

# *Annual Drinking Water Quality Report*

## *Galesburg, North Dakota*

### *2008*

We're pleased to present to you this year's *Annual Drinking Water Quality Report*. This report is designed to inform you about the safe clean water 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. We purchase treated water from Traill Rural Water District. The Water District draw ground water from the Galesburg-Page Aquifer. The water is treated with full-time chlorine for disinfection.

Traill Rural Water District is participating in North Dakota's Wellhead Protection Program. The North Dakota Department of Health has also prepared a Source Water Assessment for Traill Rural Water District. Information regarding these programs is available upon request

Traill Rural Water District, in cooperation with the North Dakota Department of Health, has completed the delineation and contaminant/land use inventory elements of the North Dakota source Water Protection Program. Based on the information from these elements, the North Dakota Department of Health has determined that our source of water is "moderately susceptible" (Traill Source) to potential contaminants. No significant source of contamination have been identified.

If you have any questions about this report or concerning your water utility, please contact Shelly Satrom, City Auditor, at (701) 488-2220. 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 at 7pm on the second Monday of each month at the Galesburg Memorial Hall. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Shelly Satrom at the number listed above.

Galesburg would appreciate it if large volume water customers would please post copies of the *Annual Drinking Water Quality Report* in conspicuous locations or distribute them to tenants, residents, patients, students, and/or employees, so individuals who consume the water, but do not receive a water bill, can learn about our water system.

The City of Galesburg routinely monitors for contaminants 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<sup>st</sup> to December 31<sup>st</sup>, 2008. As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for inorganic contaminants], though representative, is more than one year old.

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 effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.



Contaminants 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 stormwater, industrial or domestic wastewater discharges, oil or oil production, mining or farming.

*Pesticides and herbicides*, which come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

*Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

*Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

To help you better understand these terms we've provided the following definitions:

*Not Applicable- (N/A)*

*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 ( $\mu\text{g/l}$ )*- one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Picocuries per liter (pCi/l)* - picocuries per liter is a measure of the radioactivity in water.

*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)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level* - 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* - 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 (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.

*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.

## TEST RESULTS FOR TRAILL RURAL WATER DISTRICT

Contaminant	MCLG	MCL	Level Detected	Unit Measurement	Range	Year	Violation Yes/No Other Info	Likely source of contamination
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### Radiological Contaminants

Gross Alpha, Including RA, Excluding RN & U	15	15	3.28	pCi/l	N/A	2003	No	Erosion of natural deposits
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### Inorganic Contaminants

Arsenic	N/A	10	9.42	ppb	N/A	2007	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2	2	.0614	ppm	N/A	2008	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	4	4	1.44	ppm	N/A	2008	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate-Nitrite	10	10	.12	ppm	N/A	2008	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Copper	1.0	AL=1.3	1.16 90 <sup>th</sup> % Value	ppm	N/A	2006	*No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	10	AL=15	no 90 <sup>th</sup> % Value	ppb	N/A	2006	No	Corrosion of household plumbing systems, erosion of natural deposits

### Disinfectants

Chlorine	MRDL G=4	MRDL= 4.0	1	ppm	0.48 to 1.24	2008	No	Water additive used to control microbes
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**Disinfection Byproducts**

Total Haloacetic Acids (HHA5)		60	22	ppb	N/A	2008	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)		80	42	ppb	N/A	2008	No	By-product of drinking water chlorination

**Total Organic Carbon Removal**

Alkalinity 232 ppm 2008

**Unregulated Contaminants**

Bicarbonate AS HCO3 283 ppm 2008  
 Calcium 126 ppm 2008  
 Chloride 6.64 ppm 2008  
 Conductivity @25 C UMHOS/CM 897 ppm 2008  
 Hardness, Total (AS CaCO3) 464 ppm 2008  
 Magnesium 36.2 ppm 2008  
 Manganese .036 ppm 2008  
 Nickel .0025 ppm 2008  
 PH 6.78 ppm 2008  
 Potassium 4.1 ppm 2008  
 Sodium 7.5 ppm 2008  
 Sodium Adsorption Ration .15 ppm 2008  
 Sulfate 249 ppm 2008  
 TDS 569 ppm 2008  
 Zinc .168 ppm 2008

**TEST RESULTS FOR THE CITY OF GALESBURG**

Contaminant	No. of Smpl	Action Level	Level Detected	Unit Measurement	Range	Year	Violation Yes/No Other Info	Likely source of contamination
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**Inorganic Contaminants**

Copper	5	AL=1.3	.23 90 <sup>th</sup> % Value	ppm	N/A	2008	**No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	5	AL=15	1 90 <sup>th</sup> % Value	ppb	N/A	2008	**No	Corrosion of household plumbing systems; erosion of natural deposits

\*\* No sites exceeded the action levels for copper or lead.

### Disinfection Byproducts

Total Haloacetic Acids (HHA5)			7.39	ppb	N/A	2006	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)			18.82	ppb	N/A	2006	No	By-product of drinking water chlorination

### Violations

\*Monitoring (TCR), Routine Major                      2-1-2008 - 2-29-2008                      Coliform (TCR)

\*Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. The City of Galesburg failed to take the required number of samples during the month of February , but has taken steps to return to a routine sampling schedule.

While your drinking water meets EPA’s standards for arsenic, it does contain low levels of arsenic. EPA’s standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table above are the only contaminants detected in your drinking water.

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

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 (1-800-426-4791).

MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as, persons with cancer undergoing chemo-therapy, 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 (1-800-426-4791).

Please call Shelley Satrom, City Auditor, at (701) 488-2220 if you have questions.

The City of Galesburg works 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.