, if you have any ideas or comment on the topic please contact the Water Manager Rodney Cecil at (360) 520-5589

Facts on Drinking Water

- Approximately 400 billion gallons of water are used in the United States per day.
- It takes seven and a half years for the average American resident to use the same amount of water that flows over the Niagara Falls in one second (750,000 gallons).
- American residents use about 100 gallons of water per day.
- The average faucet flows at a rate of two gallons per minute. You can save up to four gallons of water every morning by turning off the faucet while you brush your teeth.
- At one drip per second, a faucet can leak 3,000 gallons per year.
- The first water pipes in the US were made from wood (bored logs that were charred with fire).
- More than 25% of bottled water comes from a municipal water supply, the place that tap water comes from.
- If you drink your daily recommended 8 glasses of water per day from the tap, it will cost you about 50 cents per year. If you choose to drink it from bottled water, it can cost you up to $1,400 dollars per year.