

2023 Water Quality Report Ligonier Water Works

This letter explains the quality of drinking water provided by Ligonier Water Works. Included is a listing of results from water quality testing, an explanation of our water sources, and tips on how to interpret the data. We are happy to share our results with you. Please read them carefully.

We are proud to report that the water provided by Ligonier Water Works meets or exceeds established water quality standards. The water source for Ligonier Water Works is supplied by groundwater pumped from two wells that are 200 feet deep located approximately 1 mile north of the city limits.

We continue to update the controls at our water plant to ensure the quality of water being distributed to you. Over the years the Ligonier Water Works has successfully completed the planning and implementation stages of our Well Head Protection Program. Signs indicate the exact location of our area of protection.

Important Health information

Drinking water, excluding 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 (EPA) Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled) 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 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, these microbes may come from sewage treatment plants, septic systems, agricultural operation, 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, these chemicals 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 number of certain contaminants in the 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 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 infections. These people should seek advice about drinking water from their health care providers. EPA and CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the EPA Safe Drinking Water Hotline (800-426-4791).

How to Read the Water Quality Table

The results of the tests performed in 2023 or the most recent testing available are presented in the table. Terms used in the water quality table and in other parts of this report are defined here.

- **Maximum Contaminants Level or MCL:** The highest level of contaminants that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **Maximum Contaminant Level Goal:** The level of contaminants in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- **Detected Level:** The highest level detected of a contaminant for comparison against the acceptance levels for each parameter.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded < triggers treatment or other requirements which a water system must follow.
- **Range:** The lowest to the highest values for all samples tested for each contaminant. If only one sample is tested, or no range is required for this report, then no range is listed for that contaminant in the table.
- **Avg:** Average - Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- **LRAA:** Locational Running Annual Average
- **mrem:** millirems per year (a measure of radiation absorbed by the body)
- **ppb:** micrograms per liter (ug/L) or parts per billion - or one ounce in 7,350,000 gallons of water.
- **ppm:** milligrams per liter (mg/L) or parts per million - or one ounce in 7,350 gallons of water
- **picocuries per liter (pCi/L):** picocuries per liter is a measure of the radioactivity in water.
- **na:** not applicable.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Board of Public Works and Safety (BOW) meetings are held on the second and fourth Wednesday of each month at 301 S. Cavin Street at 1:30 p.m. The public is welcome to attend.

This report may also be viewed on the City of Ligonier's website: <https://www.in.gov/cities/ligonier/>

The Ligonier Water Works' phone is 260-894-4241 PWSID # 52570 I0

Nitrate	Test Date	Detection Level	MCL	Result (mg/L)
Nitrate	01/01/2022	<1.0	10.0	BDL
Regulated Volatile Compounds	Test Date	Detection Level	MCL	Result (mg/L)
Benzene	08/12/2021	0.5	5	BDL
Carbon Tetrachloride	08/12/2021	0.5	5	BDL
Chlorobenzene	08/12/2021	0.5	100	BDL
1,2-Dichlorobenzene	08/12/2021	0.5	600	BDL
1,4-Dichlorobenzene	08/12/2021	0.5	75	BDL
1,2-Dichloroethane	08/12/2021	0.5	5	BDL
1,1-Dichloroethylene	08/12/2021	0.5	7	BDL
1,2-Dichloroethylene, cis	08/12/2021	0.1	70	BDL
1,2-Dichloroethylene, trans	08/12/2021	0.5	100	BDL
Dichloromethane	08/12/2021	0.5	5	BDL
1,2-Dichloropropane	08/12/2021	0.5	5	BDL
Ethyl benzene	08/12/2021	0.5	700	BDL
Styrene	08/12/2021	0.5	100	BDL
Tetrachloroethylene	08/12/2021	0.5	5	BDL
Toluene	08/12/2021	0.5	1000	BDL
1,2,4-Trichlorobenzene	08/12/2021	0.5	70	BDL
1,1,1-Trichloroethane	08/12/2021	0.5	200	BDL
1,1,2-trichloroethane	08/12/2021	0.5	5	BDL
Trichloroethylene	08/12/2021	0.5	5	BDL
Vinyl Chloride	08/12/2021	0.5	2	BDL
Total Xylenes	08/12/2021	0.5	10000	BDL
Regulated Inorganic Chemicals	Test Date	Detection Level	MCL	Result mg/L
Antimony	07/19/2021	0.0010	0.006	BDL
Arsenic	07/19/2021	.0010	0.010	0.0012
Barium	07/19/2021	.01	2.0	0.14
Beryllium	07/19/2021	0.001	0.004	BDL
Cadmium	07/19/2021	0.001	0.005	BDL
Chromium	07/19/2021	0.005	0.1	BDL
Cyanide (Free)	07/19/2021	0.01	.02	BDL
Nitrogen	07/19/2021			<1.0
Fluoride (Natural)	07/19/2021	0.05	4.0	0.17
Mercury	07/19/2021	0.0002	0.002	BDL
Nickel	07/19/2021	0.01	0.1	BDL
Selenium	07/19/2021	0.001	0.05	BDL
Thallium	07/19/2021	0.0010	0.002	BDL
Sodium	07/19/2021	1.0	No MCL	4.9

Synthetic Organic Compounds	Test Date	Detection Level	MCL	Result mg/L
Alachlor (Lasso)	10/14/2022	<0.2	2	BDL
Atrazine	10/14/2022	<0.5	3	BDL
Benzoapyrene	10/14/2022	=0.1	0.2	BDL
Carbofuran	10/05/2022	<0.9	40	BDL
Chlordane (Alpha & Gamma)	10/14/2022	<0.2	2.0	BDL
2,4-D	09/26/2022	<1	70	BDL
Dalapon	09/26/2022	<5	200	BDL
DBCP	09/08/2022	<0.02	0.2	BDL
Dinoseb	09/26/2022	<1	7	BDL
Diquat	10/04/2022	<2	20	BDL
Di (2-ethylhexyl) adipate	10/14/2022	<0.6	400	BDL
Di (2-ethylhexyl) phthalate	10/14/2022	<0.6	6	BDL
Endothall	09/19/2022	<9	100	BDL
Endrin	10/14/2022	0.1	2.0	BDL
Ethylene Dibromide (EDB)	09/08/2022	<0.01	0.1	BDL
Glyphosate (Round-Up)	10/19/2022	<30	700	BDL
Heptachlor	10/14/2022	<0.1	0.0.2	BDL
Heptachlor Epoxide	10/14/2022	<0.1	0.2	BDL
Hexachlorobenzene	10/14/2022	<0.1	1	BDL
Hexachlorocyclopentadiene	10/14/2022	<0.5	50	BDL
Lindane	10/14/2022	<0.1	0.2	BDL
Methoxychlor	10/14/2022	<0.1	40	BDL
Oxamyl (Vydate)	10/05/2022	<2	200	BDL
Pentachlorophenol	09/26/2022	<0.4	1	BDL
Picloram (Tordon)	09/26/2022	<1	500	BDL
Simazine	10/14/2022	<0.35	4	BDL
2,4,5-TP (Silvex)	09/26/2022	<1	50	BDL
Toxaphene	09/22/2022	<1	3	BDL
TTHM and HAA5	Test Date	Detection Level	MDL	Result (ug/L)
HAA5	07/27/2022	1.0	1 ug/L	< 1.0
TTHM	07/27/2022	0.5	0.5 ug/L	<0.5
HAA5	08/05/2022	1.0	1 ug/L	<1.0
TTHM	08/05/2022	0.5	0.5 ug/L	<0.5

UCMR 5 Chemicals	Collection Dates	Minimum Reporting Limit (ug/L)	Action Limit (ng/L)	Result (ug/L)
lithium	03/08/2023 09/05/2023	9	10	0
PFBA	03/08/2023 09/05/2023	0.005	-	0
PFHxA	03/08/2023 09/05/2023	0.003	-	0
PFDA	03/08/2023 09/05/2023	0.003	-	0
11CI-PF3OUdS	03/08/2023 09/05/2023	0.005	-	0
8:2 FTS	03/08/2023 09/05/2023	0.005	-	0
4:2 FTS	03/08/2023 09/05/2023	0.003	-	0
6:2 FTS	03/08/2023 09/05/2023	0.005	-	0
ADONA	03/08/2023 09/05/2023	0.003	-	0
9CI-PF3ONS	03/08/2023 09/05/2023	0.002	-	0
NFDHA	03/08/2023 09/05/2023	0.02	-	0
PFEESA	03/08/2023 09/05/2023	0.003	-	0
PFMPA	03/08/2023 09/05/2023	0.004	-	0
PFMBA	03/08/2023 09/05/2023	0.003	-	0
PFDoA	03/08/2023 09/05/2023	0.003	-	0
PFHpS	03/08/2023 09/05/2023	0.003	-	0
PFHpA	03/08/2023 09/05/2023	0.003	-	0
PFPeS	03/08/2023 09/05/2023	0.004	-	0
PFPeA	03/08/2023 09/05/2023	0.003	-	0
PFUnA	03/08/2023 09/05/2023	0.002	-	0
NEtFOSAA	03/08/2023 09/05/2023	0.005	-	0
NMeFOSAA	03/08/2023 09/05/2023	0.006	-	0
PFTA	03/08/2023 09/05/2023	0.008	-	0
PFTTrDA	03/08/2023 09/05/2023	0.007	-	0

Our system collected samples under the U.S. EPA Unregulated Contaminants Monitoring Rule (UCMR) for 29 PFAS compounds and Lithium. This monitoring is being conducted so the EPA can receive occurrence data for these compounds to determine what additional compounds may need to be regulated in drinking water. We collected samples in March and September and did not detect any of the compounds. If you would like to view our results, contact our office at 260-894-4241.

Radiological Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
GROSS BETA PARTICLE ACTIVITY	2/21/2019	3	3	pCi/L	0	0	Decay of natural and man-made deposits. Note: The gross beta particle activity MCL is 4 millirems/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used as a screening level.
RADIUM-228	2/21/2019	0.1	0.1	PCI/L	5	0	

Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta particle and photon radioactivity in excess of the MCL over many years may have an increased risk of getting cancer.

Lead and Copper	Period	90TH Percentile: 90% of your water utility levels were less than	Range of Sampled Results (low - high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2020 - 2023	0.1	0.01 - 0.1	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2020 - 2023	5.8	1 - 64.3	ppb	15	1	Corrosion of household plumbing systems; Erosion of natural deposits

Infants and 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 (800-426-4761). 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>.