# <u>2017 City of Camanche Water Quality Report</u> Results of testing performed for contaminants:

Results of testing performed		T				
CONTAMINANT	MCL-(MCLG)		mpliance	Date	Violation	Source
		Type	Value & (Range)		Yes/NO	
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	15.00 (15–15)	9/30/2017	NO	By-products of drinking water chlorination
Copper (ppm)	AL=1.3 (1.3)	90th	0.373 (0.0105- 0.897)	2015	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	1.20 (ND – 4)	2015	NO	Corrosion of household plumbing systems; erosion of natural microbes
950-DISTRIBUTION SYS	STEM		L			
Chlorine (ppm)	MRDL=4.0 MRDLG=4.0	RAA	0.8 (0.4 – 1.9)	12/31/2017	NO	Water additive used to control microbes
03 – S/EP WELL #5						
Gross Alpha, inc (pCi/L)	15 (0)	SGL	3	1/27/2014	NO	Erosion of natural deposits
Combined Radium (pCi/L)	5 (0)	SGL	1.2	1/27/2014	NO	Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	0.29	7/14/2014	NO	Water additive which promotes strong teeth; Erosion from natural deposit; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.06	7/14/2014	NO	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	54	7/11/2017	NO	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	1.4	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
04 – S/EP WELL #6						
Combined Radium (pCi/L)	5 (0)	SGL	1.1	01/30/2012	NO	Erosion of natural deposits
Arsenic (ppm)	10 (0)	SGL	2.00	7/13/2015	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production wastes
Barium (ppm)	2 (2)	SGL	0.11	7/13/2015	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	40	7/13/2015	NO	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	3.8	2017	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
06 – S/EP WELL #3					1	
Fluoride (ppm)	4 (4)	SGL	0.1	7/9/2013	NO	Water additive which promotes strong teeth; Erosion from natural deposit; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.07	7/9/2013	NO	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	55	7/1/2016	NO	Erosion of Natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	5.4	2017	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Note: Contaminants with de		c .1	·		1 1.1	1

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations

Terms used when expressing results for detection of contaminants in drinking water

mg/l - milligram per liter

ppm - parts per million

ppb - parts per billion

MCL - Maximum Contaminant Level-The maximum allowable contaminants level allowed in drinking water.

AL - Action Level- The concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow

MCLG - Maximum Contaminant Level Goal, the level of a contaminant in drinking water which there is no known or expected risk to health. MCLG's allow for a margin of safety

MRDLG - Maximum Residual Disinfectant Level Goal-The level of a drinking water disinfectant below which there is no know or expectant risk to health MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants

pCi/L - picocuries per liter

LRAA - Locational Running Annual Average: RAA-Running Annual Average: SGL-Single Sample Result: N/A-Not Applicable: ND-Not Detected

#### GENERAL 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 organ transplants, people with HIV/AIDS or other immune disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk from infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and children. The lead in your drinking water comes mainly from materials used in the plumbing and service lines in your home. The City of Camanche is responsible for providing high quality drinking water, but cannot control the variety of materials used in your homes plumbing. If your water has set for several hours you can minimize possible lead exposure by flushing your water 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water you may want to have it tested. For more information on lead in your drinking water please call the Safe Drinking Water Hotline 800-426-4791 or at http://www.epa.gov/safewater/lead. 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 EPA's Safe Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

We treat our water according to EPA and the state of Iowa regulations. The Food and Drug Administration establishes limits for contaminants in bottled water that must provide the same protection for public health.

## SOURCE WATER ASSESSMENT INFORMATION

In 2017 the City of Camanche provided 94.4 Million gallons of drinking water to the community. About 68% of the water came from well # 6, 14.10% came from well # 3 and 17.68% from well #5. And one stand-by well the produced 0.22%

The City owns the land around these wells and restricts any activity that could contaminant them. After the water comes out of the wells we add disinfectant to protect you against microbial contaminants. A chemical known as polyphosphate is also added to sequester any iron that may be present in the water

This water supply obtains its water from the sand and gravel Alluvial aquifer. The Alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials provide little protection from contamination at the land surface. The Alluvial wells will be highly susceptible to surface contamination such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. A detailed evaluation of your source water was completed by the Iowa DNR and is available from the Water Operator at 563-259-9410.

This water supply also obtains water from the sandstone and dolomite of the *Cambrian-Ordovician* aquifer. The *Cambrian-Ordovician* aquifer was determined to be slightly susceptible to contamination because the characteristics of the aquifer and overlying materials provide moderate protection from contamination at the land surface. The *Cambrian-Ordovician* well will be slightly susceptible tosurface contamination such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. A detailed evaluation of your source water was completed by the Iowa DNR and is available from the Water Operator at 563-259-9410

## ADDITIONAL HEALTH INFORMATION

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for a short period of time because of rainfall or agricultural activity. Contact your health care professional for more information.

### **CONTACT INFORMATION**

If you have questions or comments about your drinking water, please call the CAMANCHE WATER SUPPLY at 259-9410. This report will not be mailed to you, please call us if you would like a copy.