



2016 ANNUAL DRINKING WATER REPORT

Dear Customer: We are pleased to present a summary of the quality of the water provided to you for the period of January 1, 2016 to December 31, 2016.

The Safe Drinking Water Act of 1996 (SDWA) requires that water utilities issue an annual "Consumer Confidence" report to customers, in addition to other notices that may be required by law, that details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Village of Rantoul's drinking water meets or surpasses all federal and state drinking-water standards. The Village of Rantoul is committed to providing you with

the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water. Call us for information about the next opportunity for public participation in decisions about our drinking water.

For more information, consult our Web site at www.myrantoul.com or see U.S. Environmental Protection Agency (EPA) water information at: www.epa.gov/safewater.

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

The Village of Rantoul's drinking water meets or surpasses all federal and state drinking-water standards. *La Aldea de Rantoul es bebiendo agua encuentra o supera todo federal y el estado que bebe los estándares de agua.*

YEAR IN REVIEW

The Village has continued to work with the Air Force to finalize the cleanup and transfer of the remaining property at the former Chanute Air Force Base. The Village has remained focused on the environmental cleanup, remediation and redevelopment of the former Chanute Air Force Base.

An article by Samuel Panno and Holly Korab in *The Illinois Steward*, Spring 2000, noted that, "In its purity, though, the Mahomet Aquifer surpasses these and nearly every water source in Illinois..."

They further noted, "Drink a glass of tap water from the aquifer and you're drinking water that fell on earth between 3,000 and 10,000 years ago, well before pesticides, petroleum-based fuels, or industrial pollutants made their appearance. This "fossil" water is free of harmful bacteria and pollutants. To find cleaner water, you'd have to melt ice from deep within an arctic glacier." The Village of Rantoul's drinking water meets or surpasses all federal and state drinking-water standards.

WATER SOURCE

What is the source of our water? The Village of Rantoul receives its water from eight (8) wells. High quality water is pumped from a depth of between 225 to 300 feet to supply our system. Wells #5, #7, #8, #9, #10, #11, #12, and #13 provide an average of 1,420,000 gallons per day to 4,400 services or a population of 13,000. The aquifers (underground water sources), which underlay Champaign County and Rantoul, were formed during three successive periods of glaciation. The layers of debris left behind during these periods formed the groundwater aquifers which all of Champaign County derives its water. Collectively they are known as the Mahomet Bedrock Valley Aquifer.

Rantoul's water supply wells are located in the lower two aquifers. The lowest aquifer found at a depth of over 200 feet beneath the ground surface was created during the first glacial age or Kansan age. This aquifer is filled with large quantities of continuous sand and gravel deposits and is capable of producing up to 3000 gallons per minute (gpm) of water.

The following glacial period, or Illinoian age, created the middle aquifer known as the Glasford Formation. This aquifer is located between depths of 50 to 200 feet below the ground surface. Water from the Mahomet Aquifer is pumped out of the ground. This ground water is pumped to the Village's water treatment facility through a network of underground pipes. At the water treatment plant, the water is aerated to assist in removing iron, softened to reduce mineral hardness, filtered to remove any other impurities and disinfected to protect against any bacteria.

To determine Rantoul's susceptibility to groundwater contamination, a Well Site Survey, published in 1991 by the Illinois EPA, and a potential source inventory conducted by the Illinois Rural Water Association in 2001, were reviewed. Based on the information contained in these documents, forty-nine potential sources of groundwater contamination are present that could pose a hazard to groundwater pumped by the Rantoul community water supply wells.



These include seven (7) below ground fuel storages, an above ground fuel storage tank, a hardware store, five electrical generators/substations, twelve auto repair shops, an above or below ground fuel storage tank, eight vehicle sales, two autobody shops, two stores/sales, a printing facility, a small engine repair, four manufacturing processes, a former military installation, a former petroleum storage facility, a treated wood/

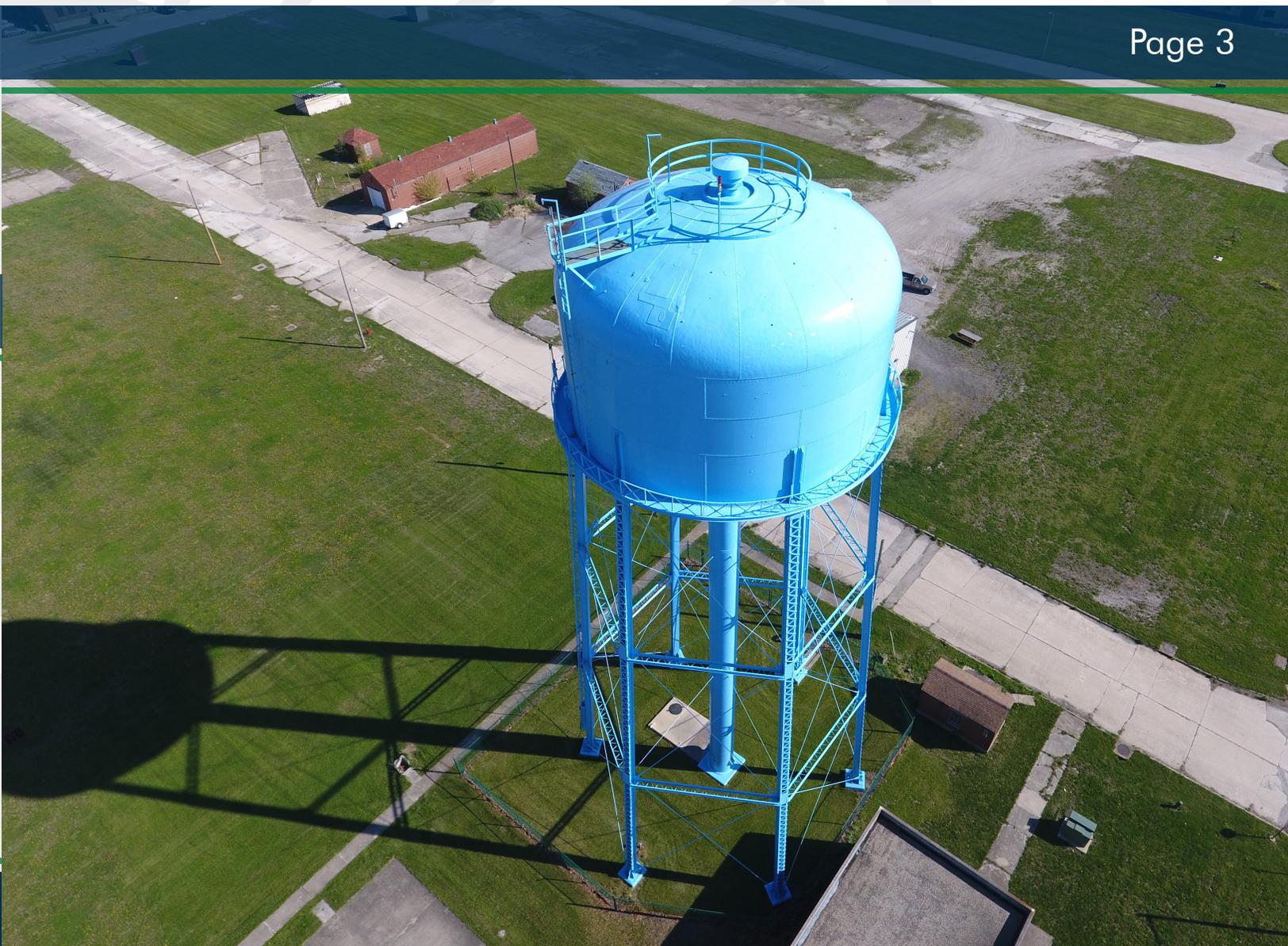
lumber yard, and a dry cleaners.

The Illinois EPA has determined that Rantoul wells #5, #7, #8, #9, #10, #11, #12 and #13 are not susceptible to IOC, VOC and SOC contamination. This determination is based on a number of criteria including: monitoring conducted at the wells, monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data for the wells.

WATER QUALITY TABLE

How to read this table:

The tables show the results of our water-quality analyses from calendar year 2016. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here and is well below all federal and state drinking water standards. The table contains the name of each substance, the highest level allowed by regulation (MCL); the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.





2016 WATER QUALITY DATA

Definition of terms:

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter ($\mu\text{g/l}$)

pCi/L = pico Curies per Liter

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.

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.

Level Found: This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

Date of Sample: If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.

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

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

nd: Not detectable at testing limits.

n/a: Not applicable

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Level Found	Range of Detections	Date	Violation
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Inorganic Contaminants

ARSENIC(ppb) <i>Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics productino wastes.</i>	0	10	1.4	1.4-1.4		No
BARIUM(ppm) <i>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.</i>	2	2	0.032	0.032-0.032		No
FLOURIDE(ppm) <i>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.</i>	4	4.0	1.21	1.21-1.21		No
IRON(ppm) <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i>	n/a	1	0.027	0.027-0.027		No
MANGANESE(ppb) <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.</i>	150	150	3.9	3.9-3.9		No
NITRATE(as N)(ppm) <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.</i>	10	10	1.6	1.4-1.4		No

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	Action Level	90th Percentile	# of Sites over AL	Violation
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Lead and Copper

LEAD(ppb) <i>Corrosion of household plumbing systems; Erosion of natural deposits.</i>	0	AL=15	1.4	0		No
COPPER(ppm) <i>Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.</i>	1.3	AL=1.3	0.061	0		No

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Level Found	Range of detections	Violation
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Disinfectants\Disinfection By-Products

TTHMS (TOTAL TRIHALOMETHANES)(ppb) <i>By-product of drinking water chlorination.</i>	n/a	80	21.80	1.58-1.84		No
CHLORINE(ppm) <i>Water additive used to control microbes</i>	MRDLG=4	MRDL=4	0.3	0.3-0.3		No

Radioactive Contaminants

Gross Alpha excluding Radon and Uranium(pCi/L) <i>Erosion of naturally occurring deposits</i>	0	5	2.7	2.7-2.7		No
COMBINED RADIUM 226/228(pCi/L) <i>Erosion of naturally occurring deposits</i>	0	5	0.82	0.82-0.82		No

State Regulated Contaminants

SODIUM(ppm) <i>Erosion of naturally occurring deposits; Used as water softener.</i>	n/a	n/a	29	29-29		No
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WATER QUALITY TABLE FOOTNOTES

1: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If the level is greater than 20 mg/l , and you are on a sodium restricted diet, you should consult a physician.

2: Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for those substances has not been established by either state or federal regulations, nor has mandatory health effects language.

3: 0 exceeding AL. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. [Additional information is available from the Safe Drinking Water Hotline \(800-426-4791\)](#)

Other Monitoring

In addition to the items listed in the previous table, our water system tests for hundreds of additional substances and microscopic organisms to make certain our water is safe and of high quality. If you are interested in a more detailed report, [contact Peter Passarelli at the Village's Department of Public Works at \(217\) 892-6526.](#)





ADDITIONAL INFORMATION

The Village of Rantoul does not test for Cryptosporidium. This parasite can cause outbreaks of intestinal disease, but scientists have not yet determined the best testing methods, or the levels at which a public health danger occurs. Because the Village's source of water is ground water not directly influenced by surface water sources, Cryptosporidium does not pose a risk to our drinking water. Therefore, the Village does not test for it at this time.

REQUIRED ADDITIONAL HEALTH INFORMATION

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. 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).

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 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: (A) Microbial contaminants, such as viruses and bacteria, which may

come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses. (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems. (E) 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 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 is 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* are available from the Safe Drinking Water Hotline (800-426-4791).

If you see any unusual activity around water utility facilities, please contact the Public Works Department (892-6526) or the Rantoul Police Department (892-5600).

QUESTIONS?

For more information, please contact the Village of Rantoul's Public Works Department at (217) 892-6526. You can learn more about the Village of Rantoul water system at www.myrantoul.com







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Village of Rantoul
2016 Water Quality Report

