2017 ANNUAL WATER QUALITY REPORT

CITY OF LUFKIN

The Water We Drink
⇒ Meets Drinking Water Standard
⇒ Is Continually Treated
⇒ No Bacterial violations
⇒ Is Safe to Drink

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en Español, favor de llamar al teléfono (936)633-0458

CITY OF LUFKIN
TX0030004

Annual Quality Water Report for the period of January 1 to December 31, 2017. 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.

CITY OF LUFKIN IS GROUND WATER.

For more information regarding this Report contact:
Gary Barton
City of Lufkin Water Plant
Operations Director
(936)633-0288
The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. The CITY OF LUFKIN’s source is Ground Water from the Corrizo Aquifer. 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 and 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 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 person 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.
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. For more information about your source 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.

The City of Lufkin Water Treatment Plant receives raw water that is pumped from the Well Field. This water is then treated and stored in Ground Storage Tanks located at the Plant. This treated water is then pumped to Elevated Tanks where it is distributed to the City of Lufkin residents for their particular needs. All treated water meets the minimum standards established by the TCEQ for safe drinking water.

Keep Our Water Clean

1. Use fewer & better pesticides & fertilizers
2. Irrigate efficiently to reduce runoff & erosion.
3. Use less toxic cleaning products.
4. Collect your food scraps, oil & grease to avoid clogging sewer lines.
5. Recycle used motor oil.
6. Check your equipment for leaks & spills.
7. Maintain your Septic System.
8. Pick up pet waste.

Conserve Our Water

1. Water or irrigate your yard efficiently to save water and maintain a healthy landscape.
2. Collecting rain water for landscape use is great for your plants and can save your water and money.
3. Save water by installing water efficient shower heads, toilets, faucets, and faucet aerators.
4. For big savings, fix household leaks.
5. Use less water every day with a few simple ideas.
6. Invest in an ENERGY STAR qualified clothes washer, which typically uses about 45% less water and 25% less energy per load.
7. Invest in an ENERGY STAR qualified dishwasher, which typically uses about 30% less water.
### 2017 Water Quality Test Results

#### Regulated Contaminants Detected

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Maximum Contaminant Level</th>
<th>Total Coliform Maximum Contaminant Level</th>
<th>Highest No. of Positive</th>
<th>Fecal Coliform or E.Coli Maximum Contaminant Level</th>
<th>Total No. of Positive E.Coli or Fecal Coliform Samples</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Contaminant Level</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Coliform</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Highest No. of Positive</td>
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<td></td>
</tr>
<tr>
<td>Fecal Coliform or E.Coli Maximum Contaminant Level</td>
<td></td>
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<td></td>
</tr>
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<td>Total No. of Positive E.Coli or Fecal Coliform Samples</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Violation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Likely Source of Contamination</td>
<td></td>
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</tr>
</tbody>
</table>

#### 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.

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Date Sampled</th>
<th>MCLG</th>
<th>Action Level (AL)</th>
<th>90th Percentile</th>
<th># of Sites over AL</th>
<th>Units</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>08/16/2016</td>
<td>1.3</td>
<td>1.3</td>
<td>0.45</td>
<td>0</td>
<td>ppm</td>
<td>N</td>
<td>Erosion of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems.</td>
</tr>
<tr>
<td>Lead</td>
<td>08/16/2016</td>
<td>0</td>
<td>15</td>
<td>1.5</td>
<td>0</td>
<td>ppb</td>
<td>N</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits.</td>
</tr>
</tbody>
</table>

#### Residual Disinfection Level

<table>
<thead>
<tr>
<th>Disinfectant</th>
<th>Year</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>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>2017</td>
<td>2.68</td>
<td>1.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>ppm</td>
<td>N</td>
<td>Disinfectant used to control microbes</td>
</tr>
</tbody>
</table>

### Definitions and Abbreviations:

- **Action Level:** 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 annual average of monthly samples.
- **Level 1 Assessment:** A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment:** A Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E.coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
- **Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG 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.

**Abbreviations:**
- **MFL:** million fibers per liter (a measure of asbestos)
- **mrem:** millirems per year (a measure of radiation absorbed by the body)
- **na:** not applicable
- **NTU:** nephelometric turbidity units (a measure of turbidity)
- **pCi/L:** picocuries per liter (a measure of radioactivity).
### Disinfectants and Disinfection By-Products

<table>
<thead>
<tr>
<th>Collection Date</th>
<th>Highest Level Detected</th>
<th>Range of Individual Samples</th>
<th>MCLG</th>
<th>MCL</th>
<th>Units</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloacetic Acid (HAAS)</td>
<td>2017</td>
<td>38</td>
<td>23.9-47.7</td>
<td>No goal for the total</td>
<td>60</td>
<td>ppb</td>
<td>N</td>
</tr>
<tr>
<td>Total Trihalomethanes (TTHM)</td>
<td>2017</td>
<td>55</td>
<td>36.7-61.1</td>
<td>No goal for the total</td>
<td>80</td>
<td>ppb</td>
<td>N</td>
</tr>
</tbody>
</table>

### Inorganic Contaminants

<table>
<thead>
<tr>
<th>Collection Date</th>
<th>Highest Level Detected</th>
<th>Range of Individual Samples</th>
<th>MCLG</th>
<th>MCL</th>
<th>Units</th>
<th>Violation</th>
<th>Likely Source of Contaminants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td>10/31/2012</td>
<td>0.3776</td>
<td>0-0.3776</td>
<td>7</td>
<td>7</td>
<td>MFL</td>
<td>N</td>
</tr>
<tr>
<td>Barium</td>
<td>2017</td>
<td>0.01</td>
<td>0.01-0.01</td>
<td>2</td>
<td>2</td>
<td>ppm</td>
<td>N</td>
</tr>
<tr>
<td>Fluoride</td>
<td>2017</td>
<td>0.722</td>
<td>0.722-0.722</td>
<td>4</td>
<td>4.0</td>
<td>ppm</td>
<td>N</td>
</tr>
<tr>
<td>Nitrate measured as Nitrogen</td>
<td>2017</td>
<td>0.0245</td>
<td>0.0245-0.0245</td>
<td>10</td>
<td>10</td>
<td>ppm</td>
<td>N</td>
</tr>
</tbody>
</table>

### Radioactive Contaminants

<table>
<thead>
<tr>
<th>Collection Date</th>
<th>Highest Level Detected</th>
<th>Range of Individual Samples</th>
<th>MCLG</th>
<th>MCL</th>
<th>Units</th>
<th>Violation</th>
<th>Likely Source of Contaminants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Radium 226/228</td>
<td>2017</td>
<td>1.5</td>
<td>1.5-1.5</td>
<td>0</td>
<td>5</td>
<td>pCi/L</td>
<td>N</td>
</tr>
</tbody>
</table>

**Lead and Copper Rule**

The Lead and Copper Rule protects public 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.

**Violations Table**

<table>
<thead>
<tr>
<th>Violation Type</th>
<th>Violation Begin</th>
<th>Violation End</th>
<th>Violation Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEAD CONSUMER NOTICE (LCR)</td>
<td>12/30/2016</td>
<td>01/24/2017</td>
<td>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.</td>
</tr>
</tbody>
</table>

**Definitions and abbreviation cont.**

- **ppb:** micrograms 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.
- **ppq:** parts per quadrillion, or pictograms per liter (pg/L)
- **ppt:** parts per trillion, or nanograms per liter (ng/L)
- **Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.
CUSTOMER REQUEST FOR CONFIDENTIALITY

The Water Department is a city-owned and operated utility; therefore, your water bill account information is considered a public record under the Texas Public Information Act. However, a state law allows residential water customers to request that personal information and any information relating to water usage, billing amounts and payment records be kept confidential. Personal information includes your address, telephone number, and social security number.

The request for confidentiality must be submitted in writing using this form or by submitting a separate letter. Once the request is received and processed, the Water Department will not release confidential information for that customer except to:
1. Government Officials,
2. Consumer reporting agencies,
3. Contractors or subcontractors who need the information to do their jobs,
4. Utility representatives, or
5. Individuals for whom the customer has waived confidentiality. (Must be in writing.)

People in these categories will be required to show identification before the information will be released.

If you have already completed a form similar to this one, the Water Department request that you complete this form in order to ensure that we have the most current up to date information on your confidentiality selection.

If you wish to request confidentiality, please complete and return the form below. If you have any questions, please call (936) 633-0220. Information cannot be kept confidential until this completed and signed form is received and processed by the Water Department.

____ I hereby request that all personal information, and any information relating to water usage, billing amounts or payment records be kept confidential.

Please Print
Customer Number: ____________________ Location Number: ____________________
Service Address: ______________________________
Customer Name: ______________________________