

*Annual Drinking Water Quality Report  
The Town of Wilbur  
2009*

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is from two wells, one at the east end of town and one at the west end of town. Both of these wells draw from the Wanapum Aquifer. We have a source water protection plan available from our office that provides more information such as potential sources of contamination. I'm pleased to report that our drinking water is safe and meets federal and state requirements. This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Jim Pope at 509-647-5821. 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. They are held on the 1<sup>st</sup> & 3<sup>rd</sup> Wednesdays of the month at 7:30 p.m. at Town Hall, 14 N.W. Division. The Town of Wilbur 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 to December 31, 2009. 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.

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 (micrograms/l)* - 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.

*Variations & Exemptions (V&E)* - State or EPA 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)* - (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. MCLs are set as close to the MCLGs 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. 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 a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Total Coliform Bacteria	N			0	(systems that collect 40 or more samples per month) 5% of monthly samples are positive; (systems that collect fewer than 40 samples per month) 1 positive monthly sample	Naturally present in the environment
Fecal coliform and <i>E.coli</i>	N			0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
Turbidity	N			n/a	TT	Soil runoff
<b>Radioactive Contaminants</b>						
Beta/photon emitters	N		mrem/yr	0	4	Decay of natural and man-made deposits
Alpha emitters	N		pCi/l	0	15	Erosion of natural deposits
Combined radium	N		pCi/l	0	5	Erosion of natural deposits
Uranium	N		ppb	0	30	Erosion of natural deposits
<b>Inorganic Contaminants</b>						
Antimony	N		ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	N		ppb	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Asbestos	N		MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Barium	N		ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	N		ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Bromate	N		ppb	10	0	By-product of drinking water disinfection.
Cadmium	N		ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chloramines	N		ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes.
Chlorine	N		ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes.
Chlorine dioxide	N		ppb	MRDLG = 800	MRDL = 800	Water additive used to control microbes.
Chlorite	N		Ppm	1	0.8	By-product of drinking water disinfection.
Chromium	N		ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	N		ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits.
Cyanide	N		ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	N		ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead	N		ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Mercury (inorganic)	N		ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen)	N		ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen)	N		ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N		ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium	N		ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>						
2,4-D	N		ppb	70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex)	N		ppb	50	50	Residue of banned herbicide
Acrylamide	N			0	TT	Added to water during sewage/wastewater treatment
Alachlor	N		ppb	0	2	Runoff from herbicide used on row crops

Atrazine	N		ppb	3	3	Runoff from herbicide used on row crops
Benzo(a)pyrene (PAH)	N		nanograms/l	0	200	Leaching from linings of water storage tanks and distribution lines
Carbofuran	N		ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane	N		ppb	0	2	Residue of banned termiticide
Dalapon	N		ppb	200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) adipate	N		ppb	400	400	Discharge from chemical factories
Di(2-ethylhexyl) phthalate	N		ppb	0	6	Discharge from rubber and chemical factories
Dibromochloropropane	N		nanograms/l	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb	N		ppb	7	7	Runoff from herbicide used on soybeans and vegetables
Diquat	N		ppb	20	20	Runoff from herbicide use
Dioxin [2,3,7,8-TCDD]	N		picograms/l	0	30	Emissions from waste incineration and other combustion; discharge from chemical factories
Endothall	N		ppb	100	100	Runoff from herbicide use
Endrin	N		ppb	2	2	Residue of banned insecticide
Epichlorohydrin	N			0	TT	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
Ethylene dibromide	N		nanograms/l	0	50	Discharge from petroleum refineries
Glyphosate	N		ppb	700	700	Runoff from herbicide use
Heptachlor	N		nanograms/l	0	400	Residue of banned termiticide
Heptachlor epoxide	N		nanograms/l	0	200	Breakdown of heptachlor
Hexachlorobenzene	N		ppb	0	1	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene	N		ppb	50	50	Discharge from chemical factories
Lindane	N		nanograms/l	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor	N		ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate]	N		ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
PCBs [Polychlorinated biphenyls]	N		nanograms/l	0	500	Runoff from landfills; discharge of waste chemicals
Pentachlorophenol	N		ppb	0	1	Discharge from wood preserving factories
Picloram	N		ppb	500	500	Herbicide runoff
Simazine	N		ppb	4	4	Herbicide runoff
Toxaphene	N		ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
<b>Volatile Organic Contaminants</b>						
Benzene	N		ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride	N		ppb	0	5	Discharge from chemical plants and other industrial activities
Chlorobenzene	N		ppb	100	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene	N		ppb	600	600	Discharge from industrial chemical factories
p-Dichlorobenzene	N		ppb	75	75	Discharge from industrial chemical factories
1,2 – Dichloroethane	N		ppb	0	5	Discharge from industrial chemical factories
1,1 – Dichloroethylene	N		ppb	7	7	Discharge from industrial chemical factories
cis-1,2-ichloroethylene	N		ppb	70	70	Discharge from industrial chemical factories
trans - 1,2 – Dichloroethylene	N		ppb	100	100	Discharge from industrial chemical factories
Dichloromethane	N		ppb	0	5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	N		ppb	0	5	Discharge from industrial chemical factories
Ethylbenzene	N		ppb	700	700	Discharge from petroleum refineries
Styrene	N		ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
Haloacetic Acids (HAA)	N		ppb	n/a	60	Byproduct of drinking water disinfection

Tetrachloroethylene	N		ppb	0	5	Discharge from factories and dry cleaners
1,2,4 –Trichlorobenzene	N		ppb	70	70	Discharge from textile-finishing factories
1,1,1 – Trichloroethane	N		ppb	200	200	Discharge from metal degreasing sites and other factories
1,1,2 –Trichloroethane	N		ppb	3	5	Discharge from industrial chemical factories
Trichloroethylene	N		ppb	0	5	Discharge from metal degreasing sites and other factories
TTHM [Total trihalomethanes]	N		ppb	n/a	80	By-product of drinking water chlorination
Toluene	N		ppm	1	1	Discharge from petroleum factories
Vinyl Chloride	N		ppb	0	2	Leaching from PVC piping; discharge from plastics factories
Xylenes	N		ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

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.

The nitrates at well #3 were just over the MCL, so we are testing well #3 for nitrates quarterly.

In 2007 or 2008 we failed to test for TTHM and HAA5, we have since taken those tests and were within the perimeter of those tests. There was no need for any action required at that time or at present time.

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. 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.

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.

**Total Coliform:** The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

**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. This last year Nitrates at well #3 reached the trigger level. We tested well #3 in four quarterly tests and found to be under the threshold.

**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. Lead and copper testing were done last year and were within the limits.

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. Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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).

Please call our office if you have questions. We at the Town of Wilbur's Public Works Dept. work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.