

Brazil City Water Works  
401 W. National Ave.  
Brazil, IN. 47834-9313

## *Brazil City Water Works*

### *2023 Consumer Confidence Report for Year 2022*

*PWSID 5211001*



**Opportunities for public participation:** Common Council meetings are held the second Wednesday of each month at 7pm. Public Board of Works & Safety meeting is held the second Wednesday of each month at 10 Am., and the fourth Wednesday of each month at 10am. All meetings are held in the council chambers of City Hall.

**Is your water safe?:** This brochure is being provided so that you the water customer may know the quality of the drinking water that we provided last year. Included as part of this report are details about where the water that you drink comes from, what it contains and how it compares to the Environmental Protection Agency (EPA) and Indiana Standards. We are committed to providing you with all the information that you need to know about the quality of the water that you drink.

**What if I have special health considerations?:** 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. U.S. Environmental Protection Agency and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the [Safe Drinking Water Hotline](#) at: (800)426-4791.

**What is Cryptosporidium?:** Cryptosporidium is a microscopic organism that lives in the intestines of animals and people. When ingested, this microscopic pathogen may cause a disease called cryptosporidiosis, which has flu-like symptoms. Although there has been no cryptosporidium found in treated finished drinking water, cryptosporidium is found not in source water such as our well field located at the westerly edge of Walnut Creek and consists of a common glacial aquifer. Brazil City Water Utility utilizes a stringent monitoring program, testing source water and finished drinking water as well as using online monitors that measure the clarity of the water, which helps determine the likeliness of the microbe's presence in the drinking water.

**Where does our water come from?:** The City of Brazil, Water Utility, water source is ground water wells located along the westerly edge of the Walnut Creek in Putnam County. This water source has been classified by the Indiana Department of Environmental Management, as a "Ground Water Source," not under the influence of surface water.

**How hard is my water?:** As is common with water in this region, Brazil's water is considered hard due to the natural levels of minerals iron and manganese. The water hardness typically ranges from around 16 to 20 grains per gallon (the measure often referred to in determining water softener settings).

**What is being done to improve water quality?: Wellhead protection.** In order to minimize the risk of ground water contamination, Brazil Water Utility in accordance with the State Wellhead Protection Rule and local ordinances has implemented a Wellhead Protection Program. This program involves working with local planning teams and regulators, mapping of the wellhead protection areas, identifying potential sources of ground water contamination, working with businesses to prevent spills and releases of chemicals, and preparing a contingency plane in case of contamination.

**Lead in drinking water & its effects on children:** 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. Brazil City Water Works 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 thirty (30) seconds to two (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/safe> water/lead.

**What can I do to conserve water?:** Everyone plays an important role in water conservation. Measures you and your families take at home today are critical to ensuring an adequate supply of treatable drinking water in the future. For starters, don't let the water run when brushing your teeth or shaving, run dishwashers and washing machines only when they're full, and regularly check for leaks in toilets and faucets. Use a shut-off nozzle on your garden hose and never use water to clean sidewalks and driveways. Water your lawn no more than every other day and use a rain sensor on an irrigation system so the system turns off when it's raining. One of the easiest ways you can protect water quality is to limit the amount of fertilizer you use on your lawn, and always make sure it's phosphorus-free; the excess phosphorus provides nutrients for algae that can harm water quality.



Volatile Organic (year:2020) IN5211001								
Bromodichloromethane	N	0	mg/L	NA	NA	By products of drinking water disinfection.		
Chloroform	N	0	mg/L	NA	NA	By products of drinking water disinfection.		
Inorganic (year: 2020) IN5211001								
Chromium	N	0.001	mg/L	0.1	0.1	Discharge from steel and pulp mills; erosion of natural deposits.		
Cyanide(Free)(year 2020)	N	0.005	mg/L	0.2	NA	Steel, Plastic and Fertilizer Factories		
Barium	N	0.08	mg/L	2	2	Discharge from steel and pulp mills; erosion of natural deposits.		
Fluoride (Natural)	N	0.128	mg/L	2	N/A	Erosion of natural deposits; Water additive which promotes; Strong Teeth discharge from fertilizer & aluminum factories		
Sodium	N	8.76	mg/L	NA	NA	Naturally occurring		
Mercury	N	0.0002	mg/L	0	0.002	Erosion of natural deposits; discharged from refineries and factories; run off from landfills and croplands.		
Nitrate-N (year: 2022)	N	1.31	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.		
Uranium	N	1.1	ug/l	30	0	Erosion of natural deposits.		
Total Trihalomethanes (Year 2022) (IN5211001)								
		Avg.	Min/Max					
Total THM's (year 2022)	N	19.55	15.7/23.4	ug/L	80	NA	By products of drinking water disinfection.	
Haloacetic Acids (Year 2022) (IN5211001)								
		Avg.	Min/Max					
Total HAA5 (year 2022)	N	10.51	8.81/12.2	ug/L	60	NA	By products of drinking water disinfection.	
<b>Lead/Copper testing for Brazil City Water Works: 30 sites consisting of residential &amp; commercial sampled with 90% of samples equal to or less than the number of sites sampled. None of the sites tested exceeded the MCL. (Year 2020)</b>								
Lead (year 2020)	N	0.0050	mg/L	AL= 0.015	0	Corrosion of household plumbing systems; erosion of natural deposits.		
Copper (year 2020)	N	0.222	mg/L	AL= 1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.		
Radium 228 in pCi/l testing								
Radium 228 in pCi/l testing (year 2017)	N	0.1	pCi/l	5	5	Naturally occurring or can be the result of oil and gas production and mining activities.		
Microbiological Contaminants								
Violation Description	Begin Date		End Date		Corrective measure taken.			
Total Coliform Test (Present)	n/a		n/a		Bac-T tests retaken with additional samples from all Ground Water well sources, along with up stream and down stream from positive sample. Samples submitted to IDEM for further tests all samples that were tested came back negative/absent for Total Coliform.			
Health effects information associated with the aforementioned Violation:								
Coliform, Total (TCR): Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other; potentially-harmful, bacteria may be present. Coliforms were found in one of the samples and this was a warning of potential problems.								
Residual Disinfectant								
Contaminate	Date	MCL	MCLG	Units	Results	Min/Max	Violates	Likely Sources
Chlorine Residual	2022	4 MRDL		.97 mg/L		.25 / 1.69 mg/L	No	IN5211001 -Water Additive (disinfectant) Used to control microbiological organisms.

### What do all of these terms mean? (Important Definitions)

**N/A**- Either not available or not applicable.

**MCLG- Maximum Contaminate Level Goal:** the level of a contaminate in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**MCL-Maximum Contaminate Level:** 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.

**MRDL-Maximum Residual Disinfectant Level:** The highest level of the disinfectant allowed in drinking water. There is convincing evidence that the addition of

**Turbidity**-The measure of the cloudiness of water. IW monitors turbidity as it is a good indicator of the effectiveness of the filtration system.

**P\***-Potential violation, one that is likely to occur in the near future once the system has sampled for four quarters.

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

**ppm**-Parts per million.

**ppb**-Parts per billion.

**pCi/L**-Picocuries per liter, used to measure radioactivity.