

# JONAH WATER SPECIAL UTILITY DISTRICT

**ANNUAL WATER QUALITY REPORT** 

FOR THE PERIOD OF JANUARY 1, 2018 TO DECEMBER 31, 2018

#### OBJECTIVE

#### **PUBLIC WATER SYSTEM # TX2460022**

For information regarding this report, please contact:

# **Bill Brown**General Manager (512) 759 – 1286

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono. (512) 759 - 1286.

This report is intended to provide you with important information about your drinking water and the efforts made by Jonah Water Special Utility District (SUD) to provide safe drinking water. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to meet the challenges of providing the best quality drinking water to our customers as we experience continuing population growth within our CCN (Certificate of Convenience and Necessity).

#### **PUBLIC PARTICIPATION OPPORTUNITIES**

You are invited to participate in our public forum and learn more about your water utility at a monthly Board meeting. We meet the first Thursday of each month, beginning at 7 p.m., at 4050 FM 1660, Hutto, Texas 78634. Este informe incluye informacion importante sobre el aqua potable. Si tiene preguntas o commentarios sobre este informe en espanol, favor de llamar at tel. (512) 759-1286 para hablar con una persona bilingue en espanol.

#### WHERE DOES MY WATER COME FROM?

Our drinking water is obtained from ground water and surface water sources. The ground water comes from Edwards and associated limestones—(Balcones Fault). The surface water comes from the East Williamson County Regional Water System.

#### **INFORMATION ABOUT YOUR 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.

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 EPA's Safe Drinking Water Hotline at (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 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, odor, or color of drinking water, please contact the system's business office.

Contaminants that may be present in source water include:

Contaminants that may be p	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 & Herbicides	May come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.								
Organic Chemical	Including synthetic and volatile organic chemicals, which are by-products of industrial processes and								
Contaminants	petroleum production, and can 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.								

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.

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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

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 Jonah Water SUD has a fluoride concentration of 3.37 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.'

For more information, please call Bill Brown of Jonah Water SUD at 512-759-1286. 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.

#### **INFORMATION ABOUT SOURCE WATER ASSESSMENTS**

JONAH WATER SUD purchases water from Brazos River Authority Water Treatment Plant. Brazos River Authority provides purchase surface water from Lake Granger.

## Terms & Abbreviations

Action Level Goal	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Action Level Goal	TT 1 1 C
	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
(ALG)	safety.
Avg	Regulatory compliance with some MCLs are based on running annual average monthly samples.
MCL	Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the
	MCL Gs as feasible using the best available treatment technology.
Level 1	Study of water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our
Assessment	water system.
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
Level 2	Very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has
Assessment	occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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 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)
na	Not applicable
mrem	Millirems per year (a measure of radiation absorbed by the body)
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 – or one ounce in 7,350,000 gallons of water
ppm	Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water
TT	Treatment Technique – a required process intended to reduce the level of contaminant in drinking water.
ppt	Parts per trillion, or nanograms per liter (ng/L)
ppq	Parts per quadrillion, or picograms per liter (pg/L)

# **2018 WATER QUALITY TEST RESULTS**

#### **COLIFORM BACTERIA**

Maximum Contaminant Level	Total Coliform Maximum Contominant Level	Highest No. of	Fecal Coliform or E. Coli Maximum	Total No. of Positive E. Coli or Fecal	Violations	Likely Source of Contamination
Goal 0	1 Positive monthly	Positive 3	Contaminant Level	Coliform Samples 0	N	Naturally present in
	sample					the environment

Lead and	Date	MCLG	Action	90 <sup>th</sup>	# Sites	Units	Violations	Likely Source of Contamination
Copper	Sampled		Level	Percentile	Over AL			
			(AL)					
Copper	09/08/2017	1.3	1.3	0.27	0	ppm	N	Erosion of natural deposits; Leaching
								from wood preservatives; Corrosion of
								household plumbing systems
Lead	09/08/2017	0	15	1.4	0	ppb	N	Corrosion of household plumbing
								systems; Erosion of natural deposits

Disinfection By-	Collection	Highest	Range of	MCLG	MCL	UNITS	Violation	Likely Source of
Products	Date	Level	Individual					Contamination
		Detected	Samples					
Haloacetic Acids	2018	27	1.3-38.6	No goal	60	ppb	N	By-product of drinking
(HAA5)				for the				water disinfection
				total				

<sup>\*</sup>The value in the Highest Level of Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

<b>Total Trihalomethanes</b>	2018	84	7.9-108	No goal	80	ppb	Y	By-product of drinking
(TTHM)				for the				water disinfection
				total				

<sup>\*</sup>The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Inorganic	Collection	Highest	Range of	MCLG	MCL	Units	Violation	Likely Source of Contamination
Contaminates	Date	Level	Individual					
		Detected	Samples					
Barium	05/01/2017	0.0646	0.0646-0.0646	2	2	ppm	N	Discharge of drilling wastes;
								Discharge from metal refineries;
								erosion of natural deposits
Fluoride	05/01/2017	3.37	3.37-3.37	4	4.0	ppm	N	Erosion of natural deposits; Water
								additive which promotes strong
								teeth; Discharge from fertilizer and
								aluminum factories.
Nitrate[measured	2018	2	0.02-2.33	10	10	ppm	N	Runoff from fertilizer use;
as Nitrogen]								Leaching from septic tanks,
								sewage; Erosion of natural
								deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	05/01/2017	7.6	7.6-7.6	0	50	pCi/L	N	Decay of natural and man-made deposits

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

<b>Combined Radium</b>	05/01/2017	3.64	3.64-3.64	0	5	pCi/l	N	Erosion of natural deposits
226/228								
Gross alpha	05/01/2017	14.3	14.3-14.3	0	15	pCi/L	N	Erosion of natural deposits
excluding radon								
and uranium								

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Ethylbenzene	2018	0.5	0-0.5	700	700	ppb	N	Discharge from petroleum refineries
Xylenes	2018	0.0016	0-0.0016	10	10	ppm	N	Discharge from petroleum factories;
								Discharge from chemical factories

# DISINFECTANT RESIDUAL

Disinfectant	Year	Average Level	Range of Levels	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking
Residual			Detected				(Y/N)	Water
	2018	1.517	0.28-3.28	4	4	ppm	N	Water additive used to
								control microbes

## **VIOLATIONS**

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Total Trihalomethanes (TTHM)								
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver,								
kidneys, or centra	kidneys, or central nervous systems, and have an increased risk of getting cancer.							
Violation Type	Violation Begin	Violation End	d Violation Explanation					
MCL, LRAA	07/01/2018	09/30/2018	Water samples showed that the amount of this contaminant in our drinking water was					
			above its standard (called a maximum contaminant level and abbreviated MCL) for					
			the period indicated.					