



2015 Annual Drinking Water Quality Report

(Consumer Confidence Report)

CITY OF ROBINSON

<http://tx-robinson.civicplus.com/DocumentCenter/Home/View/720>

254-662-1415

SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, PEOPLE WITH HIV/AIDS OR OTHER IMMUNE PROBLEMS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as: persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available at the Safe Drinking Water Hotline (1-800-426-4791).

Public Participation Opportunities

To learn about future public meetings (concerning Robinson's water) or to request to schedule one please call 254-662-1415ext 2600.

Robinson's Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water provided to Robinson customers. The analysis was made by using the data from the most recent U.S.

Environmental Protection Agency (EPA) required tests and is presented on the attached pages. This information is intended to help residents be more knowledgeable about the water supply.

WATER SOURCES: 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 before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel 254-662-1415 para hablar con una persona bilingüe en español.

Robinson Water Sources

Robinson drinking water is obtained from both surface and ground water sources. The ground water comes from deep wells in the Second (Lower) Trinity Aquifer. Surface water is drawn from the Brazos River and stored in the Robinson Reservoir before treatment. Robinson also purchases treated water from the City of Waco, which treats water from Lake Waco. TCEQ (Texas Commission on Environmental Quality) completed an assessment of your source water, results indicate that some of our 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 Consumer Confidence Report. For more information on source water assessments and protection efforts at the Robinson system contact: Greg Hobbs, Water Utilities Director.

ALL drinking water may contain contaminants. When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).

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 causes for health concern. Therefore, secondaries are not required to be reported in this document but they may

greatly affect the appearance and taste of water.

The following part of this report lists all of the federally regulated or monitored contaminants which have been found in Robinson drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

DEFINITIONS:

Maximum Contaminant Level (MCL)

The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (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 (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 (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 contamination.

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.

ABBREVIATIONS:

NTU -Nephelometric Turbidity Units

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 (µg/L)

ppt -parts per trillion, or nanograms per liter

ppq -parts per quadrillion, or picograms per liter

Inorganic Contaminants

Collection Date	Contaminant	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contaminant
03/18/2015	Arsenic	.0020	.020-.020	n/a	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
03/18/2015	Barium	.0780	0.0780-.0780	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
03/18/2015	Fluoride	.22	0.22-.22	4	4	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
03/18/2015	Nitrate	0.2	0.01-.2	1	1	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
03/18/2015	Selenium	.043	.043-.043	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion Of natural deposits; Discharge from mines

Organic Contaminants

Collection Date	Contaminant	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contaminant
03/18/2015	Atrazine	0.13	0.13 – 0.13	3	3	ppb	N	Runoff from herbicide used on row crops.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2015	Chlorine	1.5	1.0	2.9	4.0	<4.0	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Year or Range	Contaminant	Highest Level Detected	Range of Levels Detected	MCGL	MCL	Unit of Measure	Violation	Source of Contaminant
2015	Total Haloacetic Acids	19.9	0 – 19.9	No goal for the total	60	ppb	N	Byproduct of drinking water disinfection.
2015	Total Trihalomethanes	103	0-103	No goal for the total	80	ppb	N	Byproduct of drinking water disinfection.

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year or Range	Contaminant	Highest Single Sample	Range of Levels Detected	Unit of Measure	Source of Contaminant
2015	Chloroform	16.9	0- 16.9	ppb	Byproduct of drinking water disinfection
2015	Bromodichloromethane	34.0	1 – 34.0	ppb	Byproduct of drinking water disinfection
2015	Bromoform	66.0	1-66.0	ppb	Byproduct of drinking water disinfection
2015	Dibromochloromethane	63.0	1 – 63.0	ppb	Byproduct of drinking water disinfection

Violation Type	Violation Begin	Violation End	Violation Explanation
No Violations			

Lead and Copper

Date	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Violation	Source of Contaminant
06/27/2013	Lead	0.00149	0	15	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.
06/27/2013	Copper	0.133	0	1.3	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

"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. This water supply is responsible for providing high quality drinking water, but 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>."

Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Violation	Source of Contaminant
2015	Turbidity	.12	100.00	0.3	NTU	N	Soil Runoff

Total Organic Carbon

Total organic carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	MCLG	Source of Contaminant
2015	Source Water	4.18	3.80	4.62	ppm		Naturally present in the environment
2015	Drinking Water	1.88	1.68	2.22	ppm		Naturally present in the environment
2015	Removal Ratio	1.87	1.43	2.24	% Removal*		NA

*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

Cryptosporidium Monitoring Information: NOT YET SAMPLED

Total Coliform: REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA.

Fecal Coliform: REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2015	Bicarbonate	67	67	67	NA	ppm	Corrosion of carbonate rocks such as limestone.
2015	Calcium	38.1	38.1	38.1	NA	ppm	Abundant naturally occurring element.
2015	Chloride	196	196	196	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2015	Copper	0.0137	0.0137	0.0137	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood
2015	Iron	0.027	0.027	0.027	.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2015	Magnesium	10.4	10.4	10.4	NA	ppm	Abundant naturally occurring element.
2015	Manganese	.001	.001	.001	.05	ppm	Abundant naturally occurring element.
2015	pH	7.8	7.7	8.0			Measure of corrosivity of water.
2015	Sodium	113	113	113	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2015	Sulfate	72	72	72	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2015	Total Alkalinity as CaCO3	92	77	122	NA	ppm	Naturally occurring soluble mineral salts.
2015	Total Dissolved Solids	467	467	467	1000	ppm	Total dissolved mineral constituents in water.
2015	Total Hardness as CaCO3	138	138	138	NA	ppm	Naturally occurring calcium.