



May 12, 2016

Dear Water Customer:

Report for 2015

The Safe Drinking Water Act of 1996 requires that all water customers must receive this report. This report is for informational purposes. It will convey information to you as a consumer. All data provided in this report is based on samples taken between January 1, 2015 and December 31, 2015 unless otherwise indicated.

Please go to <http://www.stjacobil.com/pdf/Reports/2015waterreport.pdf> to view your 2015 annual water quality report and learn more about your drinking water. This report contains important information about the source and quality of your drinking water during 2015.

If you would like a paper copy of the Annual Drinking Water Quality Report mailed to your home, please call (618) 644-5666 during business hours. Copies are also available at the St. Jacob Village, 213 N Douglas, St. Jacob, Illinois 62281.

A handwritten signature in black ink, appearing to read "S. Fohne", is positioned above the name of the Superintendent of Public Works.

Shawn Fohne, Superintendent of Public Works  
Phone: (618) 644-2061

Richard Schiefer, Mayor

# Annual Drinking Water Quality Report

ST JACOB

ILL190950

Annual Water Quality Report for the period of January 1 to December 31, 2015

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by ST JACOB is Purchased Surface Water

For more information regarding this report contact:

Name Shawn Fohne

Phone 618-644-5666 or 618-789-1342

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o hable con alguien que lo entienda bien.

## Source of Drinking Water

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 storm water 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 storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 at (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. We 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>.

## Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at 618-644-5666. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/Recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion.

2015 Regulated Contaminants Detected

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper Date Sampled MCLG Action Level (AL) 90th Percentile # Sites Over AL Units Violation Likely Source of Contamination

Copper	09/26/2013	1.3	1.3	0.366	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
--------	------------	-----	-----	-------	---	-----	---	---

Water Quality Test Results

Maximum Contaminant Level Goal or 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.

Maximum Contaminant Level or 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 residual disinfectant level goal or 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 or 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.

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

na: not applicable.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.



Violations Table

Long Term Enhanced SWTR

The Long Term Enhanced Surface Water Treatment Rule supplements existing regulations by targeting additional Cryptosporidium treatment to higher risk

Violation Type	Violation Begin	Violation End	Violation Explanation
FAILURE MAINTAIN MICROBIAL TREAT. (LT2)	06/01/2014	06/30/2014	We failed to adequately treat our drinking water for microbial contaminants. Adequate disinfection is required to ensure safe drinking water.

# SLM WATER COMMISSION

## Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at 618.742.7122. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wq/swsp-fact-sheets.pl>.

Source of Water: S L M WATER COMMISSION Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion.

### Source Water Information

Source Water Name	Type of Water	Report Status	Location
IRPAKE (60023) RIVER IRPAKE	SW		RIVER 1/2 MILE OR SO OF SUMMERS-HYBARKS
IRPAKE (60024) SIDE CHANNEL RESERV	SW		SIDE-CHANNEL, BRSE ADJACENT TO PLANT

### Turbidity

Measurement	Limit (Treatment Technology)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.11 NTU	N	SOLI RUNOFF.
Lowest monthly 3 reading limit	0.15 NTU	100%	N	SOLI RUNOFF.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

### Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violation section.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloramines	12/31/2015	2.3	1.2 - 3.0	MCLG = 4	MCL = 4	ppm	N	Water additives used to control microb.
Halocarbon Acids (HAA5)	2015	45	28 - 35.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (THM)	2015	48	37.1 - 56.7	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2015	1	0.659 - 0.659	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2015	0.0421	0.0421 - 0.0421	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2015	1	0.965 - 0.965	4	9.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong tooth; Discharge from fertilizer and aluminum factories.
Sodium	2015	14	14 - 14			ppm	N	Erosion from naturally occurring deposits; Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2015	1.4	1.4 - 1.4	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2015	7.2	7.2 - 7.2	0	15	pCi/L	N	Erosion of natural deposits.
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2015	1	0 - 4.2	3	3	ppb	N	Runoff from herbicide used on row crops.
Simazine	2015	0.72	0 - 0.72	4	4	ppb	N	Herbicide runoff.

2015 Highland

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.29 NTU	N	Soil runoff.
Lowest monthly & meeting limit	0.3 NTU	100%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Violations Table

Consumer Confidence Rule			
Violation Type	Violation Begin	Violation End	Violation Explanation
CCR ADEQUACY/AVAILABILITY/CONTENT	07/01/2015	2015	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.



2015 Highland

Regulated Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Disinfectants and Disinfection By-Products	12/31/2015	1.6	1 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Chloramines	2015	36	0 - 43.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5) *	2015	35	19.1 - 43.19	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2015	3	3.4 - 3.4	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Inorganic Contaminants	2015	1.1	1.14 - 1.14	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Barium	2015	0.05	0.05 - 0.05	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2015	1.1	1.14 - 1.14	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Manganese	2015	3	3.4 - 3.4	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2015	1	1.2 - 1.2	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2015	14	14 - 14			ppm	N	Erosion from naturally occurring deposits; Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	07/01/2014	0.814	0.814 - 0.814	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	07/01/2014	2.11	2.11 - 2.11	0	15	pCi/L	N	Erosion of natural deposits.

Turbidity

2015 IL American—Granite City

Regulated Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Disinfectants and Disinfection By-Products	12/31/2015	3:2	2 - 4	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Chloramines	2015	27	14.8 - 30	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5) *	2015	44	22 - 58.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2015	4		MCLG	MCL	Units	Violation	Likely Source of Contamination
Inorganic Contaminants	2015	0.9	0.93 - 0.93	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Fluoride	2015	4	3.6 - 3.6	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2015	19	18.8 - 18.8			ppm	N	Erosion from naturally occurring deposits: Used in water softener regeneration.
Sodium	08/01/2011	15	15 - 15	0	50	µrem/yr	N	Decay of natural and man-made deposits.
Beta/photon emitters	08/01/2011	2.9	2.9 - 2.9	0	15	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium								

Turbidity

Measurement	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.13 NTU	N	Soil runoff.
Lowest monthly & meeting limit	0.3 NTU	100%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

11 American - Granite City

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive.	2.2		0	N	Naturally present in the environment.

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/16/2014	1.3	1.3	0.097	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	09/16/2014	0	15	2	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Maximum Contaminant Level Goal or 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.

Maximum Contaminant Level or 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 residual disinfectant level goal or 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 or 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.

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

na: not applicable.

AVG: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ppm: milligrams per liter or parts per million - or one ounce in 7.35 gallons of water.