

2017 Annual Drinking Water Quality Report

(Consumer Confidence Report)

Jarrell Schwertner Water Supply Corporation
PWS ID# 2460011
512-746-2114

The Annual Water Quality Report is 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.

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, color or odor of drinking water, please contact the system's business office at the number provided above.

The elected Board of Directors of the System meets every 2nd Wednesday of the month at 6:30 or 7:00 PM. The meeting is normally held at the City of Jarrell's Community Center located on County Road 305 in Jarrell, TX. Meeting notices are posted at the business office located at 113 N. 5th Street in Jarrell, TX.

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 immune-compromised 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 for 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.

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. 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 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>.

Nitrate Advisory – Nitrate in drinking water at levels above 10 PPM is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

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, Jarrell-Schwertner WSC has a fluoride concentration of 2.09 MG/L.

The wells producing the concentration of 2.09 MG/L are located in the southwestern area of the water system and affect 319 of the systems' 1566 connections. Samples collected and affecting the remaining 1247 connections have concentrations of Fluoride below 0.5 MG/L. The Southwestern area is considered to be south of the City of Jarrell of the west side of IH 35, CR314, CR 311, and FM 1105 up to CR 314.

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 alternate sources of drinking water or water that has been treated to remove 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 Protection 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 problem.

For more information, please call David Yohe of Jarrell-Schwertner WSC at 512-746-2114. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

En Espanol

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono, 512-746-2114.

Source of Drinking Water

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over surface of the land and 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 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.

Where do we get our drinking water?

The source of drinking water primarily used by Jarrell Schwertner WSC is ground water. The wells draw water from the Edwards Aquifer. Only those areas served by Central Texas Water Supply Corporation are on surface water. The source of their water is Lake Stillhouse Hollow. The Texas Commission on Environmental Quality (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 detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact David Yohe at 512-746-2114.

JSWSC customers along Royal, Blackberry, East Amity and the Live Oak Subdivision have received water from two outside sources. Those are either Salado WSC noted as Salado in the report or Central Texas WSC noted as CTWSC. JSWSC may take water from Sonterra MUD which is shown as SMUD in the report. Water taken from SMUD is an emergency supply and would influence water quality in an area west and east of IH 35 near County Roads 310 and 311. No water was taken from SMUD during 2017.

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 and not the EPA. These constituents are not causes for health concerns. Therefore secondary contaminants are not required to be reported in this document but they may greatly affect the appearance and taste of your water. Please call 512-746-2114 if you have any questions regarding these contaminants.

Abbreviations and Definitions

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)

PPM – parts per million or milligrams per liter (MG/L)

PPB – parts per billion or micrograms per liter

PPT – parts per trillion or nanograms per liter

PPQ – parts per quadrillion or picograms per liter

PPM: milligrams per liter or parts per million or one once in 7,350 gallons of water

PPB: micrograms per liter or parts per billion or one once in 7,350,000 gallons of water

NA – not applicable

ND – non-detect

AVG – Regulatory compliance with some MCLs are based on running annual average of monthly samples

MCL or maximum contaminant level – 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.

MCLG or maximum contaminant level goal – 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.

MRDL or maximum residual disinfectant level – 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.

MRDLG or maximum residual disinfectant level goal – 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.

Not all sample results 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.

In early 2018 the WSC submitted an annual water loss report to the Texas Water Development Board for the time period of January 1 to December 31, 2017. The estimated water loss was 129,131,483 gallons. The WSC does have an on-going program to lessen these losses. If you have any questions about the water loss audit please call the WSC at 512-746-2114.

Regulated Contaminants								
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	JSWSC 2017	1 Positive monthly sample	0	0	0		N	Naturally present in the environment.

		Collection Date	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violations	Likely Source of Contamination
Copper	JSWSC	2016	1.3	1.3	0.11	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	JSWSC	2016	0	15	1.7	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Action Levels - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.									

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)	JSWSC	2017	0	0	No goal for total	60	ppb	N	By-Product of drinking water chlorination.
Total Trihalomethanes (TTHM)	JSWSC	2017	22.7	22.7-22.7	No goal for total	80	ppb	N	By-Product of drinking water chlorination.

Chlorine Residuals	JSWSC	2017	2	1.0-2.0	MRDL 4	MRDLG 4	ppm	N	Disinfectant used to control microbes in drinking water
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Lowest allowed residual in the system is 0.2 ppm

Inorganic Contaminants		Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	JSWSC	2016	0.048	0.042-0.048	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
	CTWSC	2017	0.0482	0.0467-0.0482				N	
	SALADO	2017	0.0694	0.044-.0634				N	
Fluoride	JSWSC	2017	2.09	0.23-2.09	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum
	CTWSC	2017	0.26	0.25-0.26				N	
	SALADO	2017	1.02	0.25-1.02				N	
Nitrate (measured as Nitrogen)	JSWSC	2017	4.99	0.02-4.99	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
	CTWSC	2017	0.78	0.24-0.78				N	
	SALADO	2017	7.44	0.06-7.44				N	

Cyanide									
	CTWSC	2017	180	120-180	200	200	ppb	N	Discharge from platic and fertilizer factories; Discharge from steel/metal factories

Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violations	Likely Source of Contaminants
Not Detected								

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228 JSWSC	2015	3.8	ND-3.8	0	5	pCi/L	N	Erosion of natural deposits.
SALADO	2017	ND	ND				N	
Gross Alpha including radon and uranium JSWSC	2015	3.8	ND-3.8	0	15	pCi/L	N	Erosion of natural deposits.

Uranium	SALADO	2017	ND	ND	0	30	ppm	N	Ersion of natural deposits
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Unreglated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Bromoform JSWSC	2017	6.3	0-6.3	NA	NA	ppb	N	Byproduct of drinking water disinfection
Salado	2017	1.2	0-1.2				N	
CTWSC	2017	10.6	1.1-10.6				N	
Bromodichloromethane				NA	NA	ppb		Byproduct of drinkingi water disinfection
CTWSC	2017	8.8	4.9-8.8				N	
Salado	2017	ND	ND-1.5				N	
JSWSC	2017	4.9	0-4.9				N	
Dibromochloromethane				NA	NA	ppb		Byproduct of drinking water disinfection
Salado	2017	1.5	0-1.5				N	
CTWSC	2017	10.6	3.0-10.6				N	
JSWSC	2017	9.6	0-9.6				N	
Chloroform				NA	NA	ppb		Byproduct of drinking water disinfection
CTWSC	2017	8.9	3.3-8.9				N	
Salado	2017	ND	ND				N	
JSWSC	2017	1.9	0-1.9				N	

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Not Detected								

Turbidity		Limit (Treatment Technique)	Level Detected	Violation		Likely Source of Contamination
CTWSC only						
Highest single measurement	2017	1 NTU	0.49	N		Soil runoff.
Lowest monthly % meeting limit		0%	98.80%	N		Soil runoff.



THE PIPELINE

Spring 2018

Jarrell, Texas

The Corporation has continued to grow in 2017. Thirty-three (33) new members were added during the year which is almost twice as many as in 2016. Most roadway improvements that were underway in 2016 were completed in 2017. New road projects will take place in the near future.

2017 was a fairly stable year for work on the current water system. No major changes or additions were made. This was more of a year to plan for the Corporation's future and prioritize projects that benefit its' membership.

As noted last year the Corporation had entered into an agreement to aide in constructing and purchasing water from the Lone Star Regional Water Authority. The project will bring 1.5 Million Gallons of treated water per day to the Corporation. This project has received bids and the low bidders have been awarded contracts by the Authority. These awards of contracts must be approved by the Texas Water Development Board who is providing funding of the project. If approved, construction will begin in June or July with a completion date of fall of 2019.

Water loss continues to be an issue for the Corporation. Please continue to report any leaks or suspected leaks to our office at 512-746-2114. Our staff will investigate each reported leak and address them in an appropriate manner. If you notice your water pressure is low please contact the office. Even if you do not see a leak this may be a sign of a water leak in your area. For water quality issues please contact the same number and report the problem. The Corporation maintains a website, www.jswatersupply.com. If there is a large area that is experiencing a water outage an explanation should be available on that site as well as instructions of any precautions to take.

Thank you for your cooperation and please let us know if you have any questions.

David L. Yohe
General Manager