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2016 Annual Drinking Water Quality Report (Consumer Confidence Report)

PWS ID Number: TX0950004
PLAINVIEW MUNICIPAL WATER SYSTEM
Phone (806) 296-1154

Annual Water Quality Report for the period of January 1 to December 31, 2016

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. 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.

We Welcome Your Comments: There are many opportunities to learn more about the City of Plainview Water Production department and water quality. For questions or concerns about water quality, contact Brian Gallaway at (806) 296-1154. To request a speaker for your group, call (806) 296-1150. For inquiries about public participation and policy decisions, contact the City Manager at (806) 296-1106. The Water Department is part of the city government. The City Council meets the second and fourth Tuesday of each month. Call (806) 296-1107 for meeting times and location. You may make written comments to the City of Plainview at 901 Broadway, Plainview, Texas 79072.

For more information regarding this report contact:

Name Brian Gallaway

Phone (806) 296-1154

Este informe contiene información muy importante sobre el agua que usted bebe. Si tienes preguntas sobre la calidad del agua, puedes llamar a Rick Luna, Ciudad de Plainview, (806) 296-1154. Tambien puedes escribir a Rick Luna, 901 Broadway, Water Treatment Plant, Plainview, Texas 79072, con sus preguntas.

Special Notice – Required Language for all Community Public Water Systems: Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants 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 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.

The source of drinking water used by PLAINVIEW MUNICIPAL WATER SYSTEM is Purchased Surface and Ground Water.

Information on Sources of 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 pickup substances resulting from the presence of animals or from human activity.

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.

The City of Plainview has a total of 15 wells. All of our wells draw water from the Ogallala Aquifer. All wells are active.

Information about Secondary Contaminants

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.

Information about Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water sources(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 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 available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW/
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 Confident Report. For more information on source water assessments and protection efforts at our system, contact Brian Gallaway at (806) 296-1154.

Water Quality Test Results

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 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.

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.

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.

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

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

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

na: not applicable.

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

Maximum Residual Disinfectant Level

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR Report, the

system must provide disinfectant type, minimum, maximum and average levels.

| Year | Disinfectant Type | Average Level | Minimum Level | Maximum Level | MRDL | MRDLG | Unit | Source of Chemical |
|------|-------------------|---------------|------------------|------------------|------|-------|------|--|
| 2016 | Free CL2 | 1.01 | .29 | 1.63 | 4 | 4 | ppm | Disinfectant used to control microbes. |

Coliform Bacteria

| Maximum | Total Coliform | Fecal Coliform or | Total No. of | Violation | Likely Source of Contamination |
|-------------------|-------------------|-------------------|---------------------|-----------|---------------------------------------|
| Contaminant Level | Maximum | E. Coli Maximum | Positive E. Coli or | | |
| Goal | Contaminant Level | Contaminant Level | Fecal Coliform | | |
| | | | Samples | | |
| | | | | | |
| 0 | 0 | | 0 | N | Naturally present in the environment. |
| | | | | | 31 |
| | | | | | |
| | | | | | |

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 |
|--------------------|-----------------|------|----------------------|--------------------|--------------------|-------|-----------|---|
| Copper | 2016 | 1.3 | 1.3 | 0.033 | 0 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |

Regulated Contaminants

| Disinfectants and Disinfection By- Products | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|---|--------------------|------------------------------|-----------------------------|-----------------------|-----|-------|-----------|--|
| Haloacetic Acids (HAA5)* | 2016 | 14 | 0 – 22.4 | No goal for the total | 60 | ppb | N | By-product of drinking water chlorination. |

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

| Total Trihalomethanes (TThm)* | 2016 | 38 | 1.14 – 64.3 | No goal for the total | 80 | ppb | N | By-product of drinking water chlorination. | | |
|--|--------------------|------------------------------|-----------------------------|-----------------------|----------------|------------------|----------------|--|---|--|
| | | | lating the Highest | Level Detected be | cause some re | esults may be p | part of an eva | aluation t | o determine where compliance | |
| ampling should occur | | | Range of Levels | MCLG | MCL | Units | Violation | | kely Source of Contamination | |
| Inorganic Contaminants | Collection Date | Highest Level Detected | Detected | MICEG | IVICL | UIIIIS | Violation | Likely Source of Contamination | | |
| Arsenic ** | 2016 | 4 | 1.7 – 4.6 | 0 | 10 | ppb | N | orchard | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. | |
| Chromium | 2016 | 4.8 | 1 – 4.8 | 100 | 100 | ppb | N | Discharge from steel and pulp mills; Erosion of natural deposits. | | |
| While your drinking | water meets E | PA standards f | r arsenic, it does | contain low levels | of arsenic. EP | As standard b | alances the o | urrent ur | nderstanding of arsenics possible | |
| ealth effects against t | he costs of re | emoving arsenio | from drinking wat | er. EPA continues | to research th | ne health effect | s of low leve | Is of arse | nic, which is a mineral known to | |
| ause cancer in humar | | | | | | | | | as of drilling woods. Discharge | |
| Barium | 2016 | 0.11 | 0.096 – 0.11 | 2 | 2 | ppm | N | | ge of drilling wastes; Discharge etal refineries; Erosion of natural s. | |
| Fluoride | 2016 | 2.6 | 0.744 – 2.64 | 4 | 4.0 | ppm | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. | | |
| Nitrate [measured as Nitrogen] | 2016 | 2 | 0.776 – 1.6 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. | | |
| | litrate levels r | | | | | | | | vels in drinking water can cause r an infant you should ask advice | |
| Selenium | 2016 | 3.3 | 0 – 3.3 | 50 | 50 | ppb | N | refinerie | ge from petroleum and metal s; Erosion of natural deposits; ge from mines. | |
| | | | | | | | | | | |
| Radioactive Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination | | |
| Beta/photon emitters | 2016 | 6.8 | 6.8 – 6.8 | 0 | 50 | pCi/L | N | Decay o | of natural and man-made deposits. | |
| Gross alpha excluding radon and uranium | 2016 | 6.2 | 1 – 6.2 | 0 | 15 | pCi/L | N | Erosion of natural deposits. | | |
| Uranium | 2016 | 7.6 | 7.8 – 7.8 | 0 | 30 | ug/1 | N | Erosion | of natural deposits. | |
| urbidity | | | | | | | | | | |
| urbiaity | | Limit (Treatmo | ent Technique) | Level Det | ected | | Violation | | Likely Source of Contamination | |
| Highest single measurement | | 11 | ITU | 0.15 | | | N | | Soil runoff. | |
| Lowest monthly % me | eting limit | 0.3 | NTU | 100% | 6 | | N | | Soil runoff. | |
| | L. | | • | | | • | | | | |
| Synthetic organic contaminants including pesticides and herbicides | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination | | |
| Di (2-ethylhexyl) phthalate | 2016 | 4.6 | 0 – 4.6 | 0 | 6 | ppb | N | Dischar factorie: | ge from rubber and chemical s. | |

Total Organic Carbon
The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Violations Table

| Filter Backwash Rule | | | | | | | |
|--|-----------------|---------------|--|--|--|--|--|
| The Filter Backwash Recycling Rule requires public water systems to review their backwash water recycling practices to ensure that they do not compromise microbial control. | | | | | | | |
| Violation Type | Violation Begin | Violation End | Violation Explanation | | | | |
| FAILURE TO SUBMIT PLANT | 07/24/2011 | 2015 | We failed to submit to our regulator a plant schematic showing the origin of all flows which are | | | | |
| SCHEMATIC (FBR) | | | recycled, the hydraulic conveyance used to transport them, and the location where they are | | | | |
| | | | re-introduced back into the treatment plant. | | | | |

Drought Contingency Plan and Water Loss Audit

The City maintains a drought contingency plan to preserve the water supply in case of emergency conditions. The plan can be easily implemented if emergency or drought conditions persist for any length of time. The drought contingency plan ensures that ample water will always be available to meet the most critical needs of residents and business. The City of Plainview urges everyone to be water wise. During the summer, 50% - 80% of a household's water consumption is outdoors. By all working together, we can each do our part to help conserve this most precious commodity! For more information on being a smart water consumer, for a free brochure on the subject, feel free to contact the City of Plainview Water Production Department at 806-296-1154.

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan – Dec 2016, our system lost an estimated 139,173,822 gallons of water. If you have any questions about the water loss audit please call 806-296-1154.

Exceedance of Fluoride Secondary Constituent Level

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low, levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community Water System, City of Plainview has a fluoride concentration of 2.64 mg/l.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Project Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problems.

For more information, please call Paul Kite or Brian Gallaway at 806-296-1154. Some home water treatment units are also available to remove fluoride from drinking water. To learn more available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.