

Otwell Water Corporation
2022
Annual Water Quality Report
Otwell Water Corporation/Patoka
PWSID #526-3001

We are very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is ground water. We purchase water from Petersburg Municipal Utilities, their wells draw from the "Surficial Sand & Gravel Aquifer," which is located on River Road. Petersburg has a Well head Protection Plan which was approved on April 6, 2021.

The President of the water corporation, Gary J. Pride, is proud to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Keith Breidenbaugh, Water Superintendent at 812-354-2256. We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Tuesday of every month at 7:00 p.m. at the water office in Otwell, 2055 N St Rd. 257.

The annual meeting is held the second Tuesday in January. January 09, 2024.

Otwell Water Corporation routinely monitors for constituents in your drinking water according to Federal and State laws. The table shows the results of our monitoring for the period of January 1st to December 31 2022. Not all testing is required every year, and if we were not required to monitor for something in 2022, then our results are for the most recent round of testing.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions and terms in the chart.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

As you can see by the table, our system had no violations. 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.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or manmade. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

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 the 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 at 1-800-4264791.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface over 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 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, wildlife.

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.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products or industrial processes and petroleum 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 that limit the number 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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological 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. Our system 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.

OTWELL WATER CORPORATION TESTING TABLE

Constituents	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Violation	Major Sources
<u>INORGANIC CONSTITUENTS</u>								
Anthimony	2/17/2017	ppm	0.006		0.005		N	Erosion of natural deposits
Cyanide Free	2/17/2017	ppm	0.2		0.005		N	Erosion of natural deposits
Copper	2021	ppm	AL=1.3	1.3	0.103	90th %	N	Corrosion of household plumbing systems.
Fluoride	2022	ppm	4	4	0.136		N	Water additive for strong teeth
Alpha	2017	pci/2	15	0	0.92		N	Erosion of natural deposits
**Nitrate (as N)	2022	ppm	10	10	2	1.56-1.56	N	Runoff from fertilizer use; Leaching of septic tank, sewage, erosion of natural deposits
Lead	2021	ppm	0.01	1.5	1.66	90th%	N	Corrosion of household plumbing systems.
Sodium	2022	ppm			5.71		N	Erosion of natural deposits
Barium	2022	ppm	2	2	0.028		N	Erosion of natural deposits
<u>DISECTION BYPRODUCTS & PRECURSORS</u>								
HAAS (Total Halo acetic Acids)	2022	ppb	60		43.2	9.58-43.2	Y	Disinfection process by product
TTHM (Total Trihalomethanes)	2022	ppb	80		69.2	11.2-69.2	Y	Disinfection process by product
<u>RADIOLOGICAL CONTAMINANTS</u>								
CHLORINE RESIDUE	2021	mg/l	4		0.86	.047-1.21	N	Disinfectant used to control microbiological organisms
**Uranium	3/20/2017	ug/l	30	0	1.5577	1.5577-1.5577	N	Erosion of natural deposits
<u>RADIOACTIVE CONTAMINANTS</u>								
GROSS ALPHA EXCLUDING RADON AND URANIUM	8/22/2017	Pci/l	15	0	0.92	0.92-0.92	N	Erosion of natural deposits
<u>PATOKA LAKE REGIONAL WATER & SEWAGE DISTRICT WATER TESTING TABLE</u>								
TTHM	2022	Ppb	80		36.1	19.3-59.4	N	Disinfection process by product
Total Halo Acetic 2018	2022	Ppb	60		41.6	25.5-63.5	N	Disinfection process by product
<u>INORGANIC CONSTITUENTS</u>								
Copper	2020	pg/L	AL=1300		170	90th %	N	Corrosion of household plumbing systems.
Fluoride	3/17/2020	Ppb	4	4	0.198	0.1980,198	N	Water additive for strong teeth
Lead	2020	pg/L	AL=15		3.7	90th %	N	Corrosion of household plumbing systems.
Sodium	2022	PPM	NONE	NONE	2.7		N	Erosion of natural deposits
Silica	2022	Pylb	NONE	NONE	1.2		N	Erosion of natural deposits
Barium	2022	PPM	2	BDL	0.25		N	Erosion of natural deposits
Gross Alpha	2020	pg/L	15	0	1.7		N	Erosion of natural deposits
Radium 226	2016	pg/L	0	0	0.14		N	Erosion of natural deposits
Radium 228	2020	pg/L	0	0	0.17		N	Erosion of natural deposits
Combined Radium 2016	2020	pg/L	5	0	0.97		N	Erosion of natural deposits
<u>RADIOACTIVE CONTAMINANTS</u>								
<u>BETA/PHOTON EMITTERS</u>								
GROSS ALPHA EXCLUDING RADON AND URANIUM	6/7/2017	mrem/yr	4	0	1.49	1.49	N	Decay of natural and man-made deposits
HEXACHLOROCYCLOPENTADIENE	6/9/2020	pc/l	15	0	1.7	1.7-1.7	N	Erosion of natural deposits
<u>TURBIDITY</u>	2022	ppb	50	50	1.4	0-1.4	N	Discharge from chemical factories
<u>Total Organic Carbon</u>								
Average Percent of Removal %			25%	100%	31.70%	26.6%-37%	N	Erosion of natural deposits
<u>UNREGULATED CONTAMINANTS</u>								
EPA is preparing a regulation, which will specify a Maximum Contaminant Level for radon. Radon is a radioactive gas that occurs naturally in ground water and is released from water into the air during household use. At high exposure levels it can cause lung cancer. Radon was not detected in the treated finished water distributed by Patoka Lake Regional Water and Sewer District.								
Chloramines	Daily	Ppm	4	4	3.4	3.91-2.8	N	Added for Disinfection

Turbidity does not present any risk to your health. Turbidity is a measure of suspended matter in water, and is a good indicator that the filtration system is functioning.

Total Organic Carbon

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terms and Definitions to Table

ppb — parts per billion, or microgram per liter (ug/l) ppm — parts per million, or milligram per liter (mg/l)

pCi/L — Picocuries per liter is a measure of the radioactivity in water.
MRAA-Maximum running annual average EPA — Environmental Protection Agency

IDEM — Indiana Department of Environmental Management

N/A — Either not available or not applicable

ND — Not detected, the result was not detected at or above the analytical method detection

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

NRDWR — National Primary Drinking Water Regulations

AL — Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.

MCL — Maximum Contaminant Level — "The Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to MCLG's as feasible using the best available treatment technology.

MCLG — Maximum Contaminant Level Goal — The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MRDL — Maximum residual Disinfectant Level — The highest level of a disinfectant allowed in drinking water.

MRDLG — Maximum Residual Disinfectant Level Goal The level of a drinking water disinfectant below which there is no known or expected risk to health.

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

2022 Water Board

Gary J. Pride (President)
Greg Mangin (Vice President)
Jerry Traylor (Treasurer)
Scott Birk (Secretary)
Paul Bastin
Keith Nolan
Kevin Schnarr

Helpful Comparisons for Use in Consumer Confidence Reports

Often the measures used for detected contaminants are confusing to consumers. Terms such as one part per million and one part per billion are hard to visualize and grasp. Consider using comparisons to explain the contaminant amounts found in water. Think of one part per million as:

01 inch in 16 miles
01 minute in 2 years
01 cent in \$10,000

Think of one part per billion as:

01 inch in 16,000 miles
•1 second in 32 years
01 cent in \$10 million

Using these comparisons may help your customers understand the significance of a detected level in your drinking water.

Environmental Protection Agency