Ppm - *part per million* , **Ppb** - *part per billion* , **MG/L** – *milligrams per liter* , **pCi/L** - *picocuries per liter* , **NTU** - *nephelomentric turbidity unit* , **AL** - *action level* , **TT** - *treatment technique* , **MCL** - *maximum contaminant level* , **MCLG** - *maximum contaminant level goal* , **n/a** - *not applicable* , **MRDL** - *maximum residual disinfectant level* , **MRDLG** - *maximum residual disinfectant level goal,* **L/mg-m** - *liters per milligram-meter,* **Umho/cm** - *micromhos per centimeter (a measure of conductivity),* **obsvns** - *ovservations/field at 100 Power,* **IDSE** - *Initial Distribution System Evaluation*

CITY OF WASHBURN CHEMICAL/RADIOLOGICAL ANALYSIS

Lead/Copper	Date	# Samples	Action Level	9th Percentile	Samples Exceel AL	Units
Copper 90th Percentile	8/19/2022	10	1.3	0.0677	0	ppm
Lead 90th Percentile	8/19/2022	10	15	2.11	0	ppb

* Lead and Copper in drinking water originates from corrosion of household plumbing systems; Erosion of natural deposits

* Required action is taken if more than 10 percent of the samples have exceeded the AL. The City water sampling meets the requirements of 90 percent as 100 percent of the testing sites tested under the AL

	Violation?	Date	MCL	MCLG	Level Detected	Units	Major Sources in Water
Inorganic Contaminats							
NITRATE - NITRITE	No	4/25/2023	10	10	0.134	ppm	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Disinfectants							
CHLORAMINE	No	3/31/2023	MRDL=4.0	MRDLG=4	2.2	ppm	Water additive used to control microbes. Range of detection: 1.96 to 2.41
Unregulated Contaminants							
BICARBONATE AS HCO3	N/A	12/13/2023			208	ppm	Range of detection: 187 - 208
ALKALINITY, CARBONATE	N/A	12/13/2023			2	ppm	Range of detection: ND - 2
Total Organic Carbon Removal							
ALKALINITY - Source	N/A	6/30/2023			170	MG/L	Naturally present in the environment. Range of detection: 153.00 to 170.00
TOC - Finished Water	N/A	12/31/2023			3.14	MG/L	Naturally present in the environment. Range of detection: 2.29 to 3.14
TOC - Source Water	N/A	4/30/2023			4.02	MG/L	Naturally present in the environment. Range of detection: 3.30 to 4.02
Stage 2 Disinfecton Byproducts							
HAA5	No	12/31/2023	60	--	23	ppb	By-product of drinking water disinfection. Range of detection: 15.96 to 28.81
TTHM	No	3/31/2023	80	--	41	ppb	By-product of drinking water disinfection. Range of detection: 18.3 to 53.32
Surface Water Treatment Rule Monitoring Data							
TURBIDITY	No		--	--	0.13	NTU	Soil Runoff

Lowest monthly percentage of samples meeting turbidity limits = 100%

* Turbidity is a measure of cloudiness of the water and is a good indicator of the effectiveness of our filtration system. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Bacteriological Monitoring Data - RTCR

Total Coliform Data August had the highest number of Total Coliform Samples. Total Coliform Positives for that Month: 2

Assessment Data - RTCR

Level 1 8/7/2023 Multiple Total Coliform Positive Samples Assessment Completed

* A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system. During the past year, we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. The Level 1 Assessment was triggered when one sample taken on 8/7/2023 and another sample taken 8/14/2023 tested positive for total coliform bacteria. The assesement was completed on 8/30/2023. **Corrective Action**: **No sanitary defects were found.**

Our system is required to monitor for total coliform bacteria in our drinking water. Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential path exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems found during these assessments.