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

Quality Report

Wellborn Special Utility District

PWS ID Number TX0210016

P.O. Box 250, Wellborn, Texas 77881 (979) 690-9799

Our Drinking Water Is Regulated

This report is intended to provide you with important information about your drinking water and the efforts made by Wellborn SUD to provide safe drinking water. 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 is in your drinking water.

Public Participation Opportunities

Date: The third Tuesday of each month. Time: 6:00 P.M. Location: Wellborn Special Utility District 4118 Greens Prairie Road W. College Station, Texas Phone Number: 979-690-9799

To learn more about future public meetings (concerning your drinking water), or to request to schedule one, please contact us.

Special Notice

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 at 1-800-426-4791.

<u>En Espanol</u>

Este informe incluye información impotante sobre el agua para tomar. Para asistencia en español, favor de llamar al tel. (979) 690-9799.

<u>ALL Drinking Water May Contain</u> <u>Contaminants</u>

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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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 of contaminants in bottled water which must provide the same protection for public health.

Source 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. 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 agricultural, 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.

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 Wellborn SUD office at 979-690-9799.

Where Do We Get Our Drinking Water?

The source of drinking water used by Wellborn SUD is surface and ground water. It comes from the Yegua and Simsboro Aquifers and Navasota River located in Brazos County and Robertson County, as well as water purchased from the City of Bryan and the City of College Station.

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 CCR. For more information on source water assessments and protection efforts at our system contact Stephen Cast at 979-690-9799. 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://www.tceq.texas.gov/gis/swaview. Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww2.tceq.texas.gov/DWW/

Treatment of Water

Wellborn SUD treats both groundwater and surface water for disinfection purposes with chlorine or chloramine. In order to ensure that our water is safe, twenty five water samples are taken each month from designated sites throughout the community and analyzed in the Brazos County Health Department Laboratory or any other state approved laboratory. These laboratories are approved by the TCEQ.

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 cause for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of our 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 constituents.

Reading and Understanding the Table -Definitions

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

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 Contaminant Level Goal or (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 or (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 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.

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.

ppt – Parts per trillion, or nanograms per liter (ng/L) **ppq** – Parts per quadrillion or pictograms per liter

(pg/L). **na** – Not applicable.

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.

MFL – Million fibers per liter (a measure of asbestos). **NTU** – Nephelometric turbidity units (a measure of turbidity).

MFL – Million fibers per liter (a measure of asbestos) **pCi/L** – Picocuries per liter (a measure of radioactivity).

mrem/year – millirems per year (a measure of radiation absorbed by the body).

Water Conservation Tips

Water is a precious resource. Unfortunately, it is also a limited resource that is being stretched to accommodate the growing number of users that rely on it. Conserving our water by using it efficiently is the simplest and most cost-effective way to stretch our water supplies and to insure there will be enough to go around.

- Repair dripping faucets by replacing washers. One drop per second wastes 2,700 gallons of water per year.
- Operate automatic dishwashers and washing machines only when they are fully loaded.
- Store drinking water in the refrigerator. Do not let the tap run while you are waiting for water to cool.
- Plant native and/or drought-tolerant grasses, ground covers, shrubs, and trees. Avoid over watering your lawn. A heavy rain eliminates the need for watering for up to two weeks.
- Use mulch to retain moisture in the soil. Mulch also helps to control weeds that compete with landscape plants for water.
- Try trickle or drip irrigation systems in outdoor gardens. These methods use 25 to 50 percent less water than a hose or sprinkler method.
- Take a short shower, a 5 minute shower uses 4-5 gallons of water compared to 50 gallons for a bath.
- Clean the swimming pool filter often. You will not have to replace the water as often.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill.
- Visit <u>www.epa.gov/watersense</u> for more information on helpful water conservation tips.

Water loss

In the water loss audit submitted to the Texas Water Development Board for the period of January – December 2016, our system lost an estimated 9%. If you have any questions about the water loss audit please call 979-690-9799.

For your Convenience

A night deposit drop is located on the right side of our Building for the convenience of any customers who may need to drop off a payment after hours. If you are interested in having your water bill drafted from your bank account, please call the office and one of the staff persons will assist you with the procedure.

Check our website at <u>www.wellbornsud.com</u> to pay your bill online.

Wellborn Special Utility District (WSUD) is here for you, our customers, 24 hours a day. If you should have a water emergency after hours, simply call our office at (979-690-9799) and our answering service will dispatch your call to our water operator.

For more information regarding this report contact: Stephen Cast, General Manager 979-690-9799

Este reporte incluye informacion importante el aqua para tomar. Para asistencia en espanol, favor de llamar al telefono 979-690-9799.

Water system facts:

Wellborn Special Utility District was established in 1963 serving approximately 150 customers. As of December 2016, we were serving 8025 customers. The District currently utilizes a Surface Water Treatment Plant, 8 groundwater wells, 4 elevated towers with a total storage capacity of 2.5 million gallons. The District is able to produce 2 to 5 million gallons of water per day. For emergency purposes, Wellborn SUD has interconnections with the City of College Station, City of Bryan and Wickson SUD.

2016 System Improvements

- 15,000 feet of 16 inch transmission lines
- Upgraded pump house at Linda Lane
- Enhanced Ultra Violet Disinfection system at Surface Water Treatment Plant

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	9	0-11.1	No Goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2016	37	1.1-60.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Chlorite	2016	0.69	0-0.69	0.8	1	ppm	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest level detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely source of Contamination
Barium	2016	0.0941	0.0624-0.0941	2	2	ppm	N	Discharge of drilling waste; discharge from metal refineries; Erosion of natural deposits.
Fluoride	2016	0.37	0-0.37	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	1	0-1.2	10	10	ppm	Ν	Runoff from fertilizer use: Leaching from septic tanks: sewage: Erosion of natural deposits.
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Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest level detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely source of Contamination
Atrazine	2016	0.12	0-0.12	3	3	ppb	Ν	Runoff from herbicide used on row crops.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely source of contamination
Beta/Photon Emitters	2016	4.9	0-4.9	0	50	pCi/L*	N	Decay of natural and man-made deposits
Combined Radium 226/228	02/06/2013	2.1	1-2.1	0	5	pCi/L	N	Erosion of natural deposits

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Lead and Copper

Definitions: Action Level Goal (AGL): 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)	90 th Percentile	# Sites over AL	Units	Violation	Likely source of contamination
Copper	2016	1.3	1.3	0.307	0	ppm	N	Erosion of natural Deposits: Leaching from wood preservatives: corrosion of household plumbing systems.
Lead	2016	0	15	3.62	1	ppb	N	Corrosion of household plumbing systems: Erosion of natural deposits.

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. Wellborn Special Utility District is 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.

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 samples	4		0	Ν	Naturally present in the environment

Disinfectant Residual

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MCLG	Units of Measure	Violation (Y/N)	Source
Chlorine	2016	1.48	1.10	1.80	4.0	<4.0	Mg/L	N	Chlorine
Chloramine	2016	1.58	0.90	3.20	4.0	<4.0	Mg/L	N	Chlorine and ammonia

Turbidity

	Limit (Treatment Technique)	Level Detected	Violations	Likely source of Contamination
Highest single measurement	1 NTU	0.29 NTU	Ν	Soil Runoff
Lowest monthly % meeting limit	0.3 NTU	100 %	Ν	Soil Runoff

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of the water quality and the effectiveness of our filtration.

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.

City of College Station

Regulated Contaminants

Year Sampled	Substance	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Units
2014	Fluoride	0.48 ppm	0.48-0.48 ppm	4	2	ppm
2016	Barium	0.0876	0.0876-0.0876	2	2	ppm
2016	Nitrate	0.41	0.41-0.41	10	10	ppm

Secondary and Other Non-Regulated Contaminants

Year Sampled	Substance	Range of Levels Detected	Limit	Units
2014	pH	8.4	>7.0	N/A
2016	Sodium	222	No Recommendation	ppm
2014	Bicarbonate	442	No Recommendation	ppm
2014	Phenolphthalein Alkalinity (as CaCO3)	14	No Recommendation	ppm
2014	Alkalinity (Total)	390	No Recommendation	ppm
2016	Calcium	3.26	No Recommendation	ppm
2014	Carbonate	17	No Recommendation	ppm
2014	Chloride	57	300	ppm
2016	Copper	0.005	1	ppm
2014	Diluted Conductance	966	No Recommendation	umhos/cm
2016	Iron	0.022	0.3	ppm
2016	Manganese	0.0085	0.05	ppm
2014	Sulfate	8	300	ppm
2014	Total Dissolved Solids	544	1000	ppm
2016	Total Hardness (as CaCO3)	8.14	No Recommendation	ppm
2016	Potassium	1.85	No Recommendation	N/A

Regional Cooperative Efforts

Wellborn Special Utility District and the City of College Station have entered into an innovative regional cooperation effort in which Wellborn SUD transmits water from its well field in Northern Brazos County to its customers in south College Station using the City of College Station's raw water transmission lines. The well fields for both water systems are in the Carrizo-Wilcox Aquifer. Wellborn SUD puts water from its well field into College Station's transmission line at College Station's well field pump station, and takes out water to serve its customers through existing interconnects with College Station. In 2016, this transfer occurred over a period of six months, from May to October 2016. For more information about College Station's water quality please contact Jennifer Douglass Nations Water Resource Coordinator City of College Station – Water Services Dept. <u>inations@cstx.gov</u> 979-794-6223.

City of Bryan Inorganic Contaminants – Screened at the Production Facility

Year	Constituent	MCL	Detected Level	MCLG	Violation? Y/N	Possible Source(s) of Contaminant
2016	Barium	2 ppm	0.097 ppm	2 ppm	N	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
2016	Chromium	100 ppb	<10 ppb	100 ppb	N	Discharge from steel and pulp mills; erosion of natural deposits
2014	Fluoride	4 ppm	0.48 ppm	4 ppm	Ν	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2016	Mercury (inorganic)	2 ppb	<0.4 ppb	2 ppb	Ν	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
2016	Nitrate (as Nitrogen)	10 ppm	0.07 ppm	10 ppm	Ν	Erosion of natural deposits, runoff from fertilizer use; leaching from septic tanks, sewage
2016	Selenium	0.05 ppm	0.003 ppm	0.05 ppm	Ν	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills
2011	Gross Alpha	15 pCi/L	2.4 pCi/L	0 pCi/L	Ν	Erosion of natural deposits

Secondary (Constituents
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Year	Constituent	MCL	Detected Levels
2015	pH	>7.0	8.65
2016	Sodium	Not Regulated	237 ppm
2016	Aluminum	0.05-0.2 ppm	<0.02 ppm
2014	Bicarbonate	Not Regulated	455 ppm
2016	Calcium	Not Regulated	3.13 ppm
2014	Carbonate	Not Regulated	17 ppm
2014	Chloride	300 ppm	57 ppm
2016	Copper	1 ppm	0.0054 ppm
2016	Hardness as Ca/Mg	Not Regulated	7.82 ppm
2016	Magnesium	Not Regulated	<1 ppm
2016	Manganese	0.05 ppm	0.0102 ppm
2014	Sulfate	300 ppm	6 ppm
2015	Total Alkalinity	Not Regulated	412 ppm
2014	Dissolved Solids	1000 ppm	548 ppm
2016	Zinc	5 ppm	<0.005 ppm