CITY OF MASON
Annual Drinking Water Quality Report
TX1600001

Annual Water Quality Report for the period of January 1 to December 31, 2012. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

For more information regarding this report of the City of Mason Public Water Supply, contact: Mr. John Palacio, City Administrator
Phone: 325-347-6449
If you would like the opportunity to participate in discussions and decisions that may affect the quality of water, all public comments are welcome at each meeting of the City Commission, which is regularly scheduled to meet on the second Monday of each month at 5:30 pm at the Richard Eckert Civic Center located at 1024 McKinley Ave.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (325) 347-6449.

CITY OF MASON water supply is Ground Water from City owned Wells, and is pumped from the Hickory Sandstone Water Aquifer.

Sources of 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 pickup 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 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 immune-compromised 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 Assessments

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Mr. John Palacio at 325-347-6449.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:
http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=
Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW

Source Water Name, Type of Water, Report Status, and Location

City Well #1	Ground Water	Y	END OF EL PASO ST
City Well #4	Ground Water	Y	MILL CREEK RD
City Well #5	Ground Water	Y	WEST OF TOWN
City Well #7	Ground Water	Y	SOUTH OF TOWN
City Well #8	Ground Water	Y	MILL CREEK RD

The City of Mason uses gaseous Chlorine (Free) in treating the ground water as a disinfectant for the Public Water System. The 2012 average quarterly level was 1.52 mg/L and the highest residual reading for the year was 2.85 mg/L and the lowest residual level was 0.37 mg/L. The Maximum quarterly residual disinfectant level was 1.86 mg/L.

2012 Regulated Contaminants Detected -- Water Quality Test Results

Definitions: The following contains scientific terms and measures

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

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.

na: not applicable.

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

ppb: micrograms per liter or parts per billion, or one ounce in 7,350,000 gallons.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Many constituents (such as calcium, sodium or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

The City of Mason has for the past several years been in violation of the Maximum Contaminant Levels on Radium 226 & 228 and Gross Alpha. These contaminates are a natural result of the recharge of our water aquifer as rainwater and surface water flow through the underlying granite and soil in our region. Through careful monitoring and management of the water system and pumping schedules, the highest level detected and the range of levels detected has been reduced. The City continues to seek a reasonable way to reduce the contaminants, however all technological means that have been examined have proven to be economically unfeasible. Continued monitoring and management have provided a significant benefit, and will be maintained while other mechanical and technological methods are considered. In addition the City of Mason has built and maintained a Reverse Osmosis facility with availability to all residents on a 24 hour per day basis. Although it is recognized that this does not address the violation mitigation, it is provided as a free service to the citizens as one way that individuals can provide uncontaminated drinking water for their homes and businesses.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	06/07/2010	1.2	0 - 1.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	06/07/2010	3.7	1 - 3.7	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	03/04/2009	2.6	0 - 2.6	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	03/04/2009	0.181	0.0333 - 0.181	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	01/20/2011	0.39	0.39 - 0.39	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2012	2	1.76 - 1.76	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2012	12.6	10.4 - 12.6	0	50	pCi/L *	N	Decay of natural and man-made deposits.

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

Combined Radium 226/228	2012	6	6 - 6.7	0	5	pCi/L	Y	Erosion of natural deposits.
Gross Alpha Compliance	2012	18	13.3 - 20.7	0	15	pCi/L	Y	Erosion of natural deposits.
Uranium	2012	3	0 - 2.5	0	30	ug/l	N	Erosion of natural deposits.