

2018 Drinking Water Quality Report

Prepared for the City of Van

We are pleased to present you with our 2018 Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. The Safe Drinking Water Act requires us to prepare and deliver this report to you on an annual basis. The City of Van is committed to ensuring the quality of your drinking water.

En Espanol

This report includes important information about your drinking water. To receive a copy of this information or have it translated into Spanish, please call (903) 963-7216.

Este reporte incluye la informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (903) 963-7216.

The City of Van's water meets or exceeds all Federal (EPA) drinking water requirements.

This report is a summary of the quality of the water we provide to our customers. The analysis was made by using the data from the most recent U. S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages.

Where does our drinking water come from? §290.272(a)

Our drinking water is obtained from ground water sources. The deep wells draw from the Carrizo-Wilcox formation. A Source Water Susceptibility Assessment for your drinking water source is currently being updated by the Texas Commission on Environmental Quality and will be provided to us when finished. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following [URL: http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=](http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=). Further details about sources and source-water assessments are available in Drinking Water Watch at the following [URL: http://dww.tceq.texas.gov/DWW](http://dww.tceq.texas.gov/DWW). For more information on source water assessments and protection efforts for our system please call us (903) 963-7216.

Public Inquiries:

If you have any questions about this report or any other issue concerning your water utility, please contact Kevin Johnson at (903) 963-7216. We want you to be informed about our water quality. If you want to learn more, please attend any of our regularly scheduled city council meetings. §290.272(g)(2)

Day: 2nd Thursday of each month **Time:** 7:00 p.m. **Location:** The Movie House (255 E. Main Street)

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

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or Immuno-compromised persons such as those undergoing chemotherapy for cancer; those 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 provider. The EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791). §290.273

About the Attached Tables

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Water Drinking Hotline (1-800-426-4791).

The sources of drinking water (both tap and bottled) 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 animal or human activity.

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. The attached tables contain all of the constituents, which have been found in your drinking water for the period of January 1st to December 31st, 2018 unless otherwise noted. The U.S. EPA requires water systems to test up to 97 constituents.

In the following tables, you will find many terms and abbreviations you might not know. To help you better understand these terms we've provided the following definitions: (see §290.272(b)):

- Maximum Contaminant Level – The “Maximum Allowed” (MCL) is 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.
- Maximum Contaminant Level Goal – The “Goal”(MCLG) is 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.
- Maximum Residual Disinfectant Level (MRDL)- 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.
- 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 contaminants.
- Treatment Technique (TT) – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Parts Per Million (ppm) or Milligrams Per Liter (mg/l) – One part per million corresponds to a single penny in \$10,000 or is about the same as one drop of soda in 35 Big Gulps (32 oz. each)
- Parts Per Billion (ppb) or Micrograms Per Liter – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Micromhos Per Centimeter or Microsiemens Per Centimeter (umhos/cm) – This property is a measure of the ability of water to conduct electricity.
- Picocuries per liter (pCi/L) – The measure of radioactivity.

- HRA Avg.(Highest Running Annual Average) – The highest of four values calculated by averaging each quarter’s average result with the three (3) previous quarter’s average results.

The state requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

Table 1. Inorganic Constituents §290.106

Constituent	City of Van Max. Level	MCL	MCLG	Range of Detections	Sample Year	Violation	Typical Sources of Constituent
Barium (ppm)	0.035	2	2	0.035 - 0.035	2016	NO	Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries.
Chromium (ppm)	2.3	100	100	ND - 2.3	2016	NO	Erosion of natural deposits; Discharge of steel and pulp mills
Fluoride (ppm)	0.124	4	4	ND - 0.124	2017	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizers and aluminum factories.
Nitrate (ppm)	0.189	10	10	ND	2018	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
				- 0.189			

Table 2. Organic Constituents §290.107

Constituent	City of Van Max. Level	MCL	MCLG	Range of Detections	Sample Year	Violation	Typical Sources of Constituent
Chloride (ppb)	22.4	0	250	ND – 22.4	2018	NO	Dissolved from rocks and soils. Present in sewage and found in natural and industrial brines
Sulfate (ppb)	30.8	0	250	ND – 30.8	2018	NO	Erosion of natural deposits; Industrial waste

Table 3. Disinfection Byproducts & Disinfection Residual §290.113/ §290.115/ §290.110

Constituent	City of Van Max. Level	MCL	MCLG	Range of Detection	Sample Year	Violation	Typical Sources of Constituent
Total Trihalomethanes (ppb)	20	80	0	ND- 20	2018	NO	By product of drinking water chlorination.
Total Haloacetic Acids (ppb)	5	60	0	ND- 6.7	2018	NO	By product of drinking water chlorination.
Chlorine Disinfectant (ppm)	1.8	4	--	1.8 - 0.49	2018	NO	Disinfectant used to control microbes.

* Maximum level determined by the highest running annual average (HRAA)

This evaluation is required sampling by the EPA to determine the range of total Trihalomethanes and Haloacetic acid in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standards conditions. EPA also requires the data to be reported here.

Additional Health Information for Lead (§290.273)

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 material 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 water for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking 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>.

Table 4. Lead & Copper §290.117

Constituent	City of Van Water 90 th percentile	AL	MCLG	Number of sites found above the AL	Sample Year	Typical Sources of Constituent
Lead (ppb)	2.3	15	0	0	2018	Erosion of natural deposits; Corrosion of household plumbing systems.
Copper (ppm)	0.2	1.3	1.3	0	2018	Erosion of natural deposits; Corrosion of household plumbing systems; Leaching from wood preservatives.

Table 5. Unregulated Constituents §290.272 (c)(1)(b)

Constituent	City of Van Max. Level	MCL	MCLG	Range of Detection	Sample Year	Typical Sources of Constituent
Chloroform (ppm)	3.7	None		ND - 3.7	2017	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate them.
Bromodichloromethane (ppm)	2.83	None		ND - 2.83	2017	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate them.
Dibromochloromethane (ppm)	1.79	None		ND 1.79	2017	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate them.
Bromoform (ppm)	ND	None		ND	2017	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate them.

Table 6. Radionuclides §290.108

Constituent	City of Van Max. Level	MCL	MCLG	Range of Detection	Sample Year	Violation	Typical Sources of Constituent
Combined Radium 226/228 (pCi/L)	1.5	5	0	1.5 - 1.5	2016**	NO	Erosion of natural deposits

**Year of most recent analysis

Secondary constituents may be found in drinking water that may cause taste, color and odor problems. These types of problems are not necessarily causes for health concerns. The State of Texas regulates these constituents, not the EPA. We are not required to report these constituents in this document, but do so to help inform you, the consumer. For more information on these constituents, please call us.

2018 Table 7. Secondary Constituents & Properties of Water §290.118(g)

Constituent	City of Van Water	Secondary Limit	Range of Detections	Sample Year	Typical Sources of Constituent
Nickel (ppm)	0.00047		ND – 0.00047	2016	Minerals, Metals, and other parameters commonly found in drinking water.
Chloride (ppm)	22.4	300	ND - 22.4	2018	
Sulfate (ppm)	30.8	300	ND – 30.8	2018	
Bicarbonate (ppm)	192	None	91 - 192	2014*	
Total Hardness as CaCO3 (ppm)	37	None	22 – 37	2018	
Total Alkalinity (ppm)	156	None	148 - 156	2018	
Alkalinity, Bicarbonate CaCO3 (ppm)	132	ND	ND – 132	2017	
Alkalinity, Carbonate CaCO3 (ppm)	197	ND	87.4 – 197	2017	
Alkalinity, Hydroxide (ppm)	ND	ND	ND	2017*	
Alkalinity, Phenolphthalein (ppm)	ND	ND	ND	2017	
Dissolved Solids (ppm)	270	1000	270	2018	
Dil. Conductance (umhos/cm)	422	None	399 - 422	2018	
pH	8.48	> 7.0	7.41 – 8.48	2018	Measure of the corrosivity of water

2018 Table 8. System Violations

Lead & Copper Rule			
The lead and copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper plumbing materials.			
Violation Type	Violation Begin	Violation End	Explanation
Follow up or routine tap M/R (LCR)	07/01/2018	2018	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our water during the period indicated.
Water Quality Parameter M/R (LCR)	01/01/2018	06/30/2018	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our water during the period indicated.

As you can see by the table, our system had 2 violations. Two violations were for failure to submit testing for follow up or routine testing and this was included in this report as required. We are proud that your **drinking water meets or exceeds** all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels. Please call our office if you have questions. Kevin Johnson can be reached at 903-963-7216 between the hours of 8:00 AM – 5:00 PM Monday – Friday.

Water Loss for 2018

In the water loss audit submitted to the Texas Water Development Board for the time period of January- December 2018, our system lost an estimated 8,006,170 gallons of water. If you have any questions about the water loss audit please call Kevin Johnson, City of Van, 903-963--7216.