2017 Annual Drinking Water Quality Report

Consumer Confidence Report (CCR) for the period of January 1 to December 31, 2017

CITY OF MINERAL WELLS - PWS ID No.1820001

YOUR DRINKING WATER IS REGULATED AND MEETS OR EXCEEDS ALL FEDERAL and STATE DRINKING WATER REQUIREMENTS: 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. We hope this information helps you become more knowledgeable about what's in your drinking water. For more information regarding this report contact the City of Mineral Wells Public Works Department at (940) 328-7777.
EN ESPANOL: Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (940) 328-7865.

The City of Mineral Wells provides SURFACE water from Lake Palo Pinto, Palo Pinto Creek, and Hilltop Presedimentation Reservoir.

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 pickup 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 EPAs 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 C*ontaminants**, 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 systems 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 at (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:
The Texas Commission on Environmental Quality 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. For more information on source water assessments and protection efforts at our system contact the City of Mineral Wells Public Works Department at (940) 328-7777.

Definitions and Abbreviations
The following tables contain scientific terms and measures, some of which may require explanation:
Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Action Level Goal (ALG): - The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Avg: - Regulatory compliance with some MCLs are based on running average of monthly samples.
Maximum Contaminant Level (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 (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 (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 (MRDLG) - The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectant to control microbial contaminants.
90th Percentile – 90% of samples are equal to or less than the number in the chart.

MFL	million fibers per liter (a measure of asbestos)
mrem	millirems per year (a measure of radiation absorbed by the body)
N/A	not applicable
NTU	nephelometric turbidity units
pCi/L	picocuries per liter (a measure of radioactivity)
ppb	micrograms per liter (ug/L), or parts per billion, or one ounce in 7,350,000 gallons of water
ppm	parts per million, or milligrams per liter (mg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
ppq	parts per quadrillion, or picograms per liter
TT	Treatable Technique. A required process to reduce the level of a contaminant in drinking water.

2017 WATER QUALITY TEST RESULTS

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	No. Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.044	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	15	1.7	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2017	1	.32 - 1	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2017	32	22.7 - 32	N/A	60	ppb	N	By-product of drinking water chlorination.
* The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year '								
Total Trihalomethanes (TThm)	2017	83	36.1 - 79.5	N/A	80	ppb	Y	By-product of drinking water chlorination.
* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year '								

Inorganics Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.11	.11 - .11	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2017	47.8	47.8 - 47.8	200.0	200.0	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2017	0.100	.147 - .147	4.0	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2017	0.0528	0.0528 - 0.0528	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	2017	6.2	6.2 - 6.2	0	4	mrem/yr.	N	Decay of natural and man-made deposits.
* EPA considers 50 pci/L to be the level of concern for beta particles.								
Uranium	2017	1.2	1.2 - 1.2	0	30	ug/l	N	Erosion of natural deposits.

Disinfectant Residual	Collection Date	Average Level	Range of Levels Detected	MRDL	MRDLG	Units of Measure	Violation	Likely Source of Contamination
Chloramine	2017	2.65	2.26 - 3.16	4.0	<4.0	ppm	N	Disinfectant used to control microbes.

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	0.19	0.19	N	Soil runoff.
Lowest monthly % meeting limit	0.3	100%	N	Soil runoff.
Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.				

TOTAL ORGANIC CARBON	The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirement set, unless a TOC violation is in the violation section.

CRYPTOSPORIDIUM MONITORING INFORMATION

In 2017 the City of Mineral Wells tested our raw water monthly for Cryptosporidium, a microbial parasite that may be commonly found in surface water. Cryptosporidium may come from animal and human feces in the watershed. The results of our monitoring detected no cryptosporidium present.

TOTAL COLIFORM: REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA. **FECAL COLIFORM:** REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

WATER LOSS ESTIMATE

In the Water Loss Audit submitted to the Texas Water Development Board for the time period of January – December 2017, our system lost an estimated 139,387,319 gallons of water. This calculates to 17.42% loss of total produced water. The TCEQ's acceptable percentage of water loss is 12%. If you have any questions about the Water Loss Audit, please call the City of Mineral Wells Utilities Superintendent, Scott McKennon, at (940) 328-7777.

VIOLATIONS

Lead and Copper Rule

The lead and Copper Rule protects health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
LEAD AND COPPER NOTICE (LCR)	12/30/2017	2/22/2018	We failed to provide the results of lead tap water monitoring to the consumer at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

Total Trihalomethanes (TTHM)

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.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	4/1/2017	6/30/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called maximum contaminant level and abbreviated MCL) for the period indicated.