

Drinking Water Quality

13th Annual Water Quality Report
May 2011

Drinking Water Quality Report

Golden Heart Utilities is proud of the fine drinking water it provides. This annual water quality report shows the source of our water, lists the results of our 2010 tests, and contains important information about water and health.

Golden Heart Utilities will notify you immediately if there is any reason for concern about our water. We are happy to report to you that we have surpassed established water quality standards.

Golden Heart Utilities is in compliance with national primary drinking water regulations, and has met all testing and monitoring requirements. The EPA has determined that our water is of high quality at the tested and monitored levels (*see tables inside*).

We are proud to report that the water provided by Golden Heart Utilities meets or exceeds established water quality standards.



www.akwater.com
479-3118

From the Vice President's Office by Oran Paul

I am pleased to once again report that GHU's drinking water meets or exceeds all federal and state drinking water requirements.

The news media this past year has been full of articles regarding the addition of fluoride to our drinking water. As your water supplier, GHU does not have a choice concerning the addition of fluoride to the drinking water; we are required to follow City of Fairbanks Code which mandates the addition of fluoride.

"Sec. 82-1. - City water fluoridated.

A source of fluoride ion, approved by the state department of health, shall be added to the water supply of the city under the rules and regulations of the state department of health, such addition to be administered by Golden Heart Utilities, Inc. in a manner approved by the environmental coordinator of the city. (Code 1960, § 10.301 (a))"

The US Centers for Disease Control and Prevention (CDC) determines the recommended level of fluoride for each state in our country, and currently that recommended level is 0.7ppm. As soon as we became aware that the CDC had adjusted the recommended level of fluoride, we took immediate action and voluntarily reduced the fluoride in our water to achieve the recommended level.



On February 8, 2010, the Fairbanks City Council passed a resolution forming the Fairbanks Fluoride Task Force (FFTF) to "examine evidence related to fluoridation of public water supplies and to provide the City Council with a report containing analysis and recommendations." The FFTF is recommending "that

supplemental fluoridation of the Fairbanks public water supply be terminated." GHU is waiting for the Fairbanks City Council's final decision in this matter.

Customer Service

by Scott MacDonald

I am pleased to be included in this annual report to our customers. Our customer service professionals are here to assist our customers with anything related to their account,



and to provide individual attention to anyone contacting our offices. When your phone call is answered "The Water Company," you can have confidence that a real person will be addressing your concerns or questions. I would like to highlight some of the ways we can help you. First, our offices are located at 3691 Cameron Street, across from Sam's Sourdough Cafe. We provide the administrative support for both College Utilities and Golden Heart Utilities, which allows those two operational companies to focus on providing excellent water and wastewater service to the community. We encourage you to call us if you have questions, and to always call the utility first if you are having trouble with your service.

Where does our water come from?



Fairbanks is fortunate to have an abundant supply of fresh water. We operate four wells, 70 to 90 feet deep, which pump an average of 3.5 million gallons per day. These wells tap the huge aquifer that lies beneath the Tanana Valley. Since our water is supplied from deep wells we avoid the kinds of contaminants that may come from surface water runoff.

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Water Testing & Your Health

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminates 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.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, 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 that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-

compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons 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 are available from the Safe Drinking Water Hotline (800-426-4791).

Drinking Water Test Results

The tables to the right show the results of our water quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed there. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, the usual sources of such contamination, footnotes explaining our findings and a key to units of measurement. Definitions of MCL and MCLG are important.

Key to table

- AL** Action Level or the concentration which, if exceeded, triggers treatment or other requirements which a water system must follow.
- MCL** Maximum Contaminant Level or the highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- MCLG** Maximum Contaminant Level Goal or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- NTU** A Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- pCi/L** Picocuries per Liter, term of radiological "activity" per unit volume or mass at 20°C. A picocurie has a relation of 2.22 disintegrations per minute.
- ppm** parts per million, or milligrams per liter (mg/L). The same as one minute in two years or one penny in \$10,000.
- ppb** parts per billion, or micrograms per liter (ug/L). The same as one minute in 2,000 years or one penny in \$10,000,000.



Christie Lutsch, Utility Lab Technician, conducts numerous tests each day to ensure the quality of our water.

Detected Contaminants

Contaminant	Inorganic	Volatile Organic	
	Fluoride	HAA5*	TTHM*
Date Tested	2010	2010	2010
Unit	ppm	ppb	ppb
MCL	4	60	80
MCLG	4	0	0
RAA*	1.0	24.20	54.00
Range	0.8-1.3	19.6-27.1	33.5-76.8
Major Sources	Water additive to promote strong teeth	By-products of water chlorination	By-products of water chlorination
Violation	NO	NO	NO

* RAA= Running Annual Average, HAA5= Haloacetic Acids, TTHM= Total Trihalomethanes

Other Monitoring

In addition to the testing we are required to perform, our water system voluntarily tests for hundreds of additional substances to make certain your water is safe and of high quality.

Substance	Frequency	MCL	Recent Results	Compare to MCL
Alkalinity	daily	no limit	143 ppm as CaCO ₃	—
Chlorine	daily	4 ppm	0.9 ppm	4.4 times better
Hardness	daily	no limit	147 ppm as CaCO ₃	—
Turbidity	daily	1 NTU	0.09 NTU	11.1 times better
Iron	monthly avg.	300 ppb	30 ppb	10 times better
Manganese	monthly avg.	50 ppb	20 ppb	2.5 times better
Dissolved Solids	monthly avg.	500 ppm	194 ppm	2.6 times better
Arsenic	every 3 yrs	10 ppb	0.532 ppb	18.8 times better
Gross Alpha & Beta*	every 6 yrs	65 pCi/L	1.00 pCi/L	65 times better
Copper	not required	1300 ppb (AL)	0.230 ppb	5652 times better

* Radionuclides

The following substances were tested for and were not detected in our treated water: Benzene, Nitrate, Nickel, Antimony, Thallium, Beryllium, Cyanide, Lead, Chromium, Zinc, Uranium, Radium 226, Radium 228, and Coliform.

Data in this report is from the most recent testing done in accordance with regulations and presented as required by 40 CFR 141.153 and 141.154. The state requires GHU to monitor for certain contaminants less than once a year because concentrations of these contaminants are not expected to vary significantly from year to year.

Want to Learn More About Your Water Company?

Visit our utility's website at www.akwater.com to learn about conservation and other helpful information about our utility, including how to contact our Customer Service Department to obtain a copy of our Source Water Assessment.

We're happy to answer any other questions about **Golden Heart Utilities** and our water quality. For general information or for water quality questions call customer service at 479-3118.

Other Resources:

Environmental Protection Agency's Safe Drinking Water Hotline: 1-800-426-4791.

Water Quality Data for community water systems throughout the United States is available at www.waterdata.com

Unregulated Contaminant Monitoring Regulation (UCMR)

Because we are one of the larger Water Treatment Systems in the State of Alaska, we are occasionally asked by EPA to participate in a Nation-wide study to help gather data on contaminants that are not regulated by the Federal or State agencies. In 2010 we were asked to participate in UCMR2 by doing

the Assessment Monitoring of List 1 contaminants. This list was composed of 3 explosive, 5 flame retardant, and 2 pesticide compounds. As with previous UCMR reporting, we took samples in January and July. Both sets of data showed Non-Detects for all contaminants.

Got leaks?

Leaky faucets, toilets and showers can add up on your water bill. Check seals often. Stop by customer service for more information and a free toilet leak detection kit.



Our customer service representatives are ready to serve you!

We are Utility Services of Alaska, "The Water Company" to those of you who have called our offices. We are located at 3691 Cameron Street, Suite 201 just off of University Avenue. Our office provides administration and customer service support to both Golden Heart Utilities and College Utilities. Please feel free to call or visit our friendly and helpful customer service department.

Customer Service continued from page 1

You all know that the utility owns and operates the system of water mains, pumps and treatment facilities. But, did you know the customer owns and is responsible for maintaining the laterals or more properly termed "service connections" which extend from the utility's main to the property owners' facilities? If a customer contacts the utility with concerns

about their service, we will determine if the problem is in the utility's main. If so, the problem will be corrected by the utility. If the problem is in the service line, then the customer will be advised to contact a plumber. It is always advantageous to call the utility first for utility problems. Don't forget, our 24-hour phone number is 479-3118.

Attention Property Owners & Managers

This report is mailed to all water customers at their billing address. Certain residents and tenants may not receive a copy of this report if the property owner or manager is receiving the water bill. While not required by law, property owners and managers, as well as business owners, are encouraged to provide this information to their tenants. This report may be photocopied and distributed, or posted in a prominent place at the facility. More copies are available at our administrative offices at 3691 Cameron Street or at www.akwater.com.



Experiencing a Problem? Call the Utility First! 479-3118



Call the utility at our 24 hour number 479-3118

before you call the plumber. Customers experiencing problems with their service line should

always call the utility first. We can tell you if there is a problem in your area that may be affecting your service, or we can send out a crew to check our mains and determine where the problem is located.

Only Tap Water Delivers – That's Our Motto!

During the first full week of May, water utilities across the country celebrate National Drinking Water Week. This special week has been designated by the American Water Works Association to help bring attention to safe drinking water and raise awareness to the importance of protecting our water supply.



In culmination of the week's activities, the utility hosts the annual, family oriented Water Walk and Run. For additional information visit our website at www.akwater.com.

Water Walk and Run fun in 2010.



Source Water Testing for Sulfolane

Some of you may be aware of the Sulfolane issue in the North Pole area. GHU was asked by DEC to check each of our wells for this unregulated contaminant. No sulfolane was detected in any of our three active wells. Here are the results.

Date	Well Name	Result
1/11/10	2A	<10.4 ppb
1/11/10	3A	<10.6 ppb
1/11/10	Firewell 3	<10.4 ppb

From the Lab: Flush Your Tap Prior to Using Water for Consumption

Christie Lutsch, Utility Lab Technician, conducts numerous tests each day to ensure that the quality of our water complies with all national and state drinking water standards. Christie operates our state certified lab in compliance with strict industry procedural and reporting standards mandated for drinking water. In 2010 she and others asked some of our customers to take a first draw sample from their homes. For those of you that were not a part of this important EPA monitoring requirement, please read the following information about the importance of flushing your tap prior to using water for drinking or cooking.



Lead and Copper

Every three years the Utility is required by the Safe Drinking Water Act to test samples from its customers to determine the levels of lead and copper. These elements come from the piping and fixtures in some customer's homes and/or businesses. 2010 was one of these years. We asked certain households in our service areas to take a first draw sample from their tap after letting the water sit for at least 6 hours.

After the water had been stagnant overnight (or while the customer was at work), we asked them to collect the first one liter of water from their tap. We sent these samples to a contract lab to be analyzed for lead and copper. When the water sits for a period of time, some of the components

of the pipe, solder and/or fixtures may leach into the water.

These first draw samples were compared to Action Levels set by Federal and State regulatory agencies. An action level is similar to a Maximum Contaminant Level. The Lead and Copper Rule states that at least 90% of the samples tested must be below the

Action Levels set for lead and copper. If the Action Level is exceeded, the water treatment plant would have to change the characteristics of the water it puts into the distribution system.

The Utility tested 30 sites in the summer of 2010. All locations were below the established Action

Levels for both lead and copper. The following chart shows the 90th percentile results that were reported to the Department of Environmental Conservation.

Analyte	Action Level	90th Percentile
Lead	15 ppb	1.52 ppb
Copper	1300 ppb	71.6 ppb



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This testing helps to stress the importance in your home and business of fully flushing your lines prior to pulling water with which to drink and/or cook. When you fully flush your tap, you move the stagnant water out of the pipes that are in and under your building and bring in fresh water from the Utility main. You will probably notice a change in water temperature from warm

to cold after flushing for a short period of time. This is a good indication the water coming out of the tap is fresh water that contains little or no lead or copper.

Not only does running your faucet give you nice cold water, it also flushes away contaminants that may have leached out of your pipes and fixtures while the water sat stagnant in the lines of your home or business.

Just for kids!



Two atoms of Hydrogen, One atom of Oxygen

Use the Secret Code



Secret Code

A * C ◆ E ❄ L ⚙ M ✿
O ✉ R ✕ T ✓ U ★ W ▲