Quality on Tap

Gratiot Water Utility

Annual Drinking Water Report
For the Year 2014

We're pleased to present to you this year's Annual Drinking Water Report. This report is designed to inform you about the quality water and services we deliver to you everyday. 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 to protect our water resources. We are committed to ensuring the quality of your water, and also are pleased to report that our drinking water is safe, and meets Federal and State requirements. Our water source is derived from a deep Sandstone Aquifer and obtains its water from two wells, identified as well # 1 (BG 191) an emergency well and our primary well # 2 (AD 118). We can pump 240 Gallons per minute. We pump into a standpipe water tower capable of holding 50,000 gallons. The Village pumps an average of 29,000 gallons of water per day. The village has a hook up at well number 2 for hooking up a generator in the event of a power outage. The distribution system contains approximately 3 miles of water main mostly 6 inches in diameter with a 4 inch main going to the park.

We flush hydrants twice per year. We test for contaminants as required by the DNR. (see attached sheets) We take and have several samples tested monthly. We do a cross connection inspection annually. We add chlorine to the water to kill bacteria. We also add phosphate to clean the iron out and to protect the pipes. The Village has one trained sewer and water employee. The Water Tower was cleaned and inspected in the fall of 1999 and it is in good condition.

In addition, we would like to remind you that drinking water is our most valuable commodity. Please learn to conserve. A dripping faucet or fixture can waste 3 gallons of water a day for a total of 1095 gallons per year!

If you have any questions about this report or concerning your water utility, please contact, Phil Carroll Village Clerk, 922 6221 or Brian Sigafus 482 0228. Feel free to attend any of the Village Board's regularly scheduled meetings. They are normally held on the first Tuesday of the month at 6:30 p.m. at the village municipal office in the old Gratiot State Bank building.

The Village of Gratiot Water Utility routinely monitors for elements in your drinking water according to Federal and State laws. We test every 3 years for lead and copper. Our results are so low that further testing is unnecessary.

The Village of Gratiot and the Department of Natural Resources also test for 72 other contaminants and are available upon request to the Village Clerk. Inadequately treated water

The Village of Gratiot and the Department of Natural Resources also test for 72 other contaminants and are available upon request to the Village Clerk. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

We are replacing old mains, shut offs and hydrants as we can afford it. We also would like to eliminate all dead ends. This can only be accomplished if we were to receive a very large grant.

"All sources of drinking water are subject to potential contamination by elements that are naturally occurring or is man made. Those elements can be microbes, organic or inorganic chemicals, or radioactive materials."

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thanks for understanding.

We at the Gratiot Water Utility work diligently 365 days a year 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.

Again, Thank You.

Village of Gratiot Water Utility

2014 Consumer Confidence Report Data GRATIOT WATERWORKS, PWS ID: 13300749

Water System Information

If you would like to know more about the information contained in this report, please contact Brian Sigafus at (608) 482 0228.

Opportunity for input on decisions affecting your water quality

1st Tuesday of each month at 6:30 pm in the Village office

Health Information

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 safe drinking water hotline (800-426-4791).

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 systems 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 microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source(s) of Water

Source ID	Source	Depth (in feet)	Status
1	Groundwater	680	Active
2	Groundwater		Active

To obtain a summary of the source water assessment please contact, Brian Sigafus at (608) 482 0228.

Educational Information

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 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 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 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.

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, which shall provide the same protection for public health.

Definitions

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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.
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.
MFL	million fibers per liter
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.
MRDLG	Maximum residual disinfectant 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.
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year,

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
(ppm)				results were above the action level.			household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Radioactive Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)		15	0	4.4	4.4		No	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)		5	0	1.5	1.5		No	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)		n/a	n/a	4.4	4.4		No	Erosion of natural deposits

Additional Health Information

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. Gratiot Waterworks 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 www.epa.gov/safewater/lead.

Information on Monitoring for Cryptosporidium and Radon

Our water system did not monitor our water for cryptosporidium or radon during 2014. We are not required by State or Federal drinking water regulations to do so.

Other Compliance

Monitoring and Reporting Violations

Description	Contaminant Group	Sample Location	Compliance Period Beginning	Compliance Period Ending
Bacti M/R MAJ Routine - No Routine samples	Microbiological Contaminants	Distribution System	10/1/2014	10/31/2014

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the compliance period noted in the above table, we did not complete all monitoring or testing for the contaminant(s) noted, and therefore cannot be sure of the quality of your drinking water during that time.

Actions Taken

Complied with DNR Recommendations

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
BARIUM (ppm)		2	2	0.088	0.088		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE (ppm)		4	4	0.2	0.2		No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)		100		8.6400	8.6400		No	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
SELENIUM (ppb)		50	50	0	0		No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
SODIUM (ppm)		n/a	n/a	2.93	2.93		No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
COPPER	AL=1.3	1.3	0.0550	0 of 5		No	Corrosion of

it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

Microbiological Contaminants

Contaminant	MCL	MCLG	Count of Positives	Violation	Typical Source of Contaminant
Coliform (TCR)	presence of coliform bacteria in >=5% of monthly samples	0	1	No	Naturally present in the environment

Disinfection Byproducts

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
HAA5 (ppb)		60	60	2	2	10/15/2013	No	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
ANTIMONY TOTAL (ppb)		6	6	0.8	0.8		No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC (ppb)		10	n/a	1	1		No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes