# 2015 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, 2015. 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 2<sup>nd</sup> Wednesday of the month at 6:00 or7:00 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. 5<sup>th</sup> 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

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.

#### En Espanol

Este reporte incluye informacion importante sobre el aqua 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 Confident 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. During 2015 JSWSC did take a small amount of 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.

#### 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

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 2016 the WSC submitted an annual water loss report to the Texas Water Development Board for the time period of January 1 to December 31, 2015. The estimated water loss was 139,442,150 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.

Maximum Contaminant Level Goal		Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Collform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	JSWSC 2015	1 Positive monthly sample	1	o	o	Ŷ	Naturally present in the environmen

form was not filled out correctly. All samples found during these months were free of bacteria however the TCEQ was not allowed to count them. A check system for the forms is in place.

		Collection Date	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violations	Likely Source of Contamination
Copper	JSWSC	2013	1.3	1.3	0.138	0	ppm	Ν	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	JSWSC	2013	0	15	2.29	0	ppb	Ν	Corrosion of household plumbing

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 (H∆∆5) JSWSC	2015	6	0.0 - 0.0	No goal for total	60	ppp	Ν	By-Product of drinking water chlorination.
Total Trihalomethanes (TTHM) JSWSC	2015	11.7	11.7 - 11.7	No goal for total	80	ppb	N	By-Product of drinking water chlorination.
Chlorine Residuals JSWSC	2015	5.6	0.3 5.6	MRDL 4	MRDLG 4	ppm	N	Disinfectant used to control microbes in drinking water

	Lowest allowe	ed residual in the s	ystem is 0.2 ppm						
Inorganic Contaminants		Collection	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium					2	2	2 ppm		Discharge of drilling wastes, Discharge from metal refineries: Erosion of natural
	CTWSC	2015	0.047	0.0412-0.0468				N	deposits.
	SALADO	2014	0.0446	0.0446-0.0446				N	
	SMUD	2014	0.0229	0.0229-0.0229				Ν	
Fluoride	JSWSC	2014	2.3	0.24-2.31	4	4	ppm	N	Erosion of natural deposits; Water
	CTWSC	2015	0.25	0.17-0.25				Ν	Discharge from fertilizer and aluminum
	SALADO	2014	1.15	0.27-1.15				N	
	SMUD	2015	3.82	3.82-3.82				Ν	
Nitrate (m Nitrogen)	easured as JSWSC	2015	5.38	0.02-5.38	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural
	CTWSC	2015	0.61	0.16-0.61				N	deposits.
	SALADO	2015	6.91	0.44-6.91				N	
	SMUD	2015	0.05	0.05 0.05				N	
Cyanide									

CTWSC

2015

120-170

170

200 200

ppb

N

Discharge from platic and fertilizer factories; Discharge from steel/metal factories 

Date	Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violations	Likely Source of Contaminants
2015	0.18	0.0-0,18	3	3	ppb	Ν	Runoff from herbicide used on row crops
	<b>Date</b> 2015	Date Level Detected	2015 0.18 0.0-0.18	Date     Level Detected     Levels       2015     0.18     0.0-0.18     3	2015 0.18 0.0-0.18 3 3	Date Level Detected Levels   2015 0.18 0.0-0.18 3 3	Date     Level Detected     Levels     Mole of the work     Mole of the work       2015     0.18     0.0-0.18     3     3     ppb     N

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	0.0-3.8	0	5	pCi/L	N	Erosion of natural deposits.
CTWSC	2011	1	1-Jan				Ν	
Gross Alpha including radon and uranium				0	15	pCVL		Erosion of natural deposits.
JSWSC	2015	3.8	0.0-3.8				Ν	
SMUD	2011	4.4	4.4-4.4				N	

Upreglated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Bromoform				NA	NA	ppb		Byproduct of driniking water disinfection
SMUD Salado	2015 2015	1.2 5.2	1.2-1.2 4.4-5.2				2 2	
CTWSC Bromodichloromethane	2015	3.9	2.4-3.9	NA	NA	ppb	N	Byproduct of drinkingi wator disinfaction
CTWSC Salado	2015 2015	7.2 3.6	4.5-7.2 2.4-3.6				NN	
Dibromochloromethane				NA	NA	ppb		Byproduct of drinking water disinfection
Salado CTWSC	2015 2015	7.5 5.6	6.4-7.5 5.5-5.6				NN	
Chloroform CTWSC Salado	2015 2015	5.1 1.3	1.8-5.1 0.0-1.3	NA	NA	ppb	N N	Byproduct of drinking water disinfection

Volatile Organic Collection Highest Level Range of Levels MCLG MCL Units Violation Likely Source of Contamination Detected Detected

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination	
CTWSC only					
Highest single measurement 2015	1 NIU	7.64	Υ	Soil runoff.	
Lowest monthly % meeting limit	0%	27.00%	Y	Soil runoff.	



# THE PIPELINE

# Summer 2016

Jarrell, Texas

Thirteen (13) new members were added to the Corporation in 2015 and it appears more members will be added in 2016. The growth in the area has also brought construction projects by Bell and Williamson Counties as well as the Texas Department of Transportation (TxDOT). From time to time these projects have and/or will cause disruption of water service. The Corporation is making every effort to coordinate with these entities to minimize those disruptions.

In 2013 the Corporation was able to obtain additional funding for capital projects. These funds totaled \$1.5 million and some have been used to replace sections of water lines that have had several leaks. Funds were also used to make improvements to the service pumps at the Town Plant in Jarrell.

At the end of 2015 the Corporation entered into a water supply agreement with the Lone Star Regional Water Authority (the Authority). The agreement also includes the City of Jarrell and Sonterra MUD. The Authority will receive treated water from the Brazos River Authority and pump that water through a pipeline to be constructed from outside of Granger to the Jarrell area. The Corporation will have the ability to purchase up to 1.5 million gallons of water per day when the project is finished. The completion date is estimated to be late 2018 to early 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, <u>www.jswatersupply.com</u>. 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

# Water Conservation

Summer, 2016

# What can you do?

### Toilets

Your toilet is by far your home's largest water user, guzzling 27 percent of your household supply every year. The Federal Government now mandates that the new toilets use no more than 1.6 gallons per flush, but older toilets can use two to three times that much. Even the new ones will use more if you don't maintain them. When buying a toilet, look for the U.S.

Environmental Protection Agency (EPA)'s Water Sense label. To receive the label, toilets must be independently tested to show that they use, at most, 1.28 gallons per flush (GPF). Dual-flush toilets, those that have a full-flush mode for solids and a reduced-flush mode for liquids, use 1.6 GPF and 0.8 GPF. If you would like

to go as green as possible, there are composting toilets, which break down human waste into a nutrient- rich material that can be spread around trees and non-edible plants. Maintain the toilet you've got by replacing 3.5 gallon toilet with 1.6 gallon. The average family of four would save about 14,000 gallons of water per year. Older homes (pre-1992) still have 3.5 GPF toilets. If yours does, you can reduce the water it uses by filling a milk jug with stones and placing it in your toilet tank to displace water, but its best to get a low-flow toilet instead.





## Showerheads

Showers are rife with opportunities for waste, thanks to the rise in popularity of multi-head shower systems, some of which spew an astonishing 80 gallons per minute (GPM). These multi-head showers end- run the federal standard that requires showerheads to pump out no more than 2.5 GPM by utilizing a dozen or more of the 2.5-GPM models. If you would like you can measure the water consumption of your current showerhead, by pouring 2.5 gallons into a bucket, mark the water level, and then empty it. Then, put the bucket under the shower and run the water for exactly one minute. If the water goes higher than the mark, get a new showerhead. There are



Low-flow showerheads of every type range in price from less than \$10 to \$100 or so. Also buying a 1.5-GPM aerator for your bathroom sink faucet for less than \$4, you'll save another few hundred gallons a month. Change your expectations a bit. A water saving shower isn't going to be like standing under a warm Niagara Falls, but it will be nice and hot and you get clean. Keep a clean bucket in the shower to collect the water that runs while you wait for it to get hot (your houseplants or garden will thank you), and keep the whole process to 5 minutes or less. Do not succumb to the temptation to modify the flow restrictors in the 2.5 gallon showerheads. By replacing a 5-GPM showerhead with a 2.5-GPM model, you'll save 7,300 gallons of water per year, and cutting to 5 minute showers will save you another 2,738 gallons per year. Using less hot water saves money, greenhouse gas emissions, and of course, the water itself. This is a change well worth making.

# **Request for Emergency Contact Information**



From time to time, Jarrell-Schwertner Water Supply Corporation may experience technical difficulties in the water system. In these cases, the Corporation would like to have the ability to contact you directly. Options to the Corporation beyond door hangers or mass media could be a reverse 911 system or by e-mail. If you wish the Corporation to have your information on file please send the following data to our office at PO Box 40 Jarrell, TX 76537

Name Address Telephone Number (this may be a cell number) E-mail Address Account Number

Thank you!

# Water Saving Tips

- Never put water down the drain when there may be another use for it such as watering a plant or garden
- Repair leaking faucets.
- Check for toilet tank leaks.
- Avoid flushing the toilet unnecessarily.
- Do not use running water to thaw meat or other frozen foods.
- Insulate your water pipes.

- Take shorter showers.
- Retrofit all wasteful household faucets by installing aerators with flow restrictors.
- If the toilet flush handle frequently sticks in the flush position, letting water run constantly, replace or fix it.
- Use minimum amount needed for a bath.