



Serving Those Who Serve.®

2018 Water Quality Report - Fort Riley
PWS ID#: KS2006114
Fort Riley Utility Services, Inc.
American States Utility Services, Inc.



Providing the integral services
that empower our nation's military
communities from the ground up.



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Dedicated to Delivering Clean Water

Every day, people depend on American States Utility Services, Inc. (ASUS) for the water that enhances their quality of life. We operate and maintain water and wastewater systems on military bases across the country, dedicating ourselves to producing drinking water that meets all state and federal standards and continually striving to adopt new methods for delivering the best quality drinking water to the military installations we serve. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education, while continuing to meet the needs of all of our water users.

Fort Riley Utility Services, Inc., a wholly-owned subsidiary of ASUS, is the sole provider of your water service. Our certified operators ensure the safe delivery of all potable water, taking water samples at approved sites to ensure its quality throughout our system. With a deep commitment to customer care, ASUS works diligently to protect every drop of water. As a utility provider, we constantly analyze our systems to determine which areas might need repair, replacement, or even supplementary facilities. ASUS also puts a strong focus on water efficiency, actively providing educational outreach for customers to further encourage better resource management.

We at ASUS are proud to be able to provide our services to the military personnel, civilians, and family members who live and work at Fort Riley. We're honored to support the role your military installation plays in defending the country, both at home and abroad. We achieve this goal by always putting our fundamental ideals into practice. We pay special attention to the ultimate measure of success: our customer's peace of mind.

In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all our customers. With our own team's deeply-rooted military background, we have an intimate understanding of what it takes to make an installation thrive, and we take pride in delivering unparalleled care in this regard.

We are pleased to present you with this annual water quality report and thank you for allowing us to serve you and your family. Please remember that we are always available to assist you should you ever have any questions or concerns about your water. For more details, you can view our past and current Water Quality Reports at www.asusinc.com.

Sincerely,

Jo Anna Brown
Utility Manager
Fort Riley Water Services, Inc.
American States Utility Services, Inc.



Important Information about Your Water

Your water comes from eight ground water wells. This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call Chris McMahon at 785-717-3083.

What the EPA Wants You to Know

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those 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 for infections. These people should seek advice about drinking water from their health care providers. 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 at (800) 426-4791 or www.epa.gov/safewater.

Lead in Home Plumbing

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 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 your drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or www.epa.gov/safewater/lead.

Substances that Could Be in Your Water

In order to ensure that tap water is safe to drink, the U.S. 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. 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.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791 or 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.

Important Information about Your Water

Substances that Could Be in Your Water (cont'd)

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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or a result of oil and gas production and mining activities.

2018 Water Quality Test Results

The following tables list all of the drinking water contaminants which were detected during the 2018 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2018.

The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. **The bottom line is that the water that is provided to you is safe.**

Regulated Substances - Fort Riley Utility Services, Inc. Water Treatment Plant

Microbiological Contaminants

Substance (units)	Results	MCL	MCLG	Typical Source
Coliform (TCR)	In the month of September, 2.33% of samples returned as positive	TT	N/A	Naturally present in the environment

Our water system is required to test a minimum of 40 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

Regulated Contaminants

Substance (unit)	Sample Date	Highest Level Detected	Range	MCL	MCLG	Likely Source
Atrazine (ppb)	9/12/2017	0.12	0.12	3	3	Decay of natural and man-made deposits
Barium (ppm)	6/12/2017	0.048	0.048	2	2	Discharge from metal refineries
Fluoride (ppm)	4/30/2018	0.686	0.45-0.686	4	4	Natural deposits; water additive which promotes strong teeth
Nitrate (ppm)	1/16/2018	0.27	0.27	10	10	Runoff from fertilizer use
Selenium (ppb)	6/1/2017	1.9	1.9	50	50	Erosion of natural deposits

2018 Water Quality Test Results (cont'd)

Regulated Substances - Fort Riley Utility Services, Inc. Water Treatment Plant

Disinfection Byproducts

Substance (unit)	Monitoring Period	Highest RAA	Range (Low-High)	MCL	MCLG	Likely Source
Total Haloacetic Acids (HAA5) (ppb)	2018	24	6.7-34	60	0	Decay of natural and man-made deposits
TTHM	2018	88	33-120	80	0	Byproduct of drinking water disinfection

Lead and Copper

Substance (unit)	Monitoring Period	90th Percentile	Range (Low-High)	AL	Sites Over AL	Likely Source
Copper, Free (ppm)	2015-2017	0.018	0.001-0.15	1.3	0	Corrosion of household plumbing

Radiological Contaminants

Substance (unit)	Year	Average Level	Range (Low-High)	MRDL	MRDLG	Violation?	Likely Source
Combined Radium (-226 & -228) (pCi/l)	4/7/2015	0.3	0.3	4	4	NO	Water additive used to control microbes

Secondary Contaminants (Non-Health-Based Contaminants. No Federal Maximum Contaminant Level (MCL) Established.)

Substance (unit)	Collection Date	Highest Value	Range (Low-High)	SMCL
Alkalinity, Total (mg/l)	6/1/2017	60	60	300
Calcium (mg/l)	6/1/2017	33	33	200
Chloride (mg/l)	6/1/2017	51	51	250
Conductivity @25 C (umho/cm)	6/1/2017	490	490	1500
Corrosivity (lang)	6/1/2017	0.021	0.021	0
Hardness, Total (as CaCO3)	6/1/2017	130	130	400
Magnesium (mg/l)	6/1/2017	11	11	150
pH	6/1/2017	8.3	8.3	8.5
Phosphorus, Total (mg/l)	6/1/2017	0.088	0.088	5
Potassium (mg/l)	6/1/2017	9.1	9.1	100
Silica (mg/l)	6/1/2017	15	15	50
Sodium (mg/l)	6/1/2017	38	38	100
Sulfate (mg/l)	6/1/2017	84	84	250
TDS (mg/l)	6/1/2017	280	280	500

Please Note: Because of sampling schedules, results may be older than one year.

2018 Water Quality Test Results (cont'd)

Regulated Substances - Fort Riley Utility Services, Inc. Water Treatment Plant

VIOLATIONS

Compliance Period	Analyte	Comments
7/1/2018-9/30/2018	TTHM	MCL, LRAA
7/1/2018-9/30/2018	Public Notice	Public Notice Linked to Violation
10/1/2018-12/31/2018	TTHM	MCL, LRAA

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

TERMS AND ABBREVIATIONS

Maximum Contaminant Level Goal (MCLG): the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): 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.

Secondary Maximum Contaminant Level (SMCL): recommended level for a contaminant that is not regulated and has no MCL.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

Treatment Technique (TT): a required process intended to reduce levels of a contaminant in drinking water.

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.

Non-Detects (ND): lab analysis indicates that the contaminant is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Monitoring Period Average (MPA): An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

Locational Running Annual Average (LRAA): Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.



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