The Water We Drink: 2009 Annual Water Quality Report

- Meets Drinking Water Standards
- Is Continually Treated
- No Bacteriological Violations
- Is Safe To Drink

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (936) 633-0458—para hablar con una persona bilingüe en español.
# City of Lufkin

## 2009 Annual Drinking Water Quality Report
(Consumer Confidence Report)

**Customer Service:** (936) 633-0288  **FAX:** (936) 634-7017  
**Website:** [www.cityoflufkin.com](http://www.cityoflufkin.com)

### SPECIAL NOTICE

**Required language for ALL community public water supplies:**

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; those 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 provider. 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.

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### Are you Ready for the Next Hurricane? Be Prepared!

Hurricanes are violent storms which can bring intense winds, heavy rain, a storm surge, floods, coastal erosion, landslides, and tornadoes. While it is difficult to predict the exact time, place, and force of hurricanes, residents of the Gulf coast states must be prepared. The season for hurricanes runs from June to November, with most hurricanes occurring mid-August to late October.

#### Know Your Risk and What to Do

- Contact your local emergency management office to learn about evacuation routes and emergency plans (936-633-0414).
- Get additional information from the Federal Management Agency ([fema.gov](http://fema.gov) and [m.fema.gov](http://m.fema.gov)) from your mobile device), Ready Campaign ([Ready.gov](http://Ready.gov)), Citizen’s Corps ([citizencorps.gov](http://citizencorps.gov)), the American Red Cross ([redcross.org](http://redcross.org)) and NOAA’s National Hurricane Center ([nhc.noaa.gov](http://nhc.noaa.gov)).
- Inquire about emergency plans and procedures at your child’s school and at your workplace.
- Make a family disaster plan that includes out-of-town contacts and locations to reunite if you become separated. Be sure everyone knows home, work and cell phone numbers, and how to call 9-1-1.
- Assemble disaster supplies kit with food, water, medical supplies, battery powered radio and NOAA Weather Radio All Hazards, batteries, flashlights and other items that will allow you to get by for 3 days after a hurricane hits.
- Gather important documents and store them in a fire and flood safe location or safe deposit box.
- Trim trees and clear rain gutters and downspouts.
- Plan ahead for protection of pets and livestock. For information go to [www.fema.gov](http://www.fema.gov) and search on “Pet Owners”.

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### Visit Us

**City Hall**  
300 E. Shepherd  
Lufkin, Texas 75902  
Monday–Friday  
8:00 a.m. to 5:00 p.m.

**Water Quality Complaints**  
Debra Cassidy at  
(936) 633-0288  
Debra Fitzgerald at  
(936) 633-0230

**City Council**  
Meets the 1st and 3rd Tuesday of each month at 5:00 p.m.  
For more Information call  
(936) 633-0243.

### CONTACT US

**Chuck Walker, P.E.**  
Public Utilities Director  
(936) 622-0215  
cwalker@cityoflufkin.com

**Debra Cassidy**  
Water Production  
(936) 633-0288  
dcassidy@cityoflufkin.com

**Debra Fitzgerald**  
Water Distribution  
(936) 633-0230  
dfitzgerald@cityoflufkin.com

**Drew Squyres**  
Utility Collections  
(936) 633-0255  
dsquyres@cityoflufkin.com
Hurricane Preparedness Cont’d.

- Remember that a **Hurricane Watch** means the onset of hurricane conditions is possible within 36 hours; a **Hurricane Warning** means the onset of hurricane conditions is likely within 24 hours.
- Have a full tank of gas in a vehicle, cash and your disaster supplies kit ready to go.
- Turn refrigerator and freezer to maximum cold and keep closed.
- Fill the bathtub and other large container with water for bathing, flushing toilets, and cleaning, but do not drink this water.
- Turn off propane tanks. Shut off other utilities if emergency officials advise you to do so.
- Do not go outdoors during the storm, even in the early stages. Flying debris is extremely dangerous.
- Use caution going out of doors after the storm. Be alert for downed power lines, broken glass, and damage to building foundations, streets and bridges.
- Stay on firm ground. Moving water only 6 inches deep can sweep you off your feet.

**Where do we get our drinking water?** Our drinking water is obtained from GROUND water sources. It comes from the CARRIZO SAND Aquifer. A source Water Susceptibility Assessment for your drinking water source 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 our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at http://dww.tceq.state.tx.us/DWW/. For more information on source water assessments and protection efforts at our system, please contact us.

**ALL Drinking water may contain contaminants.**

When drinking water meets federal standards there may not be any health based benefits to purchased bottled water or point of use devices. 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 (1-800-426-4791).

**Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements**

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what’s in your drinking water. This report is a summary of the quality of the water we provide our customers.

**WATER SOURCES:** 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. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.
Secondary Constituents

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 are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

About the Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

DEFINITIONS

Maximum Contaminant Level (MCL)
The highest permissible level of a contaminant 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 health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant level (MRDL)
The highest level of 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 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 contamination.

Treatment Technique (TT)
A required process intended to reduce the level of a contaminant in drinking water.

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

ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTU</td>
<td>Nephelometric Turbidity Units</td>
</tr>
<tr>
<td>MFL</td>
<td>million fiber per liter (a measure of asbestos)</td>
</tr>
<tr>
<td>pCi/L</td>
<td>picocuries per liter (a measure of radioactivity)</td>
</tr>
<tr>
<td>ppm</td>
<td>parts per million, or milligram per liter (mg/L)</td>
</tr>
<tr>
<td>ppb</td>
<td>parts per billion. Or micrograms per liter (µg/L)</td>
</tr>
<tr>
<td>Ppt</td>
<td>parts per trillion, or nanograms per liter</td>
</tr>
<tr>
<td>Ppq</td>
<td>parts per quadrillion, or pico grams per liter</td>
</tr>
</tbody>
</table>

Don’t Flush Your Money Down the Drain!
If your toilet is from 1992 or earlier, you probably have an inefficient model that uses at least 3.5 gallons per flush. New and improved WaterSense labeled models use less than 1.28 gallons per flush. That is at least 60 percent less than their older, less efficient counterparts. Compared to a 3.5 gallons per flush, a WaterSense labeled toilet could save a family of four more than $90 annually on Their water bill, and $2,000 over the lifetime of the toilet.
### Inorganic Contaminants

<table>
<thead>
<tr>
<th>Year or Range</th>
<th>Contaminant</th>
<th>Average Level</th>
<th>Minimum Level</th>
<th>Maximum Level</th>
<th>MCL</th>
<th>MCLG</th>
<th>Unit of Measure</th>
<th>Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Fluoride</td>
<td>0.26</td>
<td>0.26</td>
<td>0.26</td>
<td>4</td>
<td>4</td>
<td>ppm</td>
<td>Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.</td>
</tr>
</tbody>
</table>

### Organic Contaminants

TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

### Maximum Residual Disinfectant Level

<table>
<thead>
<tr>
<th>Year</th>
<th>Disinfectant</th>
<th>Average Level</th>
<th>Minimum Level</th>
<th>Maximum Level</th>
<th>MRDL</th>
<th>MRDLG</th>
<th>Unit of Measure</th>
<th>Source of Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Free Chlorine</td>
<td>2.2</td>
<td>0.8</td>
<td>4.6</td>
<td>4.0</td>
<td>&lt; 4.0</td>
<td>ppm</td>
<td>Chlorine Gas</td>
</tr>
</tbody>
</table>

### Disinfection Byproducts

<table>
<thead>
<tr>
<th>Year</th>
<th>Contaminant</th>
<th>Average Level</th>
<th>Minimum Level</th>
<th>Maximum Level</th>
<th>MCL</th>
<th>Unit of Measure</th>
<th>Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Total Haloacetic Acids</td>
<td>14.9</td>
<td>14.9</td>
<td>14.9</td>
<td>60</td>
<td>ppb</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>2009</td>
<td>Total Trihalomethanes</td>
<td>44.2</td>
<td>44.2</td>
<td>44.2</td>
<td>80</td>
<td>ppb</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
</tbody>
</table>

### Unregulated Initial Distribution System Evaluation for Disinfection Byproducts

This evaluation is sampling required by EPA to determine the range of total trihalomethanes and haloacetic acid in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA also requires the data to be reported here.

<table>
<thead>
<tr>
<th>Year</th>
<th>Contaminant</th>
<th>Average Level</th>
<th>Minimum Level</th>
<th>Maximum Level</th>
<th>MCL</th>
<th>Unit of Measure</th>
<th>Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Total Haloacetic Acids</td>
<td>16.5</td>
<td>10.2</td>
<td>22.5</td>
<td>NA</td>
<td>ppb</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>2008</td>
<td>Total Trihalomethanes</td>
<td>31.9</td>
<td>22.2</td>
<td>44.7</td>
<td>NA</td>
<td>ppb</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
</tbody>
</table>

### Secondary and Other Constituents Not Regulated (No associated adverse health effects)

<table>
<thead>
<tr>
<th>Year</th>
<th>Constituent</th>
<th>Average Level</th>
<th>Minimum Level</th>
<th>Maximum Level</th>
<th>Secondary Limit</th>
<th>Unit of Measure</th>
<th>Source of Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Bicarbonate</td>
<td>234</td>
<td>234</td>
<td>234</td>
<td>NA</td>
<td>ppm</td>
<td>Corrosion of carbonate rocks such as limestone</td>
</tr>
<tr>
<td>2008</td>
<td>Chloride</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>300</td>
<td>ppm</td>
<td>Abundant naturally occurring element; used in water purification; byproduct oil field activity</td>
</tr>
<tr>
<td>2008</td>
<td>pH</td>
<td>7.6</td>
<td>7.6</td>
<td>7.6</td>
<td>&gt;7.0</td>
<td>units</td>
<td>Measure of the corrosivity of water</td>
</tr>
<tr>
<td>2008</td>
<td>Sulfate</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>300</td>
<td>ppm</td>
<td>Naturally occurring; common industrial byproduct; by product of the oil field activity</td>
</tr>
<tr>
<td>2008</td>
<td>Tot. Alkalinity</td>
<td>192</td>
<td>192</td>
<td>192</td>
<td>NA</td>
<td>ppm</td>
<td>Naturally occurring soluble mineral salts</td>
</tr>
<tr>
<td>2008</td>
<td>CaCO3</td>
<td>352</td>
<td>352</td>
<td>352</td>
<td>1000</td>
<td>ppm</td>
<td>Total dissolved mineral constituents in water</td>
</tr>
</tbody>
</table>
Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

<table>
<thead>
<tr>
<th>Year or Range</th>
<th>Contaminant</th>
<th>Average Level</th>
<th>Minimum Level</th>
<th>Maximum Level</th>
<th>Unit of Measure</th>
<th>Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Chloroform</td>
<td>8.9</td>
<td>8.9</td>
<td>8.9</td>
<td>ppb</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>2008</td>
<td>Bromodichloromethane</td>
<td>7.6</td>
<td>7.6</td>
<td>7.6</td>
<td>ppb</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>2008</td>
<td>Dibromochloromethane</td>
<td>4.4</td>
<td>4.4</td>
<td>4.4</td>
<td>ppb</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
</tbody>
</table>

Unregulated Contaminant Monitoring Rule 2 (UCMR2)

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. Any unregulated contaminants detected are reported in the following table. For additional information and data visit http://www.epa.gov/safewater/ucmr/ucmr2/index.html, or call the Safe Drinking Water Hotline at (800) 426-4791.

<table>
<thead>
<tr>
<th>Year</th>
<th>Contaminant</th>
<th>Average Level</th>
<th>Minimum Level</th>
<th>Maximum Level</th>
<th>Unit of Measure</th>
<th>Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>None Detected</td>
<td></td>
<td></td>
<td></td>
<td>ppb</td>
<td></td>
</tr>
</tbody>
</table>

Lead and Copper

<table>
<thead>
<tr>
<th>Year</th>
<th>Contaminant</th>
<th>The 90th Percentile</th>
<th>Number of Sites Exceeding Action Level</th>
<th>Action Level</th>
<th>Unit of Measure</th>
<th>Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Lead</td>
<td>1.9</td>
<td>0</td>
<td>15</td>
<td>ppb</td>
<td>Corrosion of household plumbing systems, erosion of natural deposits</td>
</tr>
<tr>
<td>2009</td>
<td>Copper</td>
<td>0.7</td>
<td>0</td>
<td>1.3</td>
<td>ppb</td>
<td>Corrosion of household plumbing systems; leaching from wood preservatives</td>
</tr>
</tbody>
</table>

Required Additional Health Information for Lead

“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. This water supply is responsible for providing high quality drinking water, but 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.”

Turbidity

NOT REQUIRED

Total Coliform

REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA

Fecal Coliform

REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA