

## ***City of Crestview 2014 Annual Drinking Water Quality Report***

*We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is ground water from eight wells that draws from the Floridan Aquifer. Because of the excellent quality of our water, the only treatment required is chlorine for disinfection purposes.*

*In 2014 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are three potential sources of contamination identified for this system with low to moderate susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/1wap](http://www.dep.state.fl.us/1wap)*

*If you have any questions about this report or concerning your water utility, please contact Vincent Knecht at our office at 682-6132. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled city council meetings. They are held at City Hall, 198 North Wilson St, at 6:00 P.M the second and fourth Monday of each month.*

*The City of Crestview routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2014. Data obtained before January 1, 2014, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.*

*In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions.*

*Maximum Contaminant Level or MCL: 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 or MCLG: 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.*

*Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.*

*Initial Distribution System Evaluation (IDSE): An important part of the Stage 2 Disinfection. By-Products Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAS). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.*

*Maximum residual disinfectant level or 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 or 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.*

*"ND": means not detected and indicates that the substance was not found by laboratory analysis.*

*Parts per billion (ppb) or Micrograms per liter (µg/l): one part by weight of analyte to 1 billion parts by weight of the water sample.*

*Parts per million (ppm) or Milligrams per liter (mg/l): one part by weight of analyte to 1 million parts by weight of the water sample.*

*Picocurie per liter (pCi/L): measure of the radioactivity in water.*

## 2014 CONTAMINANTS TABLE

<b>Microbiological Contaminants</b>						
Contaminant and Unit of Measurement	Dates of sampling (mo./yr)	MCL Violation Y/N	Highest Monthly Number	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	Jan.-Dec. 2014	Y*	3	0	Presence of coliform bacteria in 1 sample collected during a month.	Naturally present in the environment

*\*The City of Crestview had an MCL violation for Total coliform bacteria in December 2014. Three samples tested positive in December. These sample sites were immediately retested with all repeats testing negative (no bacteria present). When more than one of the bacteriological samples taken in a month are positive, it is considered an MCL violation and additional sampling is immediately requested. The bacteriological sampling procedures for our system were reviewed and modified in hopes of ensuring compliance in the future. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.*

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
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### Radioactive Contaminants

Radium 226 + 228 or combined radium (pCi/L)	Feb & Aug-2011	N	1.4	0.3-1.4	0	5	Erosion of natural deposits
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### Inorganic Contaminants

Arsenic (ppb)	May&Dec-2014	N	4.7	ND-4.7	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics Production wastes
Barium (ppm)	May & Dec-2014	N	0.018	0.011-0.018	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	May & Dec-2014	N	0.1	ND-0.1	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and
Fluoride (ppm)	May & Dec-2014	N	0.2	0.13-0.2	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong
Nickel (ppb)	May & Dec-2014	N	2	ND-2	NA	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	Feb & May 2014	N	0.1	ND-0.1	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	Feb & May 2014	N	0.01	ND-0.01	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	May & Dec 2014	N	8.2	2.7-8.2	NA	160	Salt water intrusion, leaching from soil

### Stage 2 Disinfectants and Disinfection By-Products

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo. /yr)	MCL or MRDL Violation (Y/N)	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)- Stage 1	Jan.- Dec, 2014	N	1.11	1.05-1.2	MRDLG= 4	MRDL = 4.0	Water additive used to control microbes

Haloacetic Acids (five) (HAAS) (ppb)	Oct 2013-Jul 2014	N	3.13	ND-8.5	NA	MCL= 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	Oct 2013-Jul 2014	N	3.75	ND-8.5	NA	MCL=80	By-product of drinking water disinfection

## Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	Jun-Sep 2014	N	0.15	0 of 30	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Jun-Sep 2014	N	1.6	0 of 30	0	15	Corrosion of household plumbing systems, erosion of natural deposits

## Unregulated Contaminants

Contaminant	Level Detected	Range	Likely Source of Contamination
1,4-dioxane	0.094	ND-0.41	Unavailable
Molybdenum	2.5	2.0-3.1	Unavailable
Strontium	112.0	96-160	Unavailable

*We monitored for unregulated contaminants (UCs) in 2014 as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) or likely sources have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (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. The City of Crestview 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 or at <http://www.epa.gov/safewater/lead>.*

*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 include:*

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.*
- (B) 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.*
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.*
- (D) 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.*
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.*

*In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.*

*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 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 Drinking Water Hotline at 1-800-426-4791.*

*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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).*

*PLEASE DO NOT FLUSH your unused/unwanted medications down toilets or sinks, for more information please visit <http://www.dep.state.fl.us/waste/categories/medications/pages/disposal.htm>*

*We at the City of Crestview would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.*