

# 2015 WATER QUALITY REPORT FOR CITY OF SOLON, IOWA

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our groundwater is drawn from the Silurian aquifer(s). Our water quality testing shows the following results:

CONTAMINANT	MCL – (MCLG)	Compliance		DATE SAMPLED	VIOLATION	SOURCE
		Type	Value & (Range)			
Copper (ppb)	AL=1.3 (1.3)	90th	0.4 (0.09-0.68)	2014	NO	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppm)	AL=15 (0)	90th	5.00 (ND – 14)	2014	NO	Corrosion of household plumbing systems; Erosion of natural deposits
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	8.00 (8-8)	9/30/2015	NO	By-products of drinking water chlorination

### Facility 950 Distribution System

Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	0.6 (0.22 – 1.29)	12/31/2015	NO	Water additive used to control microbes
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### Facility 02 S/EP FRM Well #2

Gross Alpha Emitters (pCi/L)	15 (0)	SGL	6	9/30/2013	NO	Erosion of natural deposits
Combined Radium (pCi/L)	5 (0)	SGL	3.9	9/30/2013	NO	Erosion of natural deposits
Barium (ppm)	2 (2)	SGL	0.1	3/24/2015	NO	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	0.31	3/24/2015	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	4.7	5/14/2015	NO	Erosion of natural deposits; Added to water during treatment process

### Facility 03 S/EP FRM Well #3

Barium (ppm)	2 (2)	SGL	0.08	6/19/2012	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Arsenic (ppb)	10 (N/A)	SGL	6.00	5/14/2015	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production waste
Fluoride (ppm)	4 (4)	SGL	0.33	6/19/2012	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium	N/A (N/A)	SGL	6.8	5/14/2015		Erosion of natural deposits; Added to water during treatment process

### Facility 04 S/EP FRM Well #4

Gross Alpha Emitters (pCi/L)	15 (0)	SGL	2.5	12/20/2013	NO	Erosion of natural deposits
Combined Radium (pCi/L)	5 (0)	SGL	1.2	12/20/2013	NO	Erosion of natural deposits
Sodium	N/A (N/A)	SGL	5.3	12/31/2013	NO	Erosion of natural deposits; Added to water during treatment process

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

## DEFINITIONS

- Maximum Contaminant Level (MCL) – 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 (MCLG) -- 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.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable

- ND -- Not detected
- RAA – Running Annual Average
- LRAA – Locational Running Annual Average
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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.
- 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.
- SGL – Single Sample Result
- TCR – Total Coliform Rule

## **GENERAL 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 posed a health risk. More information about contaminants or 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 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 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 young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Solon 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>.

## **ADDITIONAL HEALTH INFORMATION**

While your drinking water meets EPA’s standard 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.

## **SOURCE WATER ASSESSMENT INFORMATION**

The City of Solon water supply obtains its water from the Silurian aquifer. The Silurian aquifer was determined to be susceptible to contamination because the characteristics of the aquifer and overlying materials limit the rate at which contaminants can move through the aquifer. The wells will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the IDNR, and is available from City of Solon, City Hall at 319-624-3755.

## **OTHER INFORMATION**

Our water utility is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near the water tower, treatment plants, wells or fire hydrants, please contact us at 319-631-5071 or the Johnson County Sheriff Department by dialing 911. We appreciate your assistance in protecting the water system.

## **CONTACT INFORMATION**

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact the SOLON WATER DEPARTMENT at 319-624-3755, or by attending any of our City Council Meetings, held the 1<sup>st</sup> and 3<sup>rd</sup> Wednesdays of each month, at the City Hall, 101 N. Iowa Street, at 5:30 PM. Please “Like” us on FACEBOOK® to also stay up-to-date on community happenings and information.

This Consumer Confidence Report will be mailed or emailed by request. Please contact City Hall at 319-624-3755.