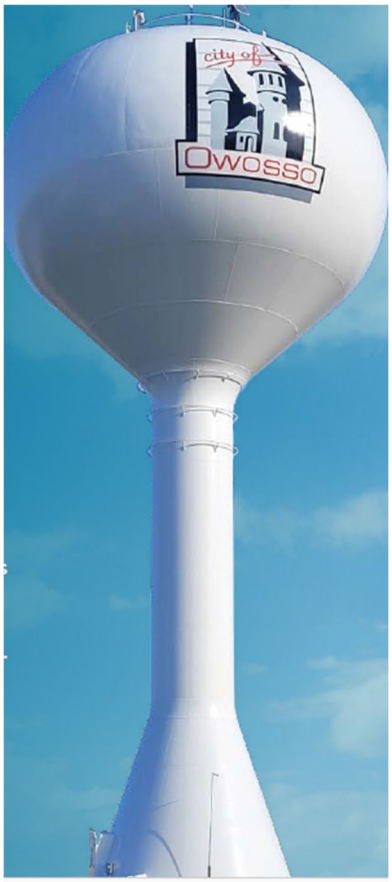


2024 Water Quality Report for the City of Owosso Water Supply

Water Supply Serial Number: 05120

This report covers the drinking water quality for the City of Owosso Water Supply for the 2024 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2024. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards.

Your water comes from five active groundwater wells, each over 80' deep. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is high to very high.

There are no significant sources of contamination in our water supply. We are making continuous efforts to protect our sources by monitoring any new construction and maintaining our Wellhead Protection Program.

If you would like to know more about this report, please contact: David Haut, Water Plant Superintendent by calling 989-725-0560 or email at david.haut@ci.owosso.mi.us .

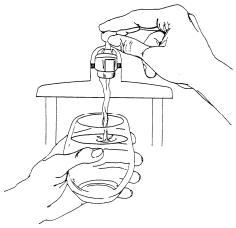
Contaminants and their presence in water: Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (800-426-4791).

Vulnerability of sub-populations: 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 systems 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. EPA/Center 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 (800-426-4791).

Sources of drinking water: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from wells. As water travels over the surface of the 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 stormwater 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 and residential uses.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **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 stormwater runoff, and septic systems.



In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

This well, located at the Water Filtration Plant has been tested and inspected. It needed some new components and other components were able to be made like new again. The well pipe and screen needed pressure and chemical cleaning. The photo shows the reinstallation of the well. This type of contract work is necessary every 6 to 8 years at a cost upwards of $45,000.00.

Two new well buildings and wells were completed in 2024. The combined permit capacity of these well is 1,800 GPM. High construction standards for these two wells will ensure a supply of water to Owosso for decades to come.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2024 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2024. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- 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.
- 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 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.
- 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.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- N/A: Not applicable
- ND: not detectable at testing limit
- ppm: parts per million or milligrams per liter
- ppb: parts per billion or micrograms per liter
- ppt: parts per trillion or nanograms per liter
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- ug\L stands for microgram per liter. 1 µg/L is 1000 times smaller than 1 mg/L (milligrams per liter).

Monitoring Data for Regulated Contaminants							
Regulated Contaminant	**MCL**	**MCLG**	**Level Detected**	**Range**	**Year Sampled**	**Violation (Yes/No)**	**Typical Source of Contaminant**
Barium (ppm)	2	2	0.14	0.07-0.14	08/2023	No	Discharge from oil drilling wastes and from metal refineries; erosion of natural deposits
Ethylbenzene (ppm)	0.7	N/A	0.0006	N/A	8/2023	No	Compounds used for industrial and manufacturing purposes
Fluoride (ppm)	4	4	0.70	0.44-0.70	2024	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories. *Water additive which promotes strong teeth.
HAA5 Haloacetic Acids (ppb)	60	N/A	6	4-6	08/2024	No	Byproduct of drinking water disinfection.
M&p-Xylene (ppm)	10	N/A	0.0027	0.0006-0.0026	8/2023	No	Compounds used for industrial and manufacturing purposes
TTHM - Total Trihalomethanes(ppb)	80	N/A	52.5	49.5-52.5	08/2024	No	Byproduct of drinking water disinfection.
Chlorine* (ppm)	MRDL 4	MRDLG 4	1.40	0.75-1.40	2024	No	Water additive used to control microbes.
Bromodichloromethane (ppm)	0.080	N/A	0.018	0.0064-0.018	08/2023	No	Byproduct of drinking water disinfection.
Bromoform (ppm)	0.080	N/A	0.0063	0.0023-0.0063	08/2023	No	Byproduct of drinking water disinfection.
Chlorodibromomethane (ppm)	0.080	N/A	0.015	0.011 - 0.015	08/2023	No	Byproduct of drinking water disinfection.
Chloroform (ppm)	0.080	N/A	0.0083	0.0042-0.031	08/2023	No	Byproduct of drinking water disinfection.
o-Xylene (ppm)	10	N/A	0.0026	N/A	8/2023	No	Compounds used for industrial and manufacturing purposes
Styrene (ppm)	0.1	N/A	0.0008	N/A	8/2023	No	Compounds used for industrial and manufacturing purposes

*Chlorine was calculated using the running annual average.

Microbiological Contaminant	**MCL**	**MCLG**	**Level Detected**	**Range**	**Year Sampled**	**Violation (Yes/ No)**	**Typical Source of Contaminant**
Total Coliform (total number or % of positive samples/month)	TT	N/A	N/A	N/A	2024	No	Naturally present in the environment
E. coli in the distribution system (positive samples)	See E. coli note *	0	0	N/A	2024	No	Human and animal fecal waste
Fecal Indicator – E. coli at the source (positive samples)	TT	N/A	0	N/A	2024	No	Human and animal fecal waste

* E. coli MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is E. coli-positive, or (2) the supply fails to take all required repeat samples following E. coli-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for E. coli.

Inorganic Contaminant Subject to ALs	AL	MCLG	Your Water*	Range of Results	Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	6 ppb	0 ppb - 9 ppb	2024	0	Lead service lines, corrosion of household plumbing including fitting and fixtures; Erosion of natural deposits.
Copper (ppm)	1.3	1.3	0.0 ppm	0 ppm - 0.1 ppm	2024	0	Corrosion of household plumbing systems; Erosion of natural deposits.

*Ninety (90) percent of the samples collected were at or below the level reported for our water.

Additional Monitoring

Unregulated contaminants are those for which the USEPA has not established drinking water standards. Monitoring helps the USEPA determine where certain contaminants occur and whether regulation of those contaminants is needed.

Unregulated Contaminant Name	Average Level Detected	Range	Year Sampled	Comments
Sodium (ppm)	43.2	35-47	6/2023	Typical source is erosion of natural deposits.
Chloride (ppm)	89	86-94	6/2023	Naturally occurring or indicative of road salt contamination.
Sulfate (ppm)	126.4	115-136	6/2023	Naturally occurring.
Magnesium (ppm)	20.75	11-29	6/2023	Naturally occurring.
Hardness of CaCO3 (ppm)	179.8	160-194	6/2023	Naturally occurring.
Calcium (ppm)	37.5	30-46	6/2023	Naturally occurring.

Unregulated Contaminant Name	Average Level Detected	Year Sampled	Comments **See EPA Website:** https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule
Germanium (ug/L)	<0.300	1/21/2020	Metal.
Manganese (ug/L)	<0.400	1/21/2020	Metal.
BHA (ug/L)	<0.0300	1/21/2020	Semi-Volatile Organic Compounds
o- Toluidine (ug/L)	<0.0070	1/21/2020	Semi-Volatile Organic Compounds
Quinoline (ug/L)	<0.0200	1/21/2020	Semi-Volatile Organic Compounds
HAA6Br (six brominated haloacetic acids) (ug/L)	11.000	1/07/2020	Disinfection Byproducts
HAA9 (nine haloacetic acids) (ug/L)	18.300	1/07/2020	Disinfection Byproducts
alpha-BHC (alpha-Hexachlorocyclohexane) (ug/L)	<0.010	1/07/2020	Pesticide
Chlorpyrifos (ug/L)	<0.030	1/07/2020	Pesticide
Dimethipin (ug/L)	<0.200	1/07/2020	Pesticide
Ethoprop (ug/L)	<0.030	1/07/2020	Pesticide
Oxyfluorfen (ug/L)	<0.050	1/07/2020	Pesticide
Profenofos (ug/L)	<0.300	1/07/2020	Pesticide
Tebuconazole (ug/L)	<0.200	1/07/2020	Pesticide
Permethrin (ug/L)	<0.040	1/07/2020	Pesticide
Tribufos (ug/L)	<0.070	1/07/2020	Pesticide
1-Butanol (ug/L)	<2.000	1/07/2020	Alcohol
2-Methoxyethanol (ug/L)	<0.400	1/07/2020	Alcohol
2-Propen-1-ol (ug/L)	<0.500	1/07/2020	Alcohol

Unregulated Contaminant	Average Level Detected	Range	Year	Comments
Lithium (ppb)	14.5	11.6-17.4	5/2023-11/2023	Compounds used for industrial and manufacturing purposes
Methyl Isobutyl Ketone (ppm)	0.0050	N/A	8/2023	Compounds used for industrial and manufacturing purposes

Information about lead: *Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of Owosso Water Supply is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for at least 5 minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water and wish to have your water tested, contact the City of Owosso Water Supply: David Haut, Water Plant Superintendent by calling 989-725-0560 or email at david.haut@ci.owosso.mi.us for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.*

Our water supply has 1,950 lead service lines, 1,809 known or assumed galvanized service lines and 13 service lines of unknown material out of a total of 6,645 service lines. If you would like to know more about this report, please contact: the Water Filtration Plant Superintendent, David Haut at 989-725-0560 or email david.haut@ci.owosso.mi.us .

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2024.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at City Hall. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. Meetings at City Hall during the regularly scheduled City Council meeting are held at 6:30 p.m., on the first and third Mondays of each month. For more information about your water, or the contents of this report, contact the Water Filtration Plant Superintendent, David Haut at 989-725-0560 or email david.haut@ci.owosso.mi.us . For more information about safe drinking water, visit the U.S. EPA at http://www.epa.gov/safewater .

This is a photo of the South Clarifier. It shows we have removed all 286,000 gallons of water and are repairing and servicing the unit. This Clarifier is almost 30 ft. deep. Cleaning and inspections have to be done every 6 months. Parts have to be replaced regularly and paint touchups are constantly applied to surfaces that begin to rust.