

**West River/Lyman-Jones Rural Water Systems, Inc.**  
**Annual Drinking Water Report**  
**January 1, 2024 – December 31, 2024**

**Water Quality**

Last year, West River/Lyman-Jones Rural Water monitored your drinking water for possible contaminants. This report is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies.

**Water Source**

We serve 3,660 customer accounts. WR/LJ has several water sources for its seven-county service area. One intake is located in Lake Sharpe on the Missouri River. We purchase water from the Mni Wiconi Water Treatment Plant (WTP) at Ft. Pierre, SD operated by Oglala Sioux Rural Water. The Mni Wiconi WTP utilizes conventional water treatment and filtration processes. Groundwater sources are wells owned by the City of Wall and four wells owned by WR/LJ near Creighton, Quinn, and Wall. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for WR/LJ Rural Water public water supply system is low.

For more information about your water and information on opportunities to participate in public meetings, call (605) 669-2931 and ask for Jake Fitzgerald.

**Additional Information**

The sources of drinking water (both tap water 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 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 results 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, 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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 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 can be obtained by calling the Environment Protections Agency's 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. The West River/Lyman-Jones public water supply 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. 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>.

### **Detected Contaminants**

The tables list 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 the tables are from testing done January 1 – December 31, 2024. The state requires 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. Some of the data, though representative of the water quality, is more than one year old.

West River/Lyman-Jones Rural Water participated in EPA's UCMR5 sampling program in 2024 and this report is being used as a public notice. Any detected unregulated contaminants have been included in this report.

### **Which Table(s) Applies To My Water?**

For your water test results, please refer to the map for your water source.

- Water Source 1 (Mni Wiconi) – See Tables A and B
- Water Source 2 (North Stanley) – See Tables A and C
- Water Source 3 (North Haakon) – See Tables A and C
- Water Source 4 (WR/LJ Wells) – See Table D
- Water Source 5 (South Wall) – See Table E

### **Terms & Abbreviations Used in Tables**

**Action Level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. For Lead and Copper, 90% of the samples must be below the AL.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water. For turbidity, 95% of samples must be less than 0.3 NTU.

**Maximum Contaminant Level (MCL)** – This 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 (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.

**NESC** – Non-enforceable secondary contaminant

**Running Annual Average (RAA):** Compliance is calculated using the running annual average of samples from designated monitoring locations.

### **Units**

ppm: parts per million, or milligrams per liter (mg/L)

ppb: parts per billion, or micrograms per liter (ug/L)

pCi/L: picocuries per liter (a measure of radioactivity)

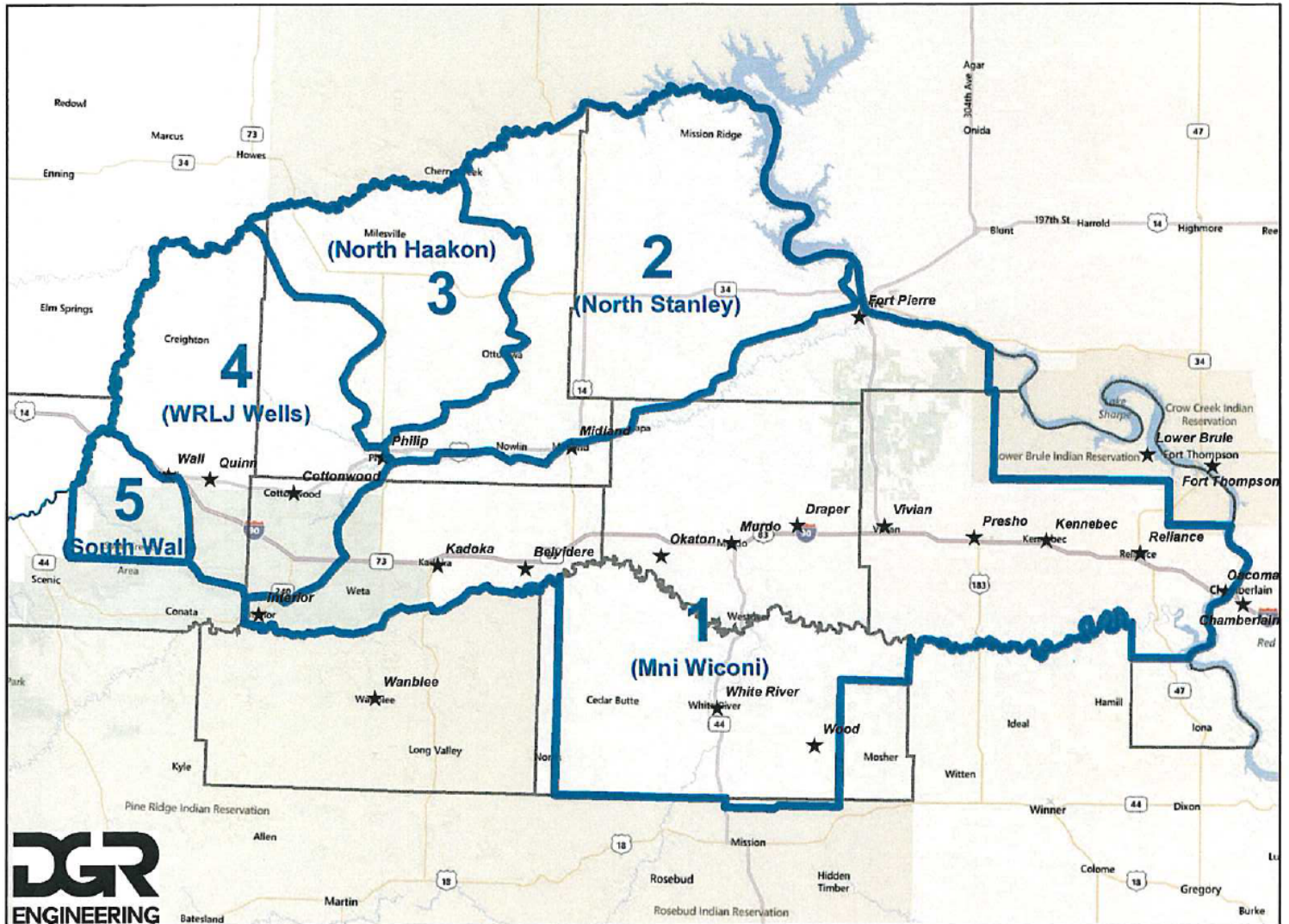
NTU: Nephelometric Turbidity Units

ND: Non-Detectable

pspm: positive samples per month



## WEST RIVER/LYMAN JONES RURAL WATER SYSTEMS, INC.



**TABLE A - 2024 TABLE OF DETECTED CONTAMINANTS  
FOR MNI WICONI WATER TREATMENT PLANT (OGLALA SIOUX RURAL WATER) SURFACE WATER**

Substance	Highest Level Detected	Range	Sample Date	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Major Source of Contaminant
Copper	90% Level = .56		2024	AL=1.3	1.3	ppm	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	90% Level = 4.3		2024	AL=15	0	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.

Substance	Highest Level Detected	Range	Sample Date	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Major Source of Contaminant
Antimony	0.26	0.26 - 0.26	2024	6	6	ppb	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Barium	0.0346	0.0346 - 0.0346	2024	2	2	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chloramines	2.8	2.7 - 2.8	2024	MRDL = 4	MRDLG = 4	ppm	Water additive used to control microbes.
Chromium	0.27	0.27 - 0.27	2024	100	100	ppb	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	0.8	0.77 - 0.77	2024	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids (HAA5)	19	18.8 - 18.8	2024	60	No goal for the total	ppb	By-product of drinking water disinfection.
Selenium	1.2	1.2 - 1.2	2024	50	50	ppb	Discharge from petroleum and metal refineries; Erosion of natural deposits; discharge from mines.
Total Trihalomethanes (TTHM)	38	37.9 - 37.9	2024	80	No goal for the total	ppb	By-product of drinking water disinfection.
Turbidity	4.98 NTU 94%		2024	TT: 1 NTU TT: % of samples <=0.3	0	NTU	Soil Runoff. Turbidity is a measurement of the clarity of the water.

**TABLE B - 2024 TABLE OF DETECTED CONTAMINANTS  
FOR WR/LJ SURFACE WATER FROM LAKE SHARPE ON MISSOURI RIVER (EPA ID 2223)**

Substance	Highest Level Detected	Range	Date Tested	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Major Source of Contaminant
Copper	90% Level = 0.2	# Sites > 1.3 AL - 0	9/8/22	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	90% Level = 1	# Sites > 15 AL - 0	9/8/22	AL=15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Fluoride	0.80	0.72 - 0.80	9/3/24	4	<4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids (RAA)	27.3		9/12/24	60	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Total Trihalomethanes (RAA)	32.9		9/12/24	80	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Substance	Level Detected		Date Tested	Range		Units	
PFBA	0.0081		5/3/2023	<MRL-0.0081		ppb	These contaminants are not regulated and acceptable levels have not been set by EPA.
Lithium	80.0		6/6/2023	51-80.0		ppb	

For more information on the unregulated contaminants, go to <https://www.epa.gov/dwucmr>  
or contact the Safe Drinking Water Hotline at (800)426-4791 <https://water.epa.gov/drink/contact.cfm>



**TABLE C - 2024 TABLE OF DETECTED CONTAMINANTS  
FOR WRLJ SURFACE WATER SOURCE FROM LAKE SHARPE ON MISSOURI RIVER (EPA ID 2224)**

Substance	Highest Level Detected	Range	Date Tested	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Major Source of Contaminant
Copper	90% Level = 0.2	# Sites > 1.3 AL - 0	9/8/22	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	90% Level = 1	# Sites > 15 AL - 0	9/8/22	AL=15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Fluoride	0.78	0.71 - 0.78	5/6/24	4	<4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer & aluminum factories.
Haloacetic Acids (RAA)	39.5		9/12/24	60	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Total Trihalomethanes (RAA)	42.9		9/12/24	80	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.

**TABLE D - 2024 TABLE OF DETECTED CONTAMINANTS  
FOR WRLJ CREIGHTON AREA WELLS - GROUNDWATER SOURCE (EPA ID 2156)**

Substance	Highest Level Detected	Range	Date Tested	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Major Source of Contaminant
Copper	90% Level = 0.2	# Sites > 1.3 AL - 0	8/9/22	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	90% Level = 2	# Sites > 15 AL - 0	8/9/22	AL=15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Barium	0.028	0.016 - 0.028	11/7/22	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	1.9	0.50 - 1.9	11/7/22	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride *VIOLATION* (see below)	3.69	2.18 - 3.69	10/22/24	4	<4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids (RAA)	<4.5	<4.5	9/26/24	60	0	ppb	By-product of drinking water chlorination.
Nitrate (as Nitrogen)	<0.2	All 4 samples <.2	8/29/24 & 10/24/24	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (as Nitrogen)	<0.02	All 3 samples <.02	8/29/24	1	1	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	0.59	ND - 0.59	11/7/22	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Total Coliform Bacteria	0	positive samples	2 each month	1	0	pspm	Naturally present in the environment.
Total Trihalomethanes (RAA)	<0.5	<.5	9/26/24	80	0	ppb	By-product of drinking water chlorination.

\*VIOLATION\* - In 2024 WR/LJ Creighton, Quinn, and north Wall wells exceeded the secondary maximum contaminant level for fluoride. Children under 9 years of age may develop cosmetic discoloration of their permanent teeth from drinking water containing more than 2 ppm of fluoride and should be provided an alternate source for drinking. Drinking water containing more than 4 ppm of fluoride can increase the risk of developing bone disease. WR/LJ annually mails each customer affected by this violation a notice of the fluoride MCL secondary exceedance. Some home water treatment units are available to remove fluoride from the water. The problem will be ongoing unless the area receives its water from another source or the natural level of fluoride drops below MCL limits.

**TABLE E - 2024 TABLE OF DETECTED CONTAMINANTS  
FOR CITY OF WALL WELLS - GROUNDWATER SOURCE (EPA ID 0417)**

Substance	Highest Level Detected	Range	Date Tested	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Major Source of Contaminant
Copper	90% Level = 0.1	# Sites > 1.3 AL - 0	8/29/24	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	90% Level = 1	# Sites > 15 AL - 0	8/29/24	AL=15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Barium	0.028	0.016 - 0.028	11/7/22	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	1.9	0.50 - 1.9	11/7/22	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits.
Combined Radium	1	ND - 1	8/4/21	5	0	pCi/l	Erosion of natural deposits.
Fluoride *VIOLATION* (See Below)	3.5	2.20 - 3.50	11/15/23	4	<4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Selenium	0.59	ND - 0.59	11/7/22	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Substance	Level Detected		Date Tested	Range		Units	
Lithium	238		10/16/2023	58.6-238		ppb	This contaminant is not regulated and acceptable levels have not been set by EPA.

\*VIOLATION\* - In 2024 Wall wells exceeded the secondary maximum contaminant level for fluoride. Children under 9 years of age may develop cosmetic discoloration of their permanent teeth from drinking water containing more than 2 ppm of fluoride and should be provided an alternate source for drinking. Drinking water containing more than 4 ppm of fluoride can increase the risk of developing bone disease. WR/LJ annually mails each customer affected by this violation a notice of the fluoride MCL secondary exceedance. Some home water treatment units are available to remove fluoride from the water. The problem will be ongoing unless the area receives its water from another source or the natural level of fluoride drops below MCL limits.