2019 ANNUAL WATER QUALITY REPORT MARINE CORPS LOGISTICS BASE ALBANY, WSID #GA0950035

Marine Corps Logistics Base Albany has three wells which are approximately 1,000 feet deep, drawing ground water from the Floridian, Claiborne, Tallahatta, Wilcox and Clayton aquifers. The water that is pumped today began its decent into the aquifers 30 to 50 years ago in central Georgia. During this time span, the water has trickled through many layers of rock, sand and clay, creating a natural filtering system. This filtering system is the primary reason our water is safe and free of contamination. The water treatment performed is the injection of chlorine and fluoride at every well site.

MCLB Albany has ample sources of water for use by residential and industrial activities. The water is pumped an average of 1,300 gallons per minute by electric pumps which are stored in two on-base 500,000 gallon water towers. Extensive system planning and development have been used to ensure that the drinking water is adequately protected. Working with the Georgia Environmental Protection Division, the drinking water is sampled and tested regularly for mineral, chemical and biological contamination.

GENERAL WATER QUALITY HEALTH EFFECTS LANGUAGE

"Drinking water, including bottle 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 at (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 systems 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 and Centers for Disease Control) 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.

"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 land or through the ground, it dissolves naturally occurring minerals and, in some cases radioactive material, can pick up substances resulting from the presence of animals or from human activity."

Contaminants that <u>may</u> be present in source water before treatment 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 storm 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 use.
- 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.
- 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. MCLB Albany strictly adheres to these regulations in an attempt to provide its base personnel with the safest quality water possible."

Lead specific information:

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. MCLB Albany, WSID# GA0950035 is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, the potential for lead exposure can be minimized by flushing the tap for 30 seconds to two 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 the Web site http://www.epa.gov/safewater/lead.

For additional information about the quality of your drinking water aboard MCLB Albany, call Robert Metts at the Environmental Branch, Installations and Environmental Division at (229) 639-8934.

Enclosure (1)

WATER QUALITY DATA

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

Water Quality Test Results Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Action Level Goal (ALG): ALGs allow for a margin of safety.	The level of a contaminant in drinking water below which there is no known or expected risk to health.
Action Level: which a water system must follow.	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
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.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
<i>Maximum Contaminant Level Goal or MCLG:</i> <i>MCLGs allow for a margin of safety.</i>	The level of a contaminant in drinking water below which there is no known or expected risk to health.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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.
na:	not applicable.
mrem:	millirems per year (a measure of radiation absorbed by the body)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

Lead and Copper	<u>Date</u> <u>Sampled</u>	<u>MCLG</u>	<u>Action</u> <u>Level</u> <u>(AL)</u>	<u>90th</u> <u>Percentile</u>	<u># Sites Over</u> <u>AL</u>	<u>Units</u>	<u>Violation</u>	Likely Source of Contamination
Copper (Tested every 3 yrs)	09/06/2017	1.3	1.3	0.11	0	ppm	Ν	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead (Tested every 3 yrs)	09/06/2017	0	15	3.5	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

WATER QUALITY DATA Regulated Contaminants cont.

Disinfectants and Disinfection By-Products	<u>Collection</u> Date	<u>Highest</u> <u>Level</u> Detected	<u>Range of</u> <u>Levels</u> Detected	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	Violation	Likely Source of Contamination
Chlorine	2018	2.9	2.9-2.9	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2018	2	1.7 - 1.7	No goal for the total	60	ррb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	5	4.6 - 4.6	No goal for the total	80	ррb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	<u>Highest</u> <u>Level</u> <u>Detected</u>	<u>Range of</u> <u>Levels</u> <u>Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	Likely Source of Contamination
Barium	11/15/2017	0.11	0 - 0.11	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2018	0.91	0 - 0.91	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	4/24/2018	0.24	0-0.2	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits