



# Grand Forks Air Force Base Drinking Water Quality Report 2016

## Is my water safe to drink?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

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## Where does my water come from?

All non-emergency-use water used by GFAFB is purchased from the City of Grand Forks. The 319th Civil Engineer Squadron maintains the water distribution system on GFAFB and will notify the supplier if daily checks indicate additional chlorination is needed. The City of Grand Forks obtains their water from the Red River and the Red Lake River. The Red River and Red Lake River are surface water sources.

## Source water assessment and its availability

For the purposes of this report, the City of Grand Forks' Department of Drinking Water is designated as a "supplier" when referring to water sources. To review Source Water Assessments or Wellhead Protection Plans contact the appropriate supplier.

## Health Information

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

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*If you are aware of non-English speaking individuals who need help with language translation please call Public Affairs at (701) 747-7072*

## Why are there contaminants in my drinking 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 the Environmental Protection Agency's (EPA) 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, 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: microbial contaminants, such as viruses and bacteria, that 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 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, urban stormwater runoff, and residential uses; organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### Additional information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Grand Forks Air Force Base- ND1800413 is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

### How can I get involved?

If you have concerns about water quality or would like to participate in water decisions you can attend the Service/Safety Committee meetings or City Council meetings at City Hall. A schedule of these meetings is available at the Mayor's office or [www.grandforksgov.com](http://www.grandforksgov.com)

## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

### Grand Forks AFB

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sam- ple Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfection By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chloramine (as Cl <sub>2</sub> ) (mg/L)	4	4	1.7	1.07	2.221	2016	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	30	10.75	60.89	2016	No	By-product of drinking water disinfection
TTHMs [Total Trihal- omethanes] (ppb)	NA	80	39	19.24	90.03	2016	No	By-product of drinking water disinfection
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source	
<b>Inorganic Contaminants– Tested at customer’s taps. Testing is done every 3 years.</b>								
Copper (ppm)	1.3	1.3	.249	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead (ppb)	0	15	0	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

## City of Grand Forks Department of Water

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sam- ple Date	Viola- tion	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfection By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chloramine (as Cl <sub>2</sub> ) (mg/L)	4	4	3	2.6	2.9	2016	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	32	8.36	68.74	2016	No	By-product of drinking water chlorination
TTHMs [Total Trihalo- methanes] (ppb)	NA	80	46	17.18	109	2016	No	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>								
Nitrate [measured as Nitrogen] (ppm)	10	10	.03	NA	NA	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Radioactive Contaminants</b>								
Gross Alpha, including RA, Excluding RN & U (pCi/L)	0	15	1.1	NA	NA	2015	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	.29	NA	NA	2015	No	Erosion of natural deposits
<b>Total Organic Carbon Removal</b>								
Alkalinity – source (MG/L)	N/A	N/A	231	198	231	2016	No	Naturally present in the environment.
Carbon, Total Organic (TOC) Finished (MG/L)	N/A	N/A	8.65	4.53	8.65	2016	No	Naturally present in the environment.
Carbon, Total Organic (TOC) Source (MG/L)	N/A	N/A	17.2	8.43	17.20	2016	No	Naturally present in the environment.

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>							
Copper - action level at consumer taps (ppm)	1.3	1.3	.09	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	3.9	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
<b>Bacteriological Monitoring Data– TCR/RTCR</b>							
Total Coliform Data	<b>March had the highest percentage of Total Coliform Samples. Total Coliform Positives for that month: 1% of samples collected.</b>						
<b>Surface Water Treatment Rule Monitoring Data</b>							
<p style="text-align: center;">Lowest Monthly Percentage of Samples Meeting Turbidity Limits = 100</p> <p style="text-align: center;">Highest Single Measurement = 0.23</p>							
<b>Unit Descriptions</b>							
Term	Definition						
ppm	ppm: parts per million, or milligrams per liter (mg/L)						
ppb	ppb: parts per billion, or micrograms per liter (µg/L)						
mg/L	mg/L: Number of milligrams of substance in one liter of water						
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)						
NA	NA: not applicable						
ND	ND: Not detected						
NR	NR: Monitoring not required, but recommended.						
<b>Important Drinking Water Definitions</b>							
Term	Definition						
MCLG	MCLG: Maximum Contaminant Level Goal: 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.						
MCL	MCL: Maximum Contaminant Level: 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.						
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.						
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.						

Important Drinking Water Definitions	
Variations and	Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

## Information on Cryptosporidium

Cryptosporidium is a microscopic parasite that is found in domestic and wild animals. When ingested, it can cause fever and many gastrointestinal symptoms. Grand Forks source water has been monitored monthly for this organism in 2007 and 2008. No cryptosporidium was found in our source water during 2007. In 2008, the organism was detected in one of twelve samples. Monitoring was accomplished and results provided to NDDH. At this time, no additional sampling is required as all monitoring requirements have been met.

For more information please contact:

Bioenvironmental Engineering

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*GFAFB would appreciate it if large volume water customers post copies of the CCR 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. For your convenience a copy of this CCR is on file at the GFAFB Library and also available on the GFAFB public internet website, <http://www.grandforks.af.mil>.*