

Annual Drinking Water Quality Report

Osnabrock, ND

2023

We're pleased to present to you this year's *Annual Drinking Water Quality Report*. This report is designed to inform you about the safe clean water we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. The city of Osnabrock purchases its water from Northeast Regional Water District – Langdon Branch & North Valley Branch is entirely groundwater. Water for North Valley Branch is obtained from the Icelandic Aquifer. Water for the Langdon Branch is obtained from the City of Devils Lake.

The Northeast Regional Water District – North Valley Branch & Langdon Branch is participating in North Dakota's Wellhead Protection Program. A copy of this program is available upon request. The North Dakota Department of Health has prepared a Source Water Assessment for the city of Osnabrock and for the Northeast Regional Water District – North Valley Branch & Langdon Branch. Information regarding this program is also available upon request.

“Our public water system, in cooperation with the North Dakota Department of Health, has completed the delineation and contaminant/land use inventory elements of the North Dakota Source Water Protection Program. Based on the information from these elements, the North Dakota Department of Health has determined that Northeast Regional Water District – North Valley Branch & Langdon Branch source water is “**moderately susceptible**” to potential contaminants.” No significant sources of contamination have been identified.

Osnabrock is pleased to report that our drinking water is safe and meets federal and state requirements.

This report shows our water quality and what it means.

If you have any questions about this report or concerning your water utility, please contact Maria Schiestel, Osnabrock City Auditor, at (701) 370-7261. We want our valued 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 second Tuesday of each month at 7:00 PM in the Osnabrock Fire Hall. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Maria at the number listed above and all efforts will be made to provide assistance.

The city of Osnabrock would appreciate it if large volume water customers would please post copies of this *Annual Drinking Water Quality Report* in conspicuous locations or distribute them to tenants, residents, patients, students, and/or employees, so individuals who consume the water, but do not receive a water bill, can learn about our water system.

Osnabrock routinely monitors for contaminants in your drinking water according to Federal and State laws. The following tables show the results of our monitoring for the period of January 1st to December 31st, 2023. As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for inorganic contaminants], though representative, is more than one-year-old.

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 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 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 stormwater runoff, and residential uses.

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.

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, The Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Not Applicable (N/A), No Detect (ND)

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter ($\mu\text{g}/\text{l}$) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/l) – Pico curies per liter is a measure of the radioactivity in water.

Action Level (AL)- The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Maximum Contaminant Level - The “Maximum Allowed” (*MCL*) is 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 - The “Goal” (*MCLG*) is 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 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.

IDSE = Initial Distribution System Evaluation

TEST RESULTS FOR NORTHEAST RWD NORTH VALLEY BRANCH ND3401128

<u>Contaminant</u>	<u>MCLG</u>	<u>MCL</u>	<u>Level Detected</u>	<u>Unit Measurement</u>	<u>Range</u>	<u>Date (year)</u>	<u>Violation Yes/No Other Info</u>	<u>Likely Source of Contamination</u>
Disinfectants								
Chlorine	MRDL =4.0	MRDLG =4	1.2	ppm	0.7625 To 1.6475	2023	**No	Water additive used to control microbes
Inorganic Contaminants								
Copper		AL=1.3	0.45 90 th % Value	ppm	N/A	2022	**No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead*		AL=15	1.46 90 th % Value	ppb	N/A	2022	**No	Corrosion of household plumbing systems, erosion of natural deposits
Stage 2 Disinfection Byproducts (TTHM/HAA5)								
HAA5	NA	60	6	ppb	N/A	2023	No	By-product of drinking water Chlorination
TTHM	NA	80	14	ppb	N/A	2023	No	By-product of drinking water Chlorination
Radioactive Contaminants								
Uranium, combined	0	30	1	ppb	N/A	2022	No	Erosion of natural deposits
Gross Alpha, Including RA, excluding RN & U	15	15	ND	pCi/l	N/A	2022	No	Erosion of natural deposits
Radium, combined (226, 228)	0	5	.2851	pCi/l	N/A	2022	No	Erosion of natural deposits
Unregulated Contaminants								
Manganese	NA	NA	0.028	ppm	N/A	2017	No	N/A

TEST RESULTS FOR NORTHEAST RWD LANGDON BRANCH ND1001380

<u>Contaminant</u>	<u>MCLG</u>	<u>MCL</u>	<u>Level Detected</u>	<u>Unit Measurement</u>	<u>Range</u>	<u>Date (year)</u>	<u>Violation Yes/No Other Info</u>	<u>Likely Source of Contamination</u>
Disinfectants								
Chlorine	MRDL =4.0	MRDLG =4	0.8	ppm	0.45 To 1.065	2023	**No	Water additive used to control microbes
Inorganic Contaminants								
Copper		AL=1.3	0.286 90 th % Value	ppm	N/A	2023	**No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead*		AL=15	1.44 90 th % Value	ppb	N/A	2023	**Yes – Lead Consumer Notice	Corrosion of household plumbing systems, erosion of natural deposits

Stage 2 Disinfection Byproducts (TTHM/HAA5)								
HAA5	NA	60	23	ppb	15.64 to 23.35	2023	No	By-product of drinking water Chlorination
TTHM	NA	80	60	ppb	35.27 to 60.29	2023	No	By-product of drinking water Chlorination

TEST RESULTS FOR THE CITY OF OSNABROCK ND1000768								
<u>Contaminant</u>	<u>MCLG</u>	<u>MCL</u>	<u>Level Detected</u>	<u>Unit Measurement</u>	<u>Range</u>	<u>Date (year)</u>	<u>Violation Yes/No Other Info</u>	<u>Likely Source of Contamination</u>
Inorganic Contaminants								
Copper	1.3	AL=1.3	0.271 90 th % Value	ppm	N/A	2022	**No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead*	0	AL=15	1.3 90 th % Value	Ppb	N/A	2022	**No	Corrosion of household plumbing systems, erosion of natural deposits

Disinfectants								
Chlorine	MRDL =4.0	MRDLG =4	1.4	ppm	0.61 To 2.2	2023	**No	Water additive used to control microbes
Stage 2 Disinfection Byproducts (TTHM/HAA5)								
HAA5	NA	60	13	ppb	N/A	2023	No	By-product of drinking water Chlorination
TTHM	NA	80	30	ppb	N/A	2023	No	By-product of drinking water Chlorination

*If present, elevated levels of lead can cause serious health problems, especially for pregnant women and you children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The city of Osnabrock is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. **Use water from the cold tap for drinking and cooking. 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 drinking 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>.

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 for advice from your health care provider.

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table above are only contaminants detected in your drinking water.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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. 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/Centers for Disease Control and Prevention (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 (1-800-426-4791).

Tampering with a public water system is a federal offense. Report suspicious activity to local law enforcement immediately.

Please call Maria Schiestel, Osnabrock City Auditor, at (701)370-7261 if you have questions concerning your water system.

The city of Osnabrock works diligently to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.