2016 Annual Drinking Water Quality Report
(Consumer Confidence Report)
TEXAS STATE UNIVERSITY–FREEMAN RANCH PWS# 1050163
Phone No: 512-245-8629
Carl Teague

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.

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.

En Español
Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español favor de llamar al teléfono(512) 245-3848 - para hablar con una persona bilingüe en español.

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 Protection 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.

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.
Public Participation
Opportunities

Date: None Scheduled
Time: 
Location: 

Phone No: 512-245-8629

Where do we get our drinking water?
Our drinking water is obtained from GROUND water sources. It comes from the following
Lake/River/Reservoir/Aquifer: EDWARDS SOUTH BFZ. A Source Water Susceptibility
Assessment for your drinking water sources(s) is currently being updated by the Texas
Commission on Environmental Quality and will be provided to us this year. The report will describe
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 will allow 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 purchasing
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).

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, secondary’s
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.

<table>
<thead>
<tr>
<th>ABBREVIATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTU - Nephelometric Turbidity Units</td>
</tr>
</tbody>
</table>
| 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(μg/L) |
| ppt - parts per trillion, or nanograms per liter |
| ppq -parts per quadrillion, or picograms per liter |
## 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>2013-2015</td>
<td>Nitrate [measured as Nitrogen]</td>
<td>.035</td>
<td>.03</td>
<td>.04</td>
<td>10</td>
<td>10</td>
<td>ppm</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.</td>
</tr>
</tbody>
</table>

## Organic Contaminants

**NOT TESTED OR REPORTED, OR NONE DETECTED**

## Maximum Residual Disinfectant Level

Systems must complete and submit disinfection data on the Disinfection Level Quarterly Operating Report (DLQOR). On the CCR report, the system must provide disinfectant type minimum, maximum and average levels.

<table>
<thead>
<tr>
<th>Year</th>
<th>Disinfectant</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 Disinfectant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Chlorine Residual, Free</td>
<td>0.84</td>
<td>0.6</td>
<td>1.4</td>
<td>4</td>
<td>4</td>
<td>ppm</td>
<td>Disinfectant used to control microbes.</td>
</tr>
</tbody>
</table>

## Disinfection Byproducts

<table>
<thead>
<tr>
<th>Year</th>
<th>Contaminants</th>
<th>Average Level</th>
<th>Minimum Level</th>
<th>Maximum Level</th>
<th>MCL</th>
<th>Unit of Measure</th>
<th>Source of Disinfectant</th>
</tr>
</thead>
</table>

## Unregulated Initial Distribution System Evaluation for Disinfection Byproducts

**WAIVED OR NOT YET SAMPLED**

## Unregulated Contaminants

**NOT REPORTED OR NONE DETECTED**

## Unregulated Contaminate 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](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 (Range)</th>
<th>Contaminants</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>
</table>

## Lead and Copper

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>MCLG</th>
<th>Action Level (AL)</th>
<th>90th Percentile</th>
<th># Sites Over AL</th>
<th>Units</th>
<th>Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Corrosion of household plumbing systems; erosion of natural deposits</td>
</tr>
<tr>
<td>9/10/2015</td>
<td>1.3</td>
<td>1.3</td>
<td>0.0027</td>
<td>0</td>
<td>ppm</td>
<td>Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.</td>
</tr>
</tbody>
</table>
Recommended 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 at http://www.epa.gov/safewater/lead.”

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.

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 are based on running annual average of monthly samples.
Maximum Contaminant Level or 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.
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.
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.
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 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.
MFL million fibers per liter (a measure of asbestos)
na: not applicable.
mrem: millirems per year (a measure of radiation absorbed by the body)

Water Quality Test Results
NTU nephelometric turbidity units (a measure of turbidity)
pCi/L picocuries per liter (a measure of radioactivity)
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.
Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.
ppt parts per trillion, or nanograms per liter (ng/L)
ppq parts per quadrillion, or picograms per liter (pg/L)
Turbidity

### Regulated Contaminants Detected

<table>
<thead>
<tr>
<th>Contaminants, Disinfectants and Disinfection By-Products</th>
<th>Collection Date</th>
<th>Highest Level Detected</th>
<th>Range of Level Detected</th>
<th>Maximum Contaminant Level Goal</th>
<th>Maximum Contamination Level</th>
<th>Units</th>
<th>Violation</th>
<th>Likely Source Of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coliform Bacteria</td>
<td>Monthly 2015</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1 Positive Monthly</td>
<td>N</td>
<td></td>
<td>Naturally Present in the environment</td>
</tr>
<tr>
<td>Total Trihalomethanes (TTHM)</td>
<td></td>
<td></td>
<td>No goal for the total</td>
<td>80</td>
<td>ppb</td>
<td>N</td>
<td></td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>Barium</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td>ppm</td>
<td>N</td>
<td></td>
<td>Discharge of drilling waste; Discharge from metal refineries; Erosion from natural deposits</td>
</tr>
<tr>
<td>Fluoride</td>
<td>9/10/2015</td>
<td>1.36</td>
<td>4</td>
<td>4</td>
<td>ppm</td>
<td>N</td>
<td></td>
<td>Erosion from natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.</td>
</tr>
<tr>
<td>Nitrate [measured as Nitrogen]</td>
<td>2016</td>
<td>.05</td>
<td>.05-.05</td>
<td>10</td>
<td>10</td>
<td>ppm</td>
<td>N</td>
<td>Runoff from fertilizer use; Leaching from septic tanks; sewage: Erosion from natural deposits.</td>
</tr>
<tr>
<td>Gross Alpha Compliance</td>
<td></td>
<td>0</td>
<td>15</td>
<td></td>
<td>pCi/L</td>
<td>N</td>
<td></td>
<td>Erosion from natural deposits.</td>
</tr>
</tbody>
</table>

**Violations Table**

**E. Coli:** Fecal coliforms and E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Microbes in these wastes can cause short term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

<table>
<thead>
<tr>
<th>Violation Type</th>
<th>Violation Begin</th>
<th>Violation End</th>
<th>Violation Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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).

<table>
<thead>
<tr>
<th>Violation Type</th>
<th>Violation Begin</th>
<th>Violation End</th>
<th>Violation Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year or Range</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>2015</td>
<td>Bicarbonate</td>
<td>NA</td>
<td>ppm</td>
<td></td>
<td></td>
<td></td>
<td>Corrosion of carbonate rocks such as limestone.</td>
</tr>
<tr>
<td></td>
<td>Calcium</td>
<td>NA</td>
<td>ppm</td>
<td></td>
<td></td>
<td></td>
<td>Abundant naturally occurring element.</td>
</tr>
<tr>
<td>2015</td>
<td>Chloride</td>
<td>46</td>
<td>46</td>
<td>300</td>
<td>ppm</td>
<td></td>
<td>Abundant naturally occurring element; used in water purification; byproduct of oil field activity</td>
</tr>
<tr>
<td>2015</td>
<td>Copper</td>
<td>.0027</td>
<td>0</td>
<td>1.3</td>
<td>NA</td>
<td>ppm</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.</td>
</tr>
<tr>
<td>2015</td>
<td>Magnesium</td>
<td>&gt;.001</td>
<td>0</td>
<td>.05</td>
<td>NA</td>
<td>ppm</td>
<td>Abundant naturally occurring element</td>
</tr>
<tr>
<td></td>
<td>Nickel</td>
<td>NA</td>
<td>Ppm</td>
<td></td>
<td></td>
<td></td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td></td>
<td>pH</td>
<td>&gt;7.0</td>
<td>units</td>
<td></td>
<td></td>
<td></td>
<td>Measure of corrosively of water</td>
</tr>
<tr>
<td></td>
<td>Sodium</td>
<td>NA</td>
<td>ppm</td>
<td></td>
<td></td>
<td></td>
<td>Erosion of natural deposits; byproduct of oil field activity</td>
</tr>
<tr>
<td>2015</td>
<td>Sulfate</td>
<td>608</td>
<td>608</td>
<td>608</td>
<td>300</td>
<td>ppm</td>
<td>Naturally occurring; common industrial byproduct; byproduct of oil field activity</td>
</tr>
<tr>
<td></td>
<td>Total Alkalinity as CaCO3</td>
<td>NA</td>
<td>ppm</td>
<td>Naturally occurring soluble mineral salts.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>Total Dissolved Solids</td>
<td>1190</td>
<td>1190</td>
<td>1190</td>
<td>1000</td>
<td>ppm</td>
<td>Total dissolved mineral constituents in water</td>
</tr>
<tr>
<td></td>
<td>Total Hardness as CaCO3</td>
<td>NA</td>
<td>ppm</td>
<td>Naturally occurring calcium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>Zinc</td>
<td>.0407</td>
<td>.0407</td>
<td>.0407</td>
<td>5</td>
<td>ppm</td>
<td>Moderately abundant naturally occurring element used in the metal industry</td>
</tr>
</tbody>
</table>