

A dynamic splash of clear water against a light blue background, with numerous droplets and ripples visible. The water is splashing from the bottom right towards the top left.

# ANNUAL WATER QUALITY REPORT

Reporting Year 2021

*Presented By*  
**SJWTX for  
Miralomas MUD**

Este reporte incluye información importante sobre el agua para tomar.  
Para asistencia en español, favor de llamar al telefono (830) 312-4600.

## From the General Manager

We are proud to provide you with our 2021 Consumer Confidence Report (CCR). The annual water-quality report covers all testing performed between January 1 and December 31, 2021. Our team of professionals has spent countless hours collecting samples, analyzing data, focusing on superior quality water and our vision, “to serve customers, communities, employees, shareholders and the environment at world class levels.” Our Mission, Vision and Values bind us together to provide life-sustaining water for our customers, community, and each other.

As you review the data in the Test Results section, keep in mind that many substances are detected at levels that vary throughout the year and at different locations. As a reminder, just because a substance is detected, does not mean the water is unsafe. Natural waters, including the sources used by SJWTX, contain a wide range of natural substances; in fact, some of the minerals detected are essential for good health.

The water source is one of the primary factors that affect the levels of the substances reflected in this report. SJWTX supplies both ground water and surface water to our customers. SJWTX supplies purchased surface water to customers in your system. Generally, ground water is harder and contains more natural minerals than surface water. In contrast, surface water typically contains small levels of natural organic substances and requires treatment by filtration. Regardless of the source, regulations require that we disinfect the water with chlorine and maintain a minimum level of chlorine residual throughout the distribution system.

## Source Water Assessment

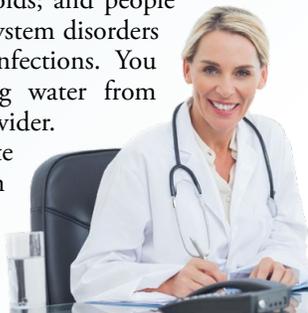
The Texas Commission on Environmental Quality (TCEQ) completed a Source Water Susceptibility Assessment for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Kristen Collier, Water Quality Specialist, at (830) 312-4600.

### Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board during the year covered by this report, our system lost an estimated 1,140,000 gallons of water. If you have any questions about the water loss audit, please call (830) 312-4600.

## Important Health Information

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at (800) 426-4791.



## Lead in Home Plumbing

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. This water supply is responsible for providing high-quality drinking water, but we 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 at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

“

When the well is dry, we know the worth of water.

—Benjamin Franklin

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## Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit <https://bit.ly/3IeRyXy>.



**QUESTIONS?** For more information about this report, or for any questions relating to your drinking water, please call Kristen Collier, Water Quality Specialist, at (830) 312-4600.

## Contaminants in Source Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which 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 these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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, 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 which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact our business office at (830) 312-4600. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Tip Top Tap

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

### Kitchen Sink and Drain

Handwashing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed-up water in which bacteria (i.e., pink or black slime growth) can grow and contaminate the sink area and faucet, causing a rotten egg odor. Disinfect and clean the sink and drain area regularly and flush with hot water.

### Faucets, Screens, and Aerators

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets and can collect particles like sediment and minerals, resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis.

Check with your plumber if you find particles in the faucet screen, as they could be pieces of plastic from the hot water heater dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet gasket with a higher-quality product. White scaling or hard deposits on faucets and showerheads may be caused by water with high levels of calcium carbonate. Clean these fixtures with vinegar or use water softening to reduce the calcium carbonate levels for the hot water system.

### Water Filtration/Treatment Devices

A smell of rotten eggs can be a sign of bacteria on the filters or in the treatment system. The system can also become clogged over time, so regular filter replacement is important. (Remember to replace your refrigerator filter!)

## Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL, SCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

### Other Table Information Worth Noting

Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means that only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

## Where Does My Water Come From?

Miralomas Municipal Utility District (MUD) purchases water from Kendall West Utility. Kendall West Utility provides surface water purchased from the Guadalupe-Blanco River Authority (GBRA) located in Comal County.

SOURCE NAME / LOCATION	SOURCE WATER	TYPE OF WATER	REPORT STATUS	TCEQ SOURCE ID
Kendall West Utility	Canyon Lake Reservoir	Surface Water	Active	P1300060B

Further details about sources and source water assessments are available at Drinking Water Watch, [dww2.tceq.texas.gov/DWW/](http://dww2.tceq.texas.gov/DWW/).

## What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.



The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit <https://www.atsdr.cdc.gov/pfas/index.html>.



## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. And, the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detections below their respective maximum allowed levels.

For each substance listed, compare the value in the Highest Amount Detected column against the value in the MCL (or AL, SCL) column. If the Highest Amount Detected value is smaller, your water meets the health and safety standards set for the substance. If there was a violation, you will see a detailed description of the event in this report.

The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

The Range column displays the lowest and highest sample readings. If the lowest sample reading and the highest sample reading are the same, that means that only a single sample was taken to test for the substance (assuming there is a reported value in the Highest Amount Detected column).

If there is a 0, that means multiple samples were taken but the substance was not detected (i.e., below the detectable limits of the testing equipment).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine <sup>1</sup> (ppm)	2021	[4]	[4]	1.18	0.4–2.6	No	Water additive used to control microbes
Haloacetic Acids [HAA5]–Stage 2 <sup>2</sup> (ppb)	2021	60	NA	32	27.4–35.8	No	By-product of drinking water disinfection
Nitrate (ppm)	2021	10	10	0.06	0–0.06	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes]–Stage 2 <sup>2,3</sup> (ppb)	2021	80	NA	89	71.6–100	Yes	By-product of drinking water disinfection
Tap water samples were collected for lead and copper analyses from sample sites throughout the community							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2021	1.3	1.3	0.0694	0/5	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2021	15	0	2.1	0/5	No	Lead services lines, corrosion of household plumbing systems including fittings and fixtures; Erosion of natural deposits; Leaching from wood preservatives

<sup>1</sup>The highest amount detected is calculated as an average.

<sup>2</sup>The value in the Highest Amount Detected column is the highest average of all sample results collected at a location over a year.

<sup>3</sup>Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. See “Violation Information” on page 6 of this Report.



## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

**Avq:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**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 the water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in the water system on multiple occasions.

**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 a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MFL:** million fibers per liter (a measure of asbestos)

**mrem:** millirems per year (a measure of radiation absorbed by the body)

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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.

**NA:** Not applicable.

**NTU:** nephelometric turbidity units (a measure of turbidity)

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

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

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**ppq:** parts per quadrillion, or picograms per liter (pg/L)

**ppt:** parts per trillion, or nanograms per liter (ng/L)

**Treatment Technique (TT):** a required process intended to reduce the level of a contaminant in drinking water

## Violation Information

In November, 2021, the TCEQ notified Miralomas MUD (TX1300060) (the “District”) that the drinking water being supplied to its customers exceeded the Maximum Contaminant Level (MCL) of 0/080 mg/L for total trihalomethanes (TTHMs). Analysis of the drinking water in your community for TTHMs indicated a compliance level in the fourth quarter of 2021 of 0.089 mg/L for sampling location DBP2-01. TTHMs are formed during treatment as a chemical reaction between chlorine and naturally occurring organic matter in the water. TTHMs increase as water ages. The water supplied to the District is experiencing an aging problem which is resulting in high TTHM levels. To address this violation, the District began flushing the main distribution lines frequently which helps reduce the age of the water and increases the quality of the water. The District has started weekly monitoring at the sample site to ensure that TTHM levels are at or below the MCL of 0.080 mg/L. Some people who drink water containing TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys, central nervous system, and may have an increased risk of getting cancer. You do not need to use an alternative water supply. However, if you have health concerns, you may want to talk to your doctor to get more information about how this may affect you. The District notified its residents of this violation and the measures it is taking to resolve this issue.

## Monitoring and Reporting Violation

TOTAL TRIHALOMETHANES (TTHM)			
Some people who drink water containing trihalomehtanes in excess of the MCL, over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
VIOLATION TYPE	VIOLATION BEGIN	VIOLATION END	VIOLATION EXPLANATION
MCL, LRAA	10/1/21	12/31/21	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.