# JACOBS' Ch2m.



Fort Campbell Water Quality Report Tennessee PWSID # 0000820 Kentucky PWSID # 0241001 Monitoring Period January 1, 2018 to December 31, 2018

#### Is my drinking water safe?

Your water meets all of Environmental Protection Agency's (EPA) health standards. We have conducted numerous tests for contaminants that may be in drinking water and only detected 9. All were below actionable limits. Those contaminants and the levels detected are listed in the chart on the back of this page.

#### What is the source of my water?

Your water comes from a ground water aquifer located on Post and our goal is to protect that water from contaminants. We are continually working with the State of Kentucky and the State of Tennessee to determine the vulnerability of your water source to potential contamination. The Tennessee Department of Environment and Conservation (TDEC) prepared a Source Water Assessment Program (SWAP) Report for the untreated water source serving this water system. This report assesses the susceptibility of untreated water sources to potential contamination. Water sources are rated as reasonably susceptible (high), moderately susceptible (moderate) or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source. The Fort Campbell water source has been rated as reasonably susceptible to potential contamination. To ensure safe drinking water, all public water systems are required to routinely test and treat their water.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at <u>http://www.tn.gov/environment/article/wrwq-source-water-assessment</u> or you may contact the Water System to obtain copies of specific assessments.

#### Why are there contaminants in my water?

The sources of drinking water, both tap 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. It may also pick up substances resulting from human activity and the presence of animals. Contaminants that may be present in source water include:

- a. Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that 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.
- 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.

To ensure that tap water is safe to drink, the U.S. EPA and the Tennessee Department of Environment and Conservation prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) is responsible for regulations establishing limits for contaminants in bottled water, providing 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 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 800-426-4791.

# Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on your water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request.

## Other Information

We at Fort Campbell work around the clock to provide top quality water at every tap. We ask that all our customers help us protect our water source, which is the heart of our community, our way of life and our children's future. The changing mission of the 101<sup>st</sup> Airborne Division and an increase in tenant units has resulted in growth in both the number of personnel served as, well as geographic spread from the original 1940's construction. Both the plant and distribution system have grown and have been managed to meet these challenges.

In September 2003, the water system was privatized with ownership transferring from the U.S. Army to JACOBS. The management team at JACOBS is proud of the professionalism and dedication of its staff. Currently there are six certified operators at a Grade IV level, the highest grade achievable in the State of Tennessee. The staff is also active in both the American Water Works Association (AWWA) and the Tennessee Association of Utility Districts (TAUD) to maintain its knowledge of water issues and regulatory changes.

The Fort Campbell Water Plant has been rehabilitated over the last several years to update the treatment processes. Efforts are constantly ongoing to improve the water distribution system and water storage facilities across the Post.

## Do I Need To Take Special Precautions?

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 under-gone 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/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 from the Safe Drinking Water Hotline at 800-426-4791.

# Is my Water System Secure?

We understand that our customers are concerned about the security of their drinking water. Unlike many municipal utilities, our water source is located on the Post and protected by Post Security, however, we urge all residents of Fort Campbell to report any suspicious activities at any of our utility facilities, including the Water Treatment Plant, pumping stations, storage tanks and fire hydrants to 270-798-7111, 270-798-7112, 270-798-7113 or 931-431-5677.

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

If you need more information about your drinking water, please feel free to call Angela Perry, the Facilities Supervisor for the Ft. Campbell Water Treatment Plant, at 931-431-2036.

## How can I get involved?

Contact the Water Treatment Plant at 931-431-2036 for more information on how you can get involved.



## Water Quality Data Table

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Year Sampled	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Turbidity <sup>1</sup>	No	0.09	0.03 – 0.09	2018	NTU	NA	TT	Soil Runoff
Copper <sup>2</sup>	No	0.6	0.03 – 1.1	2018	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	0.6	0.4- 0.8	2018	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	No	1	NA	2018	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM (Total Trihalomethanes)	No	LRAA=17.9	7- 24.1	2018	ppb	NA	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	LRAA=15.4	6.4-16.7	2018	ppb	NA	60	By-product of drinking water disinfection
Total Organic Carbon 3	No	0.5	ND- 0.5	2018	ppm	NA	TT	Naturally present in the environment.
Chlorine	No	RAA=1.8	1.2-2.2	2018	ppm	MRDLG = 4.0	MRDL= 4.0	Water additive to control microbes
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Contaminant	Violation Yes/No	Level Detected	Range of Results	Year Sampled	Unit Measurement	MCLG	MCL	Likely Source of Contamination

NA

Sodium is not a regulated contaminant and has no direct impact on health. It is being included for additional information about the quality of your drinking water.

2018

NA

# Water Quality Data

Sodium

#### What does this chart mean?

 <u>AL</u> - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

No

7.2

- <u>LRAA</u>- Locational Running Annual Average is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.
- <u>ND</u> Not detected
- <u>MCL</u> Maximum Contaminant Level, or 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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime (70 -years) to have a one-ina-million chance of having the described health effect.
- <u>MCLG</u> Maximum Contaminant Level Goal, or 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.

 <u>MRDL</u> - Maximum Residual Disinfectant Level or MRDL, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.

NA

ppm

- <u>MRDLG</u> Maximum residual disinfectant level goal, or 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.
- <u>Turbidity Unit (NTU)</u> nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Parts per billion (ppb) or Micrograms per liter explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- <u>Parts per million (ppm) or Milligrams per liter (mg/l)</u> explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.
- RAA- Running Annual Average
- <u>TT</u> Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

#### Footnotes

<sup>1</sup> Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. We met the treatment technique for turbidity with 100% of our turbidity samples meeting the turbidity limit of 0.3 NTU. A value less than 95% constitutes a TT violation. The highest single measurement was 0.09 NTU. Any measurement in excess of 1 NTU is a violation unless otherwise approved by the state.

Erosion of natural deposits: used in water treatment

<sup>2</sup> During the most recent round of Lead and Copper testing, 0 out of 30 households sampled contained concentrations exceeding the action level for copper or lead. Lead and Copper values are 90<sup>th</sup> percentile values. Lead was not detected at the 90<sup>th</sup> percentile and is therefore not included in the table. If you have concerns about the copper in your water then you can have it tested to ensure it is below the action level. Alternatively, if the faucet has not been used for over 12 hours you can run the faucet for 15-30 seconds to ensure fresh water at the tap. Additional information is available from 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. JACOBS 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>

<sup>3</sup>The treatment technique requirements for Total Organic Carbon were met in 2018. Percent TOC removal achieved to the percent TOC removal required. A minimum ratio ≥1 is required to meet the TT.

