

2022 WATER QUALITY REPORT

FOR

City of Panora

This report contains important information regarding the water quality in our water system. The source of our water is both groundwater and surface water. Our groundwater is drawn from Cambrian Jordan Sandstone aquifer(s). Our surface water is drawn from the Raccoon River.

Our water quality testing shows the following results:

Raccoon River

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Nitrate [as N] (ppm)	10	10	6.9	2022	ND-6.9	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Lead (ppb)	0	AL=15	1.00	2022	ND – 3	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	1.3	AL=1.3	0.21	2022	0.06 – 0.23	No	Corrosion of household plumbing systems; Erosion of natural deposits
TTHM (ppb) [Total trihalomethanes]	N/A	80	52.00	2022	33-73	NO	By-products of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	N/A	60	26.00	2022	20-41	No	By-products of drinking water disinfection
Turbidity (NTU)	N/A	TT	100% of samples were below limit	2022	0.03- 0.20	No	Soil runoff
Sodium (ppm)	N/A	N/A	18	2/7/2022	NA	No	Erosion of natural deposits; Added to water during treatment process
Total Organic Carbon (TOC) (ppm)	N/A	TT	36.68% removal	2022	28.57% – 44.44%	No	Naturally present in the Environment
Chlorine (ppm)	MRDLG =4.0	MRDL=4.0	1.48	2022 Running Annual Average	(0.91 - 1.88)	No	Water additive used to control microbes
Combined radium (pCi/L)	0	5	<1	7/8/2020	NA	NO	Erosion of natural deposits
Dalapon (ppb)	200	200	0.40	10/4/2021	NA	NO	Runoff from herbicide used on rights of way

Lake Panorama

TTHM (ppb) [Total trihalomethanes]	N/A	80	0.0023	7/12/2022	NA	NO	By-products of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	N/A	60	<0.006	7/12/2022	NA	NO	By-products of drinking water disinfection
Lead (ppb)	0	AL=15	<0.003	9/28/2021	<0.001 - 0.003	NO	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	1.3	AL=1.3	0.21	9/28/2021	0.07-0.45	NO	Corrosion of household plumbing systems; Erosion of natural deposits
Alpha emitters (pCi/L)	0	15	3.2	10/14/2021	NA	NO	Erosion of natural deposits
Uranium (ppb)	0	30	3.2	10/14/2021	NA	NO	Erosion of natural deposits
Combined radium (pCi/L)	0	5	1.3	10/14/2021	ND-2.3	NO	Erosion of natural deposits

Sodium (ppm)	N/A	N/A	74	11/11/2020	NA	NO	Erosion of natural deposits; Added to water during treatment process
Fluoride (ppm)	4	4	0.429	1/27/2021	NA	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate [as N] (ppm)	10	10	0.1310	2022	NA	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

Panora did use water from Lake Panorama in 2022

DEFINITIONS

- 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.
- 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.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

DEFINITIONS

- NTU – Nephelometric Turbidity Units
- 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.
- RAA – running annual average
- IDSE-initial distribution system evaluation
- LRAA- Locational Running Annual Average
- 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 that water posed 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 (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 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. Panora City Water Plant 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>.

CONTAMINANT VIOLATIONS

None

ADDITIONAL HEALTH INFORMATION

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an Infant, you should ask advice from your health care provider.

OTHER VIOLATIONS

None.

SOURCE WATER ASSESSMENT INFORMATION

Panora obtains its water from the Middle Raccoon River at a surface intake about one and one-fourth miles downstream from the dam that forms Lake Panorama. The Panora water supply can obtain some of its water from the Cambrian Jordan Sandstone aquifers. They were determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The wells will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the IDNR, and is available from Lake Panorama at 641-755-2301.

OTHER INFORMATION

Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

CONTACT INFORMATION

For questions regarding this information, please contact Brent Christofferson at 641-755-2188 during the following hours: 7am – 3pm.

Decisions regarding the water system are made at the City Council meetings held on the second and fourth Mondays at 5:30 p.m. at the City Hall and are open to the public.

“Please note: This report will not be mailed to individual customers.”

Copies of the CCR report will be available for those who would like one on line at <http://www.cityofpanora.com> or may be picked up at city hall.