

# Brown County Water Utility, Inc.

## 2016 Drinking Water Quality Report

Issued June 2017

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are our own well fields, where seven wells draw from the Indian Creek aquifer. In addition, we purchase water from three sources- Citizens Water, which is treated well water from their Harding Street south well field; from Jackson County Water Utility; and from the Town of Nashville.

*We're pleased to report that our drinking water is safe and meets federal and state requirements.*

### Our Watershed Protection Efforts

Our water system is working with the community to increase awareness of better waste disposal practices to further protect the sources of our drinking water. We are also working with other agencies and with local watershed groups to educate the community on ways to keep our water safe. To help protect our water supply wells, Brown County Water Utility, Inc. has submitted their Phase II Wellhead Protection Plan Updates to IDEM. The Wellhead Protection Plan focuses on public awareness and education and spill prevention and reporting. For more information or to join the local planning team and assist with the development and implementation of the Wellhead Protection Plan, contact Ellen Masteller, Office Manager, at 812-988-6611.

If you have any questions about this report or concerning your water utility, please contact our office at 812-988-6611. We want our valued customers to be informed about their water utility. If you'd like to learn more, please attend any of our regularly scheduled meetings. They are held on the third Tuesday of each month at 8 a.m. at the office of the Utility, 5130 North State Road 135, Beanblossom, Indiana.



Mahalasville Road Treatment Plant, Morgan County

Brown County Water Utility, Inc. (PSWID IN520701) routinely monitors for constituents in your drinking water according to Federal and State laws. The table on the following page shows the results of our monitoring for the period of January 1st to December 31st, 2016. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

*Maximum Contaminant Level Goal (MCLG)* - The level of a contaminant in drinking water below which there is no known or expected risk to human health.

*Maximum Contaminant Level (MCL)* - The "Maximum Allowed" (MCL) is 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 (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 the addition of disinfectant is necessary for control of microbial contaminants.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one ounce in 7,350 gallons.

*Parts per billion (ppb) or Micrograms per liter (ug/l)* - one part per billion corresponds to one ounce in 7,350,000 gallons.

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

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

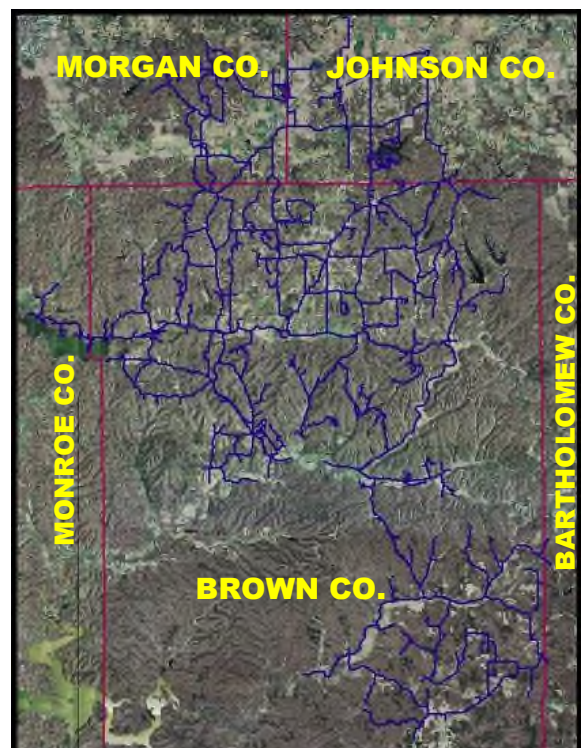
BDL- Below Detection Level

TT-Treatment Technique: A treatment technique is a required process intended to reduce the level of contaminant in drinking water.

You can find this report and other helpful information on our website:

[www.browncountywater.co](http://www.browncountywater.co)

*Brown County Water Service Area*



*Mission Statement:*

*The Mission of Brown County Water Utility is to improve the quality of life for its rural service area by supplying its members with quality water at a reasonable cost.*

## Brown County Water Utility, Inc. 2016 Treated Drinking Water Quality Data

Substance	MCL	Highest Result & (Range Detected)	Ideal Goals MCLG	Compliance Achieved?	Likely source of Contamination
<b>Lead &amp; Copper (2014)</b>					
Lead (2014)	15 ppb	90th Percentile System Wide = 3.5 ppb	0	Yes	Corrosion of Customer Plumbing
Copper (2014)	1.3 ppm = AL	90th Percentile System Wide = 0.16 ppm	1.3 ppm	Yes	Corrosion of Customer Plumbing
<b>Regulated Contaminants (2016)</b>					
Free Chlorine	MRDL=4	1.57 (0.30-1.57)	MRDLG = 4	Yes	Water additive used to control microbes.
Haloacetic Acids (HAA5)	60 ppb	19.925 (10.3-21.9)	No goal for total	Yes	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	80 ppb	38 (19-46)	No goal for total	Yes	By-product of drinking water disinfection
Arsenic (2014)	10 ppb	0.7 ppb	0	Yes	Erosion of natural deposits
Barium (2014)	2 ppm	0.055 ppm	0	Yes	Erosion of natural deposits
Fluoride (2014)	4 ppm	0.8 ppm	4 ppm	Yes	Natural deposits and treatment additive
Nitrate (measured as nitrogen) (2014)	10 ppm	0.2 ppm	10 ppm	Yes	Erosion of natural deposits
Total Coliforms	1			Yes	Septic tank leachate
Sodium (2014)	N/A			Yes	Natural deposits and by-product of water treatment (softening)
Chloromethane (2014)	N/A	1.2 ug/l	N/A	Yes	Natural deposits and industrial discharges
<b>Radioactive Contaminants (2010)</b>					
Uranium (2010)	30 ug/l	1 ug/l (0 - 1)	0 ug/l	Yes	Erosion of natural deposits

### ADDITIONAL INFORMATION

Data list is from 2016 or the most recent testing in accordance with regulations. No samples were above Allowable Limits. Not listed are the numerous other contaminants for which we tested that were not detected. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels. In addition to producing our own water, Brown County Water Utility purchases water from Citizens Water and Jackson County Water Utility, Inc. The following information is provided as required relative to those supplies.

### Citizens Water 2016 Treated Drinking Water Quality Data

Substances Detected (units)	MCLG (Goal)	MCL (Limit) / AL	Compliance Achieved?	Highest Result & (Range Detected)	Possible Source Where did it come from?
Arsenic (ppb)	0 ppb	10 ppb	YES	2.8 (ND-2.8)	Natural deposits
Barium (ppm)	2 ppm	2 ppm	YES	0.34 (0.035-0.34)	Natural deposits
Chromium (ppb)	100 ppb	100 ppb	YES	3.8 (ND-3.8)	Natural deposits
Fluoride (ppm)	4 ppm	4 ppm	YES	1.3 (0.13-1.3)	Natural deposits & treatment additive
Nitrate (ppm)	10 ppm	10 ppm	YES	4.6 (ND-4.6)	Fertilizer, Septic tank leachate
Chlorine (as Cl2)	4 ppm	4 ppm	YES	1.5 (0.35-1.5)	Water additive used to control microbes
2,4-D (ppb)	70 ppb	70 ppb	YES	0.50 (ND-0.50)	Herbicide runoff
Atrazine (ppb)	3 ppb	3 ppb	YES	1.5 (ND-1.5)	Herbicide runoff
Antimony (ppb)	6 ppb	6 ppb	YES	0.60 (ND-0.60)	Natural deposits
Aluminum (ppb)	N/A	SMCL 200	YES	300 (ND-300)	Natural deposits; water treatment additive
Metolachlor (ppb)	N/A	N/A	YES	0.2 (ND-0.20)	Herbicide runoff
Sodium (ppm)	N/A	N/A	YES	94 (8.1-94)	Erosion of natural deposits; leaching
Simazine (ppb)	4 ppb	4 ppb	YES	1.1 (ND-1.1)	Herbicide runoff
Toluene (ppb)	1,000 ppb	1,000 ppb	YES	1.8 (ND-1.8)	Discharge from petroleum refineries
Total Xylenes (ppb)	10,000 ppb	10,000 ppb	YES	0.81 (ND-0.81)	Discharge from petroleum refineries
Copper (ppm) (2015)	1.3 ppm	1.3 ppm	YES	0.32 (0 of 26>AL) 90 <sup>th</sup> percentile	Corrosion of customer plumbing
Lead (ppb) (2015)	0 ppb	15 ppb	YES	5.3 (1 of 26>AL) 90 <sup>th</sup> percentile	Corrosion of customer plumbing
Total Trihalomethanes	N/A	80 ppb	YES	9.9	By-product of chlorination treatment
Haloacetic acids (HAA5)	N/A	60 ppb	YES	10	By-product of chlorination treatment
E coli	0	1	YES	0	Human and animal fecal waste
Total Coliforms	N/A	5.0%	YES	0	Naturally present in the environment
Manganese (ppm)	N/A	0.05	YES	0.022 (ND-0.022)	Erosion of natural deposits; leaching
Sulfate (ppm)	N/A	250 ppm	YES	214 (3.3-214)	Erosion of natural deposits; leaching
Zinc (ppb)	N/A	5000 ppb	YES	5.1 (ND-5.1)	Natural deposits
Cryptosporidium (org/10L)	N/A	N/A	YES	2 (1-2 oocysts/10L)	Untreated source water
Giardia (org/10L)	N/A	N/A	YES	7 (ND-7 cysts/10L)	Untreated source water

### Jackson County Water Utility, Inc. 2016 Treated Drinking Water Quality Data

Constituent	Compliance	Highest Level Detected	Range Low-High	MCLG	MCL	Likely Source of Contamination
Sodium (ppm) (2014)	Y	91.4	N/A	N/A	N/A	Water treatment for softening water
Copper (ppm) (1) (2) (2014)	Y	0.246	N/A	1.3	AL=1.3	Corrosion of household plumbing
Lead (1) (2) (ppb) (2014)	Y	3.7	N/A	0	AL=15	Corrosion of household plumbing
Fluoride (ppm) (2014)	Y	0.9	N/A	4	4	Natural deposits & treatment additive
Nitrate (ppm)	Y	1.1	N/A	0	10	Fertilizer; septic tank leachate
Chlorine (ppm) (Free Chlorine)	Y	1.58	.41-1.58	MRDLG=4	MRDL=4	Disinfection treatment additive
TTHM [Total trihalomethanes] (ppb)	Y	25.5	7.9-39	0	80	By-product of chlorination treatment
Haloacetic Acids [HAA5] (ppb)	Y	15	4.7-21.4	0	60	By-product of chlorination treatment
Total Coliform	Y	1 Positive	N/A	0	1/Mo.	Naturally present in the environment
Barium (ppm) (2014)	Y	0.0173	N/A	2	2	Erosion of natural deposits
Nickel (ppm) (2014)	Y	0.0012	N/A	0	0	Possible waste runoff from industry

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 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.

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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

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 (800-4264791).

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. Brown County Water Utility 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 of lead exposure by flushing your tap for 30 seconds to 2 minutes before using the 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>.

(1) Levels detected represent the 90<sup>th</sup> percentile value as calculated from total samples in test year.  
(2) No test results were above AL