



2010 Annual Drinking Water Quality Report

The city of garibaldi is pleased to provide you with this years' 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 you a safe and dependable supply of drinking water. Este informe contiene información muy importante. Traduscalo o hable con UN amigo quien lo entienda bien.

This report shows our water quality and what it means.

Our water source is drawn from two wells located in the Miami Valley Aquifer. The City of Garibaldi has completed a delineation of our well field (the area from which the water supply is derived). The State of Oregon Health Division granted the well field delineation certification on February 13, 1998. We have a Source water Assessment Report (2010) available at our office that provides more information, such as potential sources of contamination of our Drinking Water Protection Area (DWPP). A Water Master Plan has been adopted in 2004.

The following tables show the results from sample tests taken out at the wells. This identifies that our main water supply is clean and healthy.

[In this table and throughout this document you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided definitions located at the back of this document.]

Test Results From Well, Field

Inorganic Contaminants

Sample/ tested (Arsenic, 2007) (Nitrate 2010)

Substance	Level Detected	Units of Measurement	MCL	MCLG	Complies	Likely source of contamination
Arsenic	ND	ppm	1.1	1.1	Yes	Runoff from orchards; runoff from glass and Electronics production wastes., Erosion of natural Deposits
Nitrate	1.0	ppm	10	10	Yes	Runoff from fertilizer use; leaching from septic tanks, Sewage; erosion of natural deposits.

Water Temperature = 10.1 C

ND means Not Detected

Water Hardness

Analysis	Method	Results	Reporting Limit	Date
Hardness	EPA 130.2	20	4	2/4/11

0-60 mg/l is considered Soft.

Radioactive Contaminants

Sampled and Tested February 2011

Analysis	EPA Code	Method	Results	Lab Reporting Limit	EPA limit
Gross Alpha	4000	E900.0	ND	0.9	15
Combined Radium 226/228	4010	E903.0 & RA-05	ND	0.7	5
Uranium	4006	E200.8	ND	0.001	0.03

Analysis by Energy Laboratories Inc, Casper WY

We routinely test for a wide and broad spectrum of Synthetic Organic Compounds (SOC), Volatile Organic Compounds (VOC), and Inorganic Compounds (IOC). These were sampled and tested August 25, 2010 and the results can be found on the DHS web site under the Drinking Water Program.

Test Results from the Distribution System

The City of Garibaldi Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2010.

Total Trihalomethanes and Haloacetic Acids

Trihalomethanes	Method: EPA 524.2, Results
CHCl ₃ (Chloroform)	ND
CHBr ₂ Cl ₂ (Bromodichloromethane)	ND
CHBr ₂ Cl (Dibromochloromethane)	ND
CHBr ₃ (Bromoform)	ND
Total THM (2950)	ND
Max. Contaminant Level	0.0800 mg/l

Haloacetic Acids	Method: EPA SM 6251B, Results
MCAA (Monochloroacetic Acid)	ND
DCAA (Dichloroacetic Acid)	ND
MBAA (Monobromoacetic Acid)	ND
TCAA (Trichloroacetic Acid)	ND
DBAA (Dibromoacetic Acid)	ND
Total HAA5(2456)	ND
Max. Contaminant Level	0.0600 mg/l

These tests check for hazardous disinfection by-products in the distribution system and are taken annually.

Microbiological Contaminants

Contaminant	Violation Yes/No	MCL	MCLG	MCL CCR Units	Likely Source of Contamination
Total Coliform Bacteria	No		0	One (1) monthly positive sample	Naturally present in the environment
Fecal Coliform and E-coli	No		0	A routine sample and repeat sample are total Coliform positive, and one is also Fecal Coliform E. Coli positive.	Human and animal fecal waste.
Turbidity			N/A		

Microbiological Contaminants:

- (1) **Total Coliform:** Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.
- (2) **Fecal Coliform/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 sever compromised immune systems.

Inorganic Contaminants

Sampled/tested in 2009

Substance	Level detected	Units of measurement	MCL	MCLG	Complies	Likely source of contamination
Asbestos	<0.136	MFL	7	7	yes	Cement asbestos pipe in the distribution system

Test results from Residential and Commercial Sites

Lead and Copper

Substance	90th Percentile	Unit of Measurement	Goal	Action level (AL)	Homes exceeding Action Level	Complies	Likely Source of Contamination
Lead	0.007	ppm	ND	0.015	0	Yes	Household fixtures
Copper	0.64	ppm	1.3	1.3	0	Yes	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.

The 90th Percentile is the highest result found in 90% of the samples when they are listed in order from the lowest to the highest results. EPA requires testing for lead and copper at customers' 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 (AL) the City must take action in reducing the risk of leaching of lead and/or copper. As you can see by the results in the table above your water was well below the action level on our last round of testing for the year 2008. We will be testing this year 2011.

Important Information

We have detected traces of copper and nitrates that were well below the maximum contaminant level (MCL). 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 two 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.

Nitrates: As a precaution, we always notify physicians and health care providers if there is ever a higher than normal level of nitrates in the water supply. Nitrate is sampled and tested annually.

Copper: is an essential nutrient but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water – containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal physician.

Some people may be more vulnerable to the contaminants in drinking water than the general population. Immune compromised persons such as a person with cancer undergoing chemotherapy, a person that has 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 guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline ([1-800-426-4791](tel:1-800-426-4791)).

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals, and radioactive substances. 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](tel:1-800-426-4791)).

The City of Garibaldi Public Works would like to thank you for allowing us to continue to provide you and our community with safe, dependable drinking water. In order to maintain the excellent quality of our water we continue to upgrade our distribution system. These improvements are necessary to provide you with good clean water and to maintain the quality of the water in order to comply with the State and Federal regulations. These improvements will also support future needs as they become a necessity. The costs of these improvements come from the System

Development Charges that are assessed to all new building permits. Your Public Works department will continue to work around the clock to provide the best 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.

If you want to learn more, please attend any of our regularly scheduled City council meetings. They are held on the third Monday of each month starting at 7:00 PM, at City Hall. If you have any questions about this report or concerns with your water quality, please contact the Director of Public Works at City Hall (503-322-3327). We want our valued customers to be informed about their water system and water quality.

Definitions

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 correspond to one minute in 2000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or nanograms per liter- one part per trillion correspond to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Action Level- The concentration of a contaminant, which if exceeded, triggers treatment or other requirements 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 allowed in drinking water set by EPA.

Maximum Contaminant Level Goal- the level of a contaminant in drinking water below the point where there is no known or expected risk to health. MCLG's allow for a margin of safety.

Million of Fibers per liter > 10 Microns in length- this is the number of fibers with a length equal to one millionth of a meter.

Thank you.

Wayne Schultz

Public Works Director