

# 2013 ANNUAL DRINKING WATER QUALITY REPORT

## TX0730002 CITY OF MARLIN



### Annual Water Quality Report for the period of January 1 to December 31, 2013.

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 source of City of Marlin drinking water is surface water, obtained from the New Marlin Lake northeast of the city.

For more information regarding this report contact:

Richard C. Fletcher, Interim City Manager  
Phone 254-883-1450

*Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono 254 883 1450.*

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#### Opportunity for Public Participation

The Marlin City Council meets at 5:30 PM on the second Tuesday of each month at the City Hall, 101 Fortune Street, Marlin, Texas. The next meetings are July 8th and August 12th.

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#### 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, 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**

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 R. C. Fletcher, Interim City Manager.

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: New Marlin Lake

Type of Water: Surface

Location of source: Falls County, Texas

Website: [www.marlintx.net](http://www.marlintx.net)

**2013 Regulated Contaminants Detected**

**Coliform Bacteria**

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1		0	N	Naturally present in the environment.

**Lead and Copper**

Definitions:

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.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
<b>Copper</b>	2013	1.3	1.3	1.04	1	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Lead</b>	2013	0	15	10.1	2	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

**Water Quality Test Results**

**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation

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

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 below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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.

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

na: not applicable

NTU: nephelometric turbidity units (a measure of turbidity)

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

ppb: microgram per liter or parts per billion – or one ounce in 7,350,000 gallons of water

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

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

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

**Disinfectant Residual Table**

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Likely Source of Contamination
Chloramines	2013	2.03	0.51	4.0	4	4	ppm	N	Water additive used to control microbes.

## Regulated Contaminants

<b>Disinfectants and Disinfection By-Products</b>	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Haloacetic Acids (HAA5)*</b>	2013	94	0 - 141	No goal for the total	60	ppb	Y	By-product of drinking water disinfection.
<b>Total Trihalomethanes (TTHM)</b>	2013	92	0 - 128	No goal for the total	80	ppb	Y	By-product of drinking water disinfection.
<b>Inorganic Contaminants</b>	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Arsenic</b>	2013	2	2.34 - 2.34	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
<b>Barium</b>	2013	0.0756	0.0756 - 0.0756	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Chromium</b>	2013	2.98	2.98 - 2.98	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
<b>Fluoride</b>	2013	0.2	0.16 - 0.16	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Nitrate [measured as Nitrogen]</b>	2013	0.52	0.11 - 0.52	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Selenium</b>	2013	4.11	4.11 - 4.11	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
<b>Thallium</b>	2013	0.415	0.415 - 0.415	0.5	2	ppb	N	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories.
<b>Radioactive Contaminants</b>	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Beta/photon emitters</b>	01/14/2010	4	4 - 4	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.

## Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
<b>Highest single measurement</b>	1 NTU	0.39 NTU	N	Soil runoff.
<b>Lowest monthly % meeting limit</b>	0.3 NTU	99.45%	N	Soil runoff.

Information Statement: 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 .

## Violations Table

### Haloacetic Acids (HAA5)\*

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, AVERAGE	01/01/2013	03/31/2013	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.
MCL, AVERAGE	04/01/2013	06/30/2013	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.
MCL, AVERAGE	07/01/2013	09/30/2013	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.

### Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	07/01/2013	09/30/2013	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

### 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, AVERAGE	07/01/2013	09/30/2013	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.

## Explanation of Corrective Action

Violations of Haloacetic Acid (HAA5) and Total Trihalomethanes (TTHM) rules have been corrected by modifying control circuits at a booster pump station located on FM147. Water samples since the last quarter of 2013 have been in compliance with these rules. Only a small segment of the system located outside the city limits was impacted by these violations.

The Public Notification Rule violation was caused by confusion over requirements to make multiple notifications concerning these violations. Staff has closely reviewed applicable regulations to ensure future compliance with the Public Notification Rule.