



2019 Water Quality Report

The Annual Water Quality Report is for the period of January 1 to December 31, 2019. 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.

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 Corporations' office located at 2393 County Road 311 in Jarrell, TX. Meeting notices are posted with Bell and Williamson Counties and at the Corporations' office.

En Español

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

Substances That Could Be in 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 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.

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 system's business office.

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.

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.

PWS ID: TX2460011

Jarrell Schwertner Water Supply Corporation
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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 contaminants* 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.

Important Health Information

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 (800) 426-4791.

Lead in Home Plumbing

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 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>.

Exceedance of Fluoride Secondary Maximum Contaminant 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 in 2017.

The wells that produced the concentration of 2.09 MG/L are in the southwestern area of the water system and affect 326 of the systems' 1591 connections. Samples collected and affecting the remaining 1265 connections have concentrations of Fluoride below 0.5 MG/L. The Southwestern area is considered 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 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 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 Joe Simmons 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.

Source of Drinking Water

The source of drinking water primarily used by Jarrell Schwertner WSC is ground water. System-owned wells, in addition to the wells owned by Salado Water Supply Corporation, draw water from the Edwards Aquifer. Only those areas served by Central Texas Water Supply Corporation are supplied 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 our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact Joe Simmons at (512) 746-2114.

Purchased Sources

Jarrell Schwertner WSC customers along Royal, Blackberry, East Amity and the Live Oak Subdivision have received water from two outside sources. Those are either Salado Water Supply Corporation noted as SALADO in the report or Central Texas Water Supply Corporation noted as CTWSC.

Emergency Source

Jarrell Schwertner WSC may take water from Sonterra Municipal Utility District which is shown as SONTERRA in the report. Water taken from Sonterra MUD is an emergency supply and would influence water quality in an area west and east of IH 35 near County Roads 310 and 311. Jarrell Schwertner WSC did not utilize this source as supply of water in 2019.

System Water Loss

In early 2020 the Jarrell Schwertner WSC submitted an annual water loss report to the Texas Water Development Board for the time period of January 1 to December 31, 2019. The estimated water loss was 131,909,320 gallons. The Jarrell Schwertner 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.

About our Reporting Violation

For the fourth quarter reporting period of 2019, the Jarrell Schwertner WSC failed to complete and submit a Disinfectant Level Quarterly Operating Report to the Texas Commission on Environmental Quality. This report confirms that the chlorine residual in your water is within safe ranges at all times. *There was no lapse in chlorination or the collection of this data, only the failure to report it to the State.* Below you will find the required language for Public Notice of this violation.

**Mandatory Language for Monitoring and Reporting Violation
Failure to Submit a Disinfectant Level Quarterly Operating Report (DLQOR)
MONITORING, ROUTINE (DBP), MAJOR/CHLORINE**

The Jarrell Schwertner WSC water system PWS ID TX2460011 has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Title 30, Texas Administrative Code (30 TAC), Section 290, Subchapter F. Public water systems are required to properly disinfect water before distribution, maintain acceptable disinfection residuals within the distribution system, monitor the disinfectant residual at various locations throughout the distribution system, and report the results of that monitoring to the TCEQ on a quarterly basis.

Results of regular monitoring are an indicator of whether or not your drinking water is safe from microbial contamination.

This violation occurred in the monitoring period: 10/1/2019 – 12/31/2019.

We are taking the following actions to address this issue: upon notification of this violation, the DLQOR was completed and immediately submitted to the TCEQ.

Please share this information with all people who drink this water, especially those who may not have received this notice directly (i.e., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

If you have questions regarding this matter, you may contact Joe Simmons at (512) 746-2114.

Posted /Delivered on: 4/30/2020.

Lab Results

Our water is monitored for many kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water. Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	WATER SOURCE	COLLECTION YEAR	AMOUNT DETECTED	RANGE OF LEVELS DETECTED	MCLG [MRDLG]	MCL [MRDL]	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Atrazine (ppb)	CTWSC	2018	0.13	0.13-0.13	3	3	N	Runoff from herbicides used in row crops
Barium (ppm)	JSWSC	2019	0.0482	0.0412 - 0.0482	2	2	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
	CTWSC	2019	0.0442	0.0442 - 0.0442	2	2	N	
	SALADO	2019	0.0649	0.0400 - 0.0649	2	2	N	
Chlorine (ppm)* *Lowest residual allowed is 0.20 ppm	JSWSC	2019	1.51	0.50 - 2.20	[4]	[4]	N	Disinfectant used to control microbes in drinking water
Combined Radium (226/228) (pCi/L)	JSWSC	2018	1.50	1.19 - 1.50	0	5	N	Erosion of natural deposits
Cyanide (ppb)	CTWSC	2019	110	110 - 110	200	200	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Fluoride (ppm)	JSWSC	2017	2.09	0.23 - 2.09	4	4	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum
	CTWSC	2019	0.23	0.23 - 0.23	4	4	N	
	SALADO	2017	1.02	0.25-1.02	4	4	N	
	SONTERRA	2018	3.79	3.79-3.79	4	4	N	
Gross Alpha including Radon and Uranium (pCi/L)	JSWSC	2018	4.6	4.6 - 4.6	0	15	N	Erosion of natural deposits
Haloacetic Acids [HAAS] (ppb)	JSWSC	2019	2.6	1.1 - 2.6	0	60	N	Byproduct of drinking water chlorination
Nitrate (measured as Nitrogen) (ppm)	JSWSC	2019	4.98	3.40 - 4.98	10	10	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
	CTWSC	2019	0.53	0.53 - 0.53	10	10	N	
	SALADO	2019	7.58	0.58 - 7.58	10	10	N	
	SONTERRA	2018	0.23	0.23-0.23	10	10	N	
Selenium (ppb)	SALADO	2019	4.6	4.6 - 4.6	50	50	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Total Trihalomethanes [TTHM] (ppb)	JSWSC	2019	12.3	4.2 - 12.3	0	80	N	Byproduct of drinking water chlorination
Turbidity (NTU)	CTWSC	2019	0.01	NA	NA	TT* = 1	N	Soil runoff
Turbidity (Lowest monthly percentage of samples meeting limit)	CTWSC	2019	100%	NA	NA	TT* = 95% of samples meet limit of 0.30	N	Soil runoff

*Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

COLIFORM BACTERIA								
SUBSTANCE (UNIT OF MEASURE)	WATER SOURCE	COLLECTION YEAR	AMOUNT DETECTED	RANGE OF LEVELS DETECTED	MCLG	MCL	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Total Coliform (Highest Number of Positive Samples)	JSWSC	2018	1	NA	0	1	N	Naturally present in the environment
Fecal Coliform or E. coli (Highest Number of Positive Samples)	JSWSC	2018	0	NA	0	0	N	Naturally present in the environment

SECONDARY SUBSTANCES								
These contaminants are not considered to present a risk to human health at the SMCL.								
SUBSTANCE (UNIT OF MEASURE)	WATER SOURCE	COLLECTION YEAR	AMOUNT DETECTED	RANGE OF LEVELS DETECTED	MCLG	SMCL	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Chloride (ppm)	CTWSC	2019	39	39 - 39	NA	300	N	Runoff/leaching from natural deposits
Copper (ppm)	JSWSC	2019	0.0086	0.0024 - 0.0086	NA	1.0	N	Corrosion of household plumbing systems; Erosion of natural deposits
	SALADO	2019	0.0153	0.0063 - 0.0153	NA	1.0	N	
Iron (ppm)	JSWSC	2019	0.042	0.010 - 0.042	NA	0.3	N	Leaching from natural deposits; Industrial wastes
	SALADO	2019	0.036	0.036 - 0.036	NA	0.3	N	
Manganese (ppb)	CTWSC	2019	2.5	2.5 - 2.5	NA	50	N	Leaching from natural deposits
Sulfate (ppm)	CTWSC	2019	25	25 - 25	NA	300	N	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	CTWSC	2019	299	299 - 299	NA	1000	N	Runoff/leaching from natural deposits
Zinc (ppm)	JSWSC	2019	0.0375	0.0144 - 0.0375	NA	5	N	Runoff/leaching from natural deposits; Industrial wastes
	SALADO	2019	0.0820	0.0073 - 0.0820	NA	5	N	

LEAD AND COPPER RULE

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	WATER SOURCE	COLLECTION YEAR	AMOUNT DETECTED (90th PERCENTILE)	SITES ABOVE AL/ TOTAL SITES	MCLG	AL*	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Copper (ppm)	JSWSC	2019	0.12	0/17	1.3	1.3	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (ppb)	JSWSC	2019	2.4	0/17	0	15	N	Corrosion of household plumbing systems; Erosion of natural deposits

*Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	WATER SOURCE	COLLECTION YEAR	AMOUNT DETECTED	RANGE OF LEVELS DETECTED	LIKELY SOURCE OF CONTAMINATION
Bromoform (ppb)	JSWSC	2019	9.6	1.0 - 9.6	Byproduct of drinking water disinfection
Dibromoacetic Acid (ppb)	JSWSC	2019	2.6	1.1 - 2.6	Byproduct of drinking water disinfection
Dibromochloromethane (ppb)	JSWSC	2019	2.7	1.1 - 2.7	Byproduct of drinking water disinfection
Nickel (ppm)	JSWSC	2019	0.0024	0.0017 - 0.0024	Discharge from petroleum and metal refineries; Erosion of natural deposits
	CTWSC	2019	0.0021	0.0021 - 0.0021	
	SALADO	2019	0.0025	0.0017 - 0.0025	
Sodium (ppm)	JSWSC	2019	19.8	13.5 - 19.8	Erosion of natural deposits
	SALADO	2019	29.3	12.6 - 29.3	

OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	WATER SOURCE	COLLECTION YEAR	AMOUNT DETECTED	RANGE OF LEVELS DETECTED	LIKELY SOURCE OF CONTAMINATION
Bicarbonate (ppm)	CTWSC	2019	220	220 - 220	Erosion of natural deposits
Bromacil (ppb)	SALADO	2019	0.27	0.27 - 0.27	Runoff from herbicide use
Calcium (ppm)	CTWSC	2019	59.1	59.1 - 59.1	Erosion of natural deposits
	SALADO	2019	92.3	87.9 - 92.3	
Lead (ppm)	SALADO	2019	0.0021	0.0021 - 0.0021	Corrosion of household plumbing systems; Erosion of natural deposits
Magnesium (ppm)	CTWSC	2019	18.5	18.5 - 18.5	Erosion of natural deposits
	SALADO	2019	31.0	14.7 - 31.0	
Potassium (ppm)	CTWSC	2019	2.93	2.93 - 2.93	Erosion of natural deposits
	SALADO	2019	1.41	1.16 - 1.41	
Total Alkalinity (ppm)	CTWSC	2019	180	180 - 180	Erosion of natural deposits
Total Hardness (as CaCO₃) (ppm)	CTWSC	2019	224	224 - 224	Erosion of natural deposits
	SALADO	2019	348	280 - 348	

Definitions and Abbreviations

AL.....	(Action Level) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
ALG.....	(Action Level Goal) 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.
Avg.....	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
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.
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.
MCL.....	(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.....	(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.....	(Maximum Residual Disinfectant Level) 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.
MRDLG.....	(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.
MFL.....	(million fibers per liter) a measure of asbestos
mrem	(millirems per year) a measure of radiation absorbed by the body
NA.....	Not Applicable
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) also, one ounce in 7,350,000 gallons of water
ppm.....	(milligrams per liter or parts per million) also, one ounce in 7,350 gallons of water
ppq.....	(parts per quadrillion or picograms per liter (pg/L))
ppt.....	(parts per trillion or nanograms per liter (ng/L))
SMCL.....	(Secondary Maximum Contaminant Level) Non-mandatory water quality standards established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.
TT.....	(Treatment Technique) A required process intended to reduce the level of a contaminant in drinking water



THE PIPELINE

Spring 2020

Jarrell, TX

The Corporation has grown in 2019. As noted last year, the Corporation had entered into an agreement to construct and purchase water from the Brazos River Authority through the Lone Star Regional Water Authority. The project will bring 1.5 million gallons of treated water per day to the Corporation. This project is well underway and is near 95% completion. At this time, it is expected that the project will be complete in May of 2020. The Corporation will begin taking water from this project when it most benefits the membership.

While the Corporation has seen increased growth over the last couple of years, the future growth of the Corporation may see a greater increase. Developers working in the area have taken note of the available land and utilities and are approaching the Corporation for service. These types of developments will bring in subdivisions that will concentrate housing in smaller areas making these areas easy to serve. In the fall of 2019, the Corporation signed agreements for the development of two subdivisions. At full build-out, this will add 1,375 additional connections to the Corporation.

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. This can sometimes 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 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.

Joe Simmons
General Manager
 Jarrell Schwertner WSC