

2014 Annual Drinking Water Quality Report

(Consumer Confidence Report)

CITY OF MALAKOFF
PWS ID Number TX1070002
Phone Number: 903-489-0699

Annual Water Quality Report for the period of January 1 to December 31, 2014

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.

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 detections 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:

Name **Tim Whitley** Phone **(903) 489-0699**

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono 903-489-0699.

Abbreviations & Definitions

- **AVG** – Running Annual Average.
- **MCL** – Maximum Containment Level. The level of a contaminant that is allowed in drinking water.
- **MCLG** – Maximum Containment Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health.
- **MRDL** – Maximum Residual Disinfectant Level. The level of a disinfectant allowed in drinking water.

- **MRDLG** – Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected risk to health.
- **NTU** - Nephelometric Turbidity Units.
- **MFL** - million fibers per liter (a measure of asbestos).
- **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.
- **ppt** - parts per trillion, or nanograms per liter.

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; 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). Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

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 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, the 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 cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, color, or odor of drinking water, please contact the system's business office.

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 the following URL: <http://www.epa.gov/safewater/lead>.

Where Do We Get Our Water?

Our raw surface water is obtained from the CEDAR CREEK RESERVOIR by way of the Surface Water Treatment Plant - 1313 FM 3062, and our raw groundwater is obtained from the CARRIZO-WILCOX AQUIFER by way of the following groundwater wells; **Ice House Well** - 106 North Terry; **Main Well** - 106 W. Railroad; **Bartlett Well** - 209 W. Main; and the **Humble Well** - 319 Bartlett.

Water Loss During 2014

In the Water Loss Audit submitted to the Texas Water Development Board for the time period of January to December 2014, our system lost an estimated 4,077,686 gallons of water. If you have any questions about the Water Loss Audit, please call the number listed on the first page.

Information About Source Water Assessments

A Source Water Susceptibility Assessment for The City Of Malakoff's drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality (TCEQ). 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 the TCEQ to focus source water protection strategies.

For more information about our 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 also available in the **Drinking Water Watch** at the following URL: <http://dww.tceq.texas.gov/DWW/>

Disinfectants and Disinfection By-Products

Disinfectant Used	Month/Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
Free Chlorine	August 15 to September 15, 2014	1.75	0.77	2.80	4.0	<4.0	ppm	Disinfectant used to destroy pathogens.
Chloramine	All of 2014 (except for above dates)	1.67	0.51	2.80	4.0	<4.0	ppm	Disinfectant used to destroy pathogens.
Disinfection By-Product	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contamination
Haloacetic Acids (HAA5)*	2014	22	1 - 50.9	<60	60	ppb	N	Byproduct of drinking water chlorination.
Total Trihalomethanes (TThm)*	2014	1	0 - 3.4	<80	80	ppb	N	Byproduct of drinking water chlorination.

Inorganic Contaminants

Contaminant	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contamination
Barium	2014	0.0634	0.0634 - 0.0634	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2014	1.98	1.98 - 1.98	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	2014	54.2	0 - 54.2	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2014	0.1	0.0875 - 0.184	4	4.0	ppm	N	Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2014	0.406	0 - 0.406	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants

Contaminant	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contamination
Beta/photon Emitters	05/21/2009	4.5	4.5 - 4.5	0	50	pCi/L	N	Decay of natural and man-made deposits.

* The MCL for beta particles is 4 mrem/year. The EPA considers 50 pCi/L to be the level of concern for beta particles.

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2008	Lead	1.6	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2008	Copper	0.106	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits.

Synthetic Organic Contaminants including Pesticides and Herbicides

Contaminant	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Atrazine	2014	0.08	0.08 - 0.08	3	3	ppb	N	Runoff from herbicide used on row crops.

Volatile Organic Contaminants

Contaminant	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Ethylbenzene	2014	1.1	0 - 1.1	700	700	ppb	N	Discharge from petroleum refineries.
Xylenes	2014	0.01	0 - 0.01	10	10	ppm	N	Discharge from petroleum factories; Discharge from chemical factories.

Turbidity

Measurement	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.15 NTU	N	Soil Runoff
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil Runoff

Total Coliform: Reported monthly tests found no coliform bacteria.

Fecal Coliform: Reported monthly test found no fecal coliform bacteria.

Total Organic Carbon: The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by the TCEQ.