2024 Southwest Regulated Detected Contaminants Table

2024 Inorganic Chemicals - Annual Monitoring at Plant Finished Tap

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation	Major Sources in Drinking Water
Fluoride	02-13-2024	ppm	4	4	**0.66**	**n/a**	**no**	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	02-13-2024	ppm	10	10	**0.31**	**n/a**	**no**	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Lead and Copper Monitoring at the Customer's Tap in 2024

Regulated Contaminant	Unit	Year Sampled	Health Goal MCLG	Action Level AL	90th Percentile Value*	Range of Individual Samples Results	Number of Samples Over AL	Major Sources in Drinking Water
Lead	ppb	2024	0	15	**0**	**ND**	**0**	Lead services lines, corrosion of household plumbing including fittings and fixtures; erosion of natural deposits.
Copper	ppm	2024	1.3	1.3	**0.1**	**0 ppm – 0.2 ppm**	**0**	Corrosion of household plumbing systems; Erosion of natural deposits.

* The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.

2024 Disinfection Residual - Monitoring in the Distribution System

Regulated Contaminant	Test Date	Unit	Health Goal MRDLG	Allowed Level MRDL	Highest Level RAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Total Chlorine Residual	2024	ppm	4	4	**0.70**	**0.52-0.80**	**no**	Water additive used to control microbes

2024 Disinfection By-Products - Stage 2 Disinfection By-Products Monitoring in the Distribution System

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level LRAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Total Trihalomethanes (TTHM)	2024	ppb	n/a	80	**68.4**	**68.4**	**no**	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	2024	ppb	n/a	60	**5.0**	**5**	**no**	By-product of drinking water chlorination

2024 Turbidity - Monitored Every 4 Hours at the Plant Finished Water Tap

Highest Single Measurement Cannot Exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)	Violation	Major Sources in Drinking Water

0.1 NTU	**100%**	**no**	Soil Runoff
Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system			

2024 Special Monitoring

Contaminant	Test Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant
Sodium	02-13-2024	ppm	n/a	n/a	**5.2**	Erosion of natural deposits

Regulated Contaminant	Treatment Technique	Typical Source of Contaminant
Total Organic Carbon ppm	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC is measured each quarter and because the level is low, there is no requirement for TOC removal	Erosion of natural deposits

These tables are based on tests conducted by GLWA in the year 2024 or the most recent testing done within the last five calendar years. GLWA conducts tests throughout the year only tests that show the presence of a substance or require special monitoring are presented in these tables. 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. The data is representative of the water quality, but some are more than one year old.

Great Lakes Water Authority (GLWA) is required to notify water users of any unresolved significant deficiencies identified by the Michigan Department of Environment, Great Lakes, and Energy, Drinking Water and Environment Health Division (EGLE). Below is the status of significant deficiencies in the GLWA water system identified by EGLE:

Date Identified by EGLE	Description	Compliance Agreement Deadline	Status
08-02-2022	Improper rapid mixing and coagulant feed location at the Southwest water plant	12-31-2027	Contractor is in place and the work has been initiated.
08-02-2022	Inoperable flocculation equipment at the Southwest water plant	07-31-2031	Review stage of procurement process.

Key to the Detected Contaminants Table

Symbol	Abbreviation	Definition/Explanation
>	Greater than	
°C	Celsius	A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.
AL	Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
HAA5	Haloacetic Acids	HAA5 is the total of bromoacetic, chloroacetic, di-bromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.

Level 1	Level 1 Assessment	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 system.
LRAA	Locational Running Annual Average	The average of analytical results for samples at a particular monitoring location during the previous four quarters.
MCL	Maximum Contaminant Level	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.
MCLG	Maximum Contaminant Level Goal	The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow a margin of safety.
MRDL	Maximum Residual Disinfectant Level	The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
n/a	not applicable	
ND	Not Detected	
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
pCi/L	Picocuries Per Liter	A measure of radioactivity
ppb	Parts Per Billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.
ppm	Parts Per Million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.
RAA	Running Annual Average	The average of all analytical results for all samples during the previous four quarters.
SMCL	Secondary Maximum Contaminant Level	
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
TTHM	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform. Compliance is based on the total.
µmhos	micromhos	Measure of electrical conductance of water