

# Drinking Water Quality

11th Annual Water Quality Report  
April 2009

## 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 2008 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 the national primary drinking water regulations, and has met all testing and monitoring requirements. The EPA has determined that your 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](http://www.akwater.com)  
479-3118

## From the President's Office by Dan Gavora

Each year I look forward to the opportunity to communicate with our customers regarding the quality of water we provide and to also let you know what the utility is doing. Foremost in my message to you this year is that **our water quality has met or exceeded all public drinking water stan-**



**dards** established by the United States Environmental Protection Agency and the Alaska Department of Environmental Conservation. I am happy to report that we have experienced no water quality violations. Please see the water quality report inside for a detailed analysis of the past year's results. Based upon the information summarized in this report you can have total confidence in the quality of water you consume.

2008 system expansion projects as well as new service connections returned to a more normal pattern following the relative boom period of the last several years. Expansion into the big box development area north of town is nearly complete, and our existing service area is substantially built out. Plans

for expansion into other outlying areas are on hold while the local economy catches its breath and digests some of the inventory accumulated over the last several years.

This pause in development has given us the chance to revisit and refocus on what is undoubtedly our most important asset, you our customers! Leading the charge in this endeavor is our Customer Service Department managed by Scott MacDonald.

Scott and his fine employees serve as the "face" of the utility. A Customer Service representative is generally the primary person to answer questions about a customer's account. Customer Service is available during business hours to answer your questions, establish accounts, complete property transfers, initiate new service applications and take trouble calls. Many of you have dealt with our fine professional staff in the past and I encourage you to continue that dialogue.

## Customer Service

by Scott McDonald

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 that personal touch to anyone contacting our offices. When your phone call is answered "Your 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 Sourdough Sam's café. We provide the administrative support for both College Utilities and



## Where does our water come from?

Fairbanks is fortunate to have an abundant supply of fresh water. We operate four wells, 75 to 90 feet deep, which pump an average of 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 and 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 analysis. 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, 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 "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	2008	2008	2008
Unit	ppm	ppb	ppb
MCL	4	60	80
MCLG	4	0	0
RAA*	1.0	21.0	48.6
Range	0.7-1.2	16.2-30.0	24.2-63.9
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	140 ppm as CaCO <sub>3</sub>	—
Chlorine	daily	4 ppm	0.8 ppm	5 times better
Hardness	daily	no limit	145 ppm as CaCO <sub>3</sub>	—
Turbidity	daily	1 NTU	0.07 NTU	14.3 times better
pH	daily	6.5-8.5 units	8.4 units	within range
Iron	monthly avg.	300 ppb	80 ppb	3.75 times better
Manganese	monthly avg.	50 ppb	20 ppb	2.5 times better
Dissolved Solids	monthly avg.	500 ppm	199 ppm	2.5 times better
Arsenic	every 3 yrs	10 ppb	0.532 ppb	18.8 times better
Radium 226 & 228*	every 4 yrs	5 pCi/L	1.4 pCi/L	3.6 times better
Gross Alpha & Beta*	every 4 yrs	15 pCi/L	2±1.8 pCi/L	3.9-75 times better
Barium	every 9 yrs	2,000 ppb	55.6 ppb	36 times better
Sodium	not required	250 ppm**	16.6 ppm	15 times better
Sulfate	not required	250 ppm	20.4 ppm	12.3 times better
Chloride	not required	250 ppm	16.7 ppm	15 times better
Copper	not required	1300 ppb (AL)	0.254 ppb	5118 times better
Boron	not required	no limit	47.6 ppb	—
Calcium	not required	no limit	37.0 ppm	—
Magnesium	not required	no limit	11.1 ppm	—
Potassium	not required	no limit	3.45 ppm	—

\* Radionuclides \*\*Suggested Limit

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

## 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 their 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](http://www.akwater.com).

## 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. As part of this celebration, our utility visits elementary school age children with our mascot “Cool Blue” as well as offers tours at the water treatment plant. In culmination of the week’s activities, the utility hosts the annual family oriented Water Walk and Run, which is May 6. Watch your monthly bill inserts for additional information or visit our website, [www.akwater.com](http://www.akwater.com)



Water Walk and Run fun in 2008.

### Customer Service continued from page 1

Golden Heart Utilities which allows those two operational companies to focus on providing 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.

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.

Our utility values feedback from our customers. Periodically we conduct customer satisfaction surveys in order to hear your thoughts. With this Water Quality Report we have once again developed a survey and I ask for your feedback so we can concentrate on those areas that you feel are important. The survey will only take a few minutes of your time but will be immensely important to us in our goal of providing superior customer service. If you have any questions about the survey or our services, please feel free to call me or any one of our customer service representatives.

## Got leaks?

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



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.



Our customer service representatives are ready to serve you!

## Experiencing a Water Problem? Call the Utility First!

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.



**479-3118**

## Want to Learn More About Your Water Company?

Visit our utility’s website at [www.akwater.com](http://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 2004 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](http://www.waterdata.com)

## From the Lab: The Care and Feeding of Your Water Heater

Christie Lutsch, Utility Lab Technician, conducts numerous tests each day to ensure 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. Christie's expertise is called upon when customers contact the utility with water questions. Most recently, she's received questions from customers related to the effect a homeowner's hot water heater has on the quality of tap water. Please read on for some tips and advice.



heater, you may see a jelly-like substance along with the solids. This means that your sacrificial anode is doing its job. The sacrificial anode should be inspected and replaced as needed to reduce the chance of the tank rusting away. The jelly-like substance has been most closely associated with the sacrificial anodes made of aluminum. The manufacturer of your water heater will know the composition of your sacrificial anode, can give you instructions on how often to check it and when to replace it, or even if you should switch to an anode made from a different material.



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## Your Water Heater

It's important to flush your water heater and change out the sacrificial anode in the tank periodically to help keep the water system in your house trouble free. Most manufacturers suggest an annual flush and check to keep things running at their best.

Water contains minerals that may cause sediment to build up in the bottom of your water heater. The periodic flushing of the tank can remove most of the accumulated iron, scale and other solids that could result in a number of issues.

Problems seen when water heater maintenance is neglected can include plugging of faucet screens by white, tan or reddish solids, or even leaks developing in your hot water tank. In addition, the solids building up in the bottom of the tank take up some of the available volume, reducing the amount of hot water on hand.

Occasionally, during flushing maintenance of a hot water



Find the hidden words. They can be all directions and backwards!

<b>N E V A P O R A T I O N B W T</b>	CLOUDS
<b>C O Y S I I S T R E A M T A H</b>	CONSERVE
<b>L E I E R N R W Q T L N C T G</b>	CYCLE
<b>O A E T W O S R E G E P Y E U</b>	DRIP
<b>U Z K A A I P C I M A I V R O</b>	DROP
<b>D R T E I T U S N G K R Y S R</b>	DROUGHT
<b>S E V T L A I O H R A D X H D</b>	ENVIRONMENT
<b>R M L V F R R P C O S T F E F</b>	EVAPORATION
<b>E P O N D I E O I A W P I D H</b>	FAUCET
<b>I L O O V P N L V C O E C O R</b>	IRRIGATION
<b>E I C N G S A E C D E K R H N</b>	LAKE
<b>M K E Y E N C Z H Y K R E V P</b>	LEAK
<b>S R Z R C A Q P X R C W P O N</b>	POND
<b>W V V M T R T C E P S E R B F</b>	PRECIPITATION
<b>Y E U A E T S A W A M D R G O</b>	RECYCLE
	RESPECT
	SAVE
	SHOWER
	STREAM
	TRANSPIRATION
	WASTE
	WATER
	WATERSHED