

2016 WATER QUALITY REPORT FOR INDIANOLA MUNICIPAL UTILITIES

CONTINUING OUR COMMITMENT:

Indianola Municipal Utilities is pleased to present the 2016 Water Quality Report. This report includes information specific to Indianola's water supply from January 1 through December 31, 2016 as well as general health information. Over the years, IMU has been successful in meeting state and federal drinking water standards and we continue to work hard to provide safe, high quality drinking water to our customers. As future challenges emerge, IMU will remain diligent in maintaining these standards while continuing to serve the needs of the Indianola community.

SAMPLING RESULTS:

This report contains important information regarding the quality of Indianola's water system. The source of our water is groundwater, which is drawn from the Cambrian-Ordovician aquifer. During the past year the Indianola Municipal Utilities water department has taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows IMU to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

CONTAMINANT	MCL	MCLG	TYPE	VALUE (RANGE)	DATE	VIOLATION	SOURCE
Copper (ppm)	AL=1.3	1.3	90 th	ND	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15	0	90 th	ND	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits
DISTRIBUTION SYSTEM							
Chlorine (ppm)	MRDL=4.0	MRDLG=4.0	RAA	2.4 (1.5 – 3.1)	06/30/2016	No	Water additive used to control microbes
Total Coliform Bacteria	TT	TT	RTCR	1 sample positive	07/31/2016	No	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other waterborne pathogens may be present, or that a potential pathway exists through which contamination may enter the drinking water.
WELLS 9, 10, 11, 12 @ FINISHED TAP							
Gross Alpha, inc (pCi/L)	15	0	SGL	4.4	06/03/2015	No	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	SGL	2.2	7/15/2014	No	Erosion of natural deposits
Antimony (ppb)	6	6	SGL	0.60	5/6/2013	No	Discharge from petroleum refineries; fire retardants; ceramics; electronic; solder
Fluoride (ppm)	4	4	SGL	2.4	07/19/2016	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	SGL	0.0046	5/6/2013	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Sodium (ppm)	N/A	N/A	SGL	124	04/27/2016	No	Erosion of natural deposits; Added to water during treatment process
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Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS:

- 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.
- ppb (parts per billion) - One part substance per billion parts water (or micrograms per liter).
- ppm (parts per million) - One part substance per million parts water (or milligrams per liter).
- pCi/L (picocuries per liter) - A measure of radioactivity.
- N/A - Not Applicable
- ND - Not Detected indicates that the substance was not found by laboratory analysis.
- RAA – Running Annual Average
- TT – Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.
- AL - Action Level, the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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
- RTCR – Revised 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 the water poses 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 at 1-800-426-4791.

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 Environmental Protection Agency’s Safe Drinking Water Hotline at 1-800-426-4791.

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. Indianola Municipal 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 <http://www.epa.gov/safewater/lead>.

ADDITIONAL HEALTH INFORMATION:

Fluoride in children’s drinking water at levels of approximately 1 mg/L reduces the number of dental cavities. However, some children exposed to levels of fluoride greater than about 2.0 mg/L may develop dental fluorosis. Dental fluorosis, in its moderate and severe forms, is a brown staining or pitting of the permanent teeth, or both.

Because dental fluorosis occurs only when developing teeth (before they erupt from the gums) are exposed to elevated fluoride levels, households without children are not expected to be affected by this level of fluoride.

Families with children under the age of nine are encouraged to seek other sources of drinking water for their children to avoid the possibility of staining and pitting.

SOURCE WATER ASSESSMENT INFORMATION:

Indianola Municipal Utilities obtains its water from the sandstone and dolomite of the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to have low susceptibility to contamination because the characteristics of the aquifer and overlying materials provide natural protection from contaminants at the land surface. The Cambrian-Ordovician wells will have low susceptibility to surface contaminants such as leaking underground storage tanks, contaminant spills and excess fertilizer application. A detailed evaluation of Indianola's source water was completed by the Iowa Department of Natural Resources and is available from Indianola Municipal Utilities at 515-961-9444, ext. 5330.

IMU BOARD OF TRUSTEES:

Indianola Municipal Utilities is governed by a five-member board of trustees appointed by the Mayor. Decisions regarding the water system are made at the IMU Board of Trustees meetings held on the 4th Monday of each month. Meetings begin at 5:30 p.m. and are held at city hall located at 110 North 1st Street, Indianola. IMU trustee meetings are open to the public or may be viewed online at www.i-m-u.com, "View Meetings Online". Meeting agendas are also posted on the IMU web site. IMU Board Members are: Deb White, Jim McClymond, Adam Voigts, Mike Rozga and Lesley Forbush.

UTILITY CONTACT INFORMATION:

Please feel free to share your thoughts about any of the information included in this report. It is important to us that we address any questions or concerns our customers may have. For questions regarding this information, or general questions regarding the Indianola water system, please contact IMU Water Superintendent, Lou Elbert.

IMU Water Department
1602 South K Street
P.O. Box 356
Indianola, IA 50125

Lou Elbert, Superintendent
Phone: 515-961-9444, x-5330
lbert@i-m-u.com
Fax: 515-961-9439

Monday-Friday
7:00 a.m. to 4:00 p.m.



State Hygienic Laboratory

The University of Iowa

INDIANOLA WATER DEPARTMENT

JAN 23 2015

LOU ELBERT
 INDIANOLA WATER SUPPLY
 110 N FIRST
 PO BOX 299
 INDIANOLA, IA 50125

Accession Number	195331
Date Sample Finalized	2015-01-20 18:37
Date Received	2014-10-07 08:18
Sample Source	Drinking Water
Project	
Date Collected	2014-10-06 08:53
Collection Site	finished water tap 01
Collection Town	INDIANOLA
Sample Description	water plant
Client Reference	ucmr3
Collector	powers rodney
Phone	515/962-5330

Note: Sample exceeded required temperature upon receipt. There was an error in sample collection date/time (e.g. missing, mismatched, postdated or incorrect).
 Paperwork lists collection time as 0859; per label 0853.

Results of Analyses

Chlorate, EPA 300.1

Units	ug/L
Date Analyzed	2014-10-08 08:00
Analyst	HML

Analyzed In	Ankeny
Date Verified	2014-10-09 13:53
Verifier	BRW

Analyte	Result	Minimum Reporting Level
Chlorate	599	20.0

Chromium-6, EPA 218.7

Units	ug/L
Date Analyzed	2014-10-13 08:00
Analyst	HML

Analyzed In	Ankeny
Date Verified	2014-10-14 20:43
Verifier	BRW

Analyte	Result	Minimum Reporting Level
Hexavalent chromium	0.240	0.0300

Metals, EPA 200.8

Units	ug/L
Date Analyzed	2014-10-16 11:12
Analyst	SGB
Analysis Prep	Total Recoverable Metals Digestion, EPA 200.2

Analyzed In	Ankeny
Date Verified	2014-10-20 11:15
Verifier	DLS

Analyte	Result	Minimum Reporting Level
Vanadium	0.300	0.2
Molybdenum	<1.00	1
Cobalt	<1.00	1
Strontium	794	0.3
Chromium	0.200	0.2