

**NEW HOLSTEIN UTILITIES  
PWS ID 40802707**

**2017 ANNUAL DRINKING WATER QUALITY REPORT**

**Water System Information**

If you would like to know more about the information contained in this report, please contact Paula M. Pethan at (920) 898-5776. The Commission meetings are held at City Hall, 2110 Washington Street, on the 4<sup>th</sup> Tuesday of every month at 6:30 p.m.

**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**

<b>Source id</b>	<b>Source</b>	<b>Depth (in feet)</b>	<b>Status</b>
1	Groundwater	450	Active
2	Groundwater	492	Active
3	Groundwater	450	Active

To obtain a summary of the source water assessment please contact Paula M. Pethan at (920-898-5776).

## 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 storm water 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.

## 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, 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.

### Disinfection Byproducts

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
TTHM(ppb)	80	0	16.3	16.3		NO	By-product of drinking water chlorination
HAA5(ppb)	60	60	1	1		NO	By-Product of drinking water chlorination

**Inorganic Contaminants**

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation	Typical Source of Contaminant
BARIUM (ppm)	2	2	.028	.026-.028		NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
NICKEL (ppb)	100		9.0	0.0000-9.0000		NO	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
FLUORIDE (ppm)	4	4	0.5	0.5-0.5		NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE (N03-N) (ppm)	10	10	8.19	4.07-8.46		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)	n/a	n/a	8.76	8.17-8.76		NO	n/a
Contaminant (units)	Action Level	MCLG	90 <sup>th</sup> Percentile Level Found	# of Results	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
Copper (ppm)	AL=1.3	1.3	0.1060	0 of 12 results were above the action level.			Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppm)	AL=15	0	11.40	2 of 12 results were above the action level.			Corrosion of household plumbing systems; Erosion of natural deposits

**Radioactive Contaminants**

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)	15	0	3.30	1.8-3.3	6/20/2014	NO	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)	n/a	n/a	3.8	2.4-3.8	6/20/2014	NO	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)	5	0	.9	0.1-0.9	6/20/2014	NO	Erosion of natural deposits
COMBINED URANIUM (ug/l)	30	0	.9	.8-0.9	6/20/2014	NO	Erosion of natural deposits

**Synthetic Organic Contaminants including Pesticides and Herbicides**

ATRAZINE	3	3	0.0	.0-0-0.0		NO	Runoff from herbicide used on row crops
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## **Health effects for any contaminants with MCL violation/Action Level Exceedances**

### **Contaminant Health Effects**

LEAD – Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this over many years could develop kidney problems or high blood pressure.

### **Additional Health Information**

**Nitrate** in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

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. New Holstein Utilities 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](http://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 2017. We are not required by State or Federal drinking water regulations to do so.

# Other Compliance

## Monitoring Violations

Description	Contaminant Group	Sample Location	Compliance Period Beginning	Compliance Period Ending
Chem M/R - Reg - No Regular samples	Fluoride	Distribution System	4/1/2017	4/30/2017
WQP M/R Initial/Follow/Routine	Pbcu_Rule	1	6/1/2017	11/30/2017
WQP M/R Initial/Follow/Routine	Pbcu_Rule	3	6/1/2017	11/30/2017
WQP M/R Initial/Follow/Routine	Pbcu_Rule	Distribution System	6/1/2017	11/30/2017
WQP M/R Initial/Follow/Routine	Pbcu_Rule	2	6/1/2017	11/30/2017

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.

## Violation of the Terms of a Variance, Exemption, or Administrative or Judicial Order

Item 1 below. The Fluoride split sample was taken and the test was performed and passed in April as required by a certified private lab.

Items 2 - 4 below. The WDNR reviewed sample analysis of New Holstein's lead and copper samples taken in the summer of 2017 and discovered that New Holstein has a lead 90th percentile value of 25.8 Mg/L which is above the lead Action Level of 15 Mg/L.

## Noncompliance with Recordkeeping and Compliance Data

Item 1 below: Due to scheduling conflicts the sample was taken to a private certified laboratory instead of the State Lab of Hygiene per usual procedure. The operator was unaware that only the State Lab is approved to submit results to the WDNR for this particular test. When this information was found out it was May and too late to retake the April sample.

Items 2-4 below. New Holstein Utilities was unaware of the additional sampling and public communications required following the lead level exceedances that occurred in the summer of 2017. As NHU was unaware of the additional sampling and public communications, the utility was found to be in noncompliance with state regulations.

## **Actions Taken**

Item 1 below. All fluoride split samples are now only sent to the State Lab of Hygiene for testing.

Items 2 - 4 below. Customers were notified in the 2/15/18 edition of the Tri-County News that high levels of lead were found in the drinking water of some New Holstein homes. Letters were sent on 2/13/18 to businesses with public access that high levels of lead were found in some homes during the most recent test period and that exposure to lead can cause serious health problems, especially to pregnant women and children. Pamphlets on "Lead Public Education Programs" were mailed as utility bill inserts in March of 2018. This information was also placed on the NHU website. The pamphlets were also available for distribution at the NHU office. Monitoring was completed at the three pumphouses and at two points in the water distribution system on 2/19/18 and 2/26/18. No lead exceedances were found as a part of these additional monitoring requirements of the water distribution system. The results were reported to the WDNR

## Definition of Terms

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions.
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.