

2021 Consumer Confidence Report for Public Water System

MASON CREEK UTILITY DISTRICT

This is your water quality report for January 1 to December 31, 2021

MASON CREEK UTILITY DISTRICT provides ground water from the **Gulf Coast Aquifer, from four water wells** located in **Harris County, Texas.**

For more information regarding this report contact:

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Mason Creek Utility District (system business office)

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Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (281) 578-7272.

Definitions and Abbreviations

Definitions and Abbreviations:	The following tables contain scientific terms and measures, some of which may require explanation.
Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Avg:	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 our 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 our water system on multiple occasions.
Maximum Contaminant Level or MCL:	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 or 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.
Maximum residual disinfectant level or 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 or 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.
MFL	million fibers per liter (a measure of asbestos)
mrem:	millirems per year (a measure of radiation absorbed by the body)
na:	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppm:	parts per million, or milligrams per liter (mg/L)
ppb:	parts per billion, or micrograms per liter (µg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
ppq	parts per quadrillion, or picograms per liter (pg/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Information about your Drinking Water

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

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 storm water 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 storm water 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 which must provide the same protection for public health.

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 the system's business office.

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; persons 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the 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. We are 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 or at <http://www.epa.gov/safewater/lead>.

Information about Source Water

TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report, and the data presented in this report is from the most recent testing done in accordance with the regulations (but not older than five years). For more information on source water assessments and protection efforts at our system contact **James E. Parrott at 281-578-7272 (system business office)**.

Lead and Copper Test Results

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# of Sites Over Action Level	Units	Violation (Y/N)	Likely Source of Contamination
Copper	09/27/2019	1.3	1.3	0.18	0	ppm	N	Erosion of natural deposits; Corrosion of household plumbing systems.
Lead*	09/27/2019	0*	15*	2.8*	0*	ppb*	N	Corrosion of household plumbing systems; Erosion of natural deposits.

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2021 Water Quality Test Results

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violations (Y/N)	Likely Source of Contamination
Arsenic*	05/11/2020	4.9*	4.9 – 4.9*	0*	10*	ppb*	N	Erosion of natural deposits.
Barium	05/11/2020	0.194	0.194 – 0.194	2	2	ppm	N	Discharge of drilling wastes; Erosion of natural deposits.
Fluoride	05/11/2020	0.31	0.31 – 0.31	4	4.0	ppm	N	Erosion of natural deposits; Discharge from fertilizer.

*While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

2021 Water Quality Test Results (Continued)

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation (Y/N)	Likely Source of Contamination
Beta/photon emitters*	05/17/2019	5.2*	5.2 - 5.2*	0*	50*	pCi/L*	N	Decay of natural and man-made deposits.
Combined Radium 226/228	05/17/2019	1.61	1.61 - 1.61	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	05/17/2019	6.7	6.7 - 6.7	0	15	pCi/L	N	Erosion of natural deposits

* EPA considers 50 pCi/L to be the level of concern for beta particles.

Unregulated Contaminants*	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation (Y/N)	Likely Source of Contamination
Chloroform*	05/06/2021	2.5*	2.5 - 2.5*	na	na	ppb*	N	By-product of drinking water disinfection.
Bromodichloromethane*	05/06/2021	2.7*	2.7 - 2.7*	na	na	ppb*	N	By-product of drinking water disinfection.
Dibromochloromethane*	05/06/2021	3.5*	3.5 - 2.5*	na	na	ppb*	N	By-product of drinking water disinfection.
Bromoform*	05/06/2021	2.3*	2.3 - 2.3*	na	na	ppb*	N	By-product of drinking water disinfection.

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

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit	Violation (Y/N)	Source in Drinking Water
Free Chlorine	2021	1.46	0.47 - 2.20	4	4	mg/L	N	Water additive used to control microbes

Opportunities for public participation

Opportunities for public participation in decisions that may affect the quality of the water include attendance at meetings of the Board of Directors of MASON CREEK UTILITY DISTRICT, usually held on the first Wednesday following the tenth day of each month, at 7:30 PM. The current meeting place is 20201 Kingsland Blvd (MCUD Clubhouse). Meetings can be rescheduled, and special meetings can be held, and the meeting place can be changed. For specific information on upcoming Board meetings, consult notice(s) posted on the bulletin board at 847 Dominion, Katy, TX 77450 or on the internet at <http://www.mcud.com/meeting-info/>. You may contact James E. Parrott or Susan Saccomen at 281-578-7272 for information about water quality and Board meetings and to provide input into decisions that may affect the quality of water.