

Presented By
Old Dominion Utility
Services, Inc. - JBLE



Old Dominion
Utility Services, Inc.
A Subsidiary of American States Utility Services, Inc

ANNUAL
WATER
QUALITY
REPORT

WATER TESTING PERFORMED IN 2016

Protecting and Preserving Your Drinking Water

We are pleased to present the following 2016 Water Quality Report, which contains information about testing completed in your water system January 1 through December 31, 2016.

Old Dominion Utility Services, Inc. (ODUS) takes seriously its job as the guardian of the drinking water quality and the service we provide to our customers. ODUS is regulated by the state and federal governments, and we are proud to say the quality of your water continually meets all drinking water standards.

Daily, ODUS industry professionals take water samples to monitor quality at approved sites throughout the distribution system. If there is an instance of a sample exceeding a drinking water standard, we are required to notify you quickly and take action to restore normal service.

We pride ourselves on our strong customer service culture that comes from industry knowledge and relationships built in the water industry. Our representatives are available around the clock to answer questions and address any water concerns, day or night.

On behalf of all of us at Old Dominion Utility Services, Inc., thank you for providing us the opportunity to serve those who serve. If you have any questions about this report, please call our Customer Service Center at 757-888-0484.

Sincerely,

Susan Miller

Utility Manager
American States Utility Services, Inc.
Old Dominion Utility Services, Inc.

Public Meetings

Decisions about your drinking water are made at Newport News City Council meetings. Meetings are held on the second and fourth Tuesdays of each month at 7:00 p.m. and the public is invited to attend. Consult the City Council website at: www.nngov.com.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban storm-water runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead in Home Plumbing

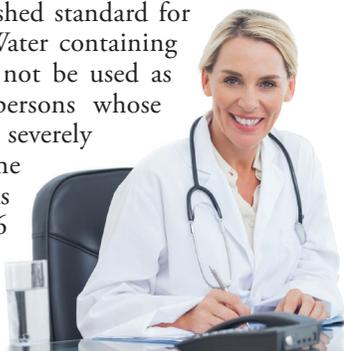
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but 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 drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/lead.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 at <http://water.epa.gov/drink/hotline>.

Sodium

There is presently no established standard for sodium in drinking water. Water containing more than 20 mg/L should not be used as drinking water for those persons whose physician has placed them on severely restricted sodium diets. The maximum detected level was 32 mg/L, the average was 16 mg/L, and the range was 10 – 32 mg/L.



Source Water Assessment

The Hampton Roads Planning Commission has completed a Source Water Assessment of the Newport News Waterworks' water sources in 2001-2002. The surface water sources were rated as relatively high in susceptibility to contamination (one reason it is important for water treatment), while the deep ground water wells were rated as low in susceptibility to contamination, using the criteria developed by the state in its approved Source Water Assessment Program. The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, a susceptibility explanation chart, and term definitions. The report is available by contacting the Newport News Waterworks (757-926-1000) or the Hampton Roads Planning Commission (757-420-8300).

Where Does My Water Come From?

The drinking water being delivered to you is purchased from Newport News Waterworks. The primary source of your drinking water comes from surface water. When available, water is pumped from the Chickahominy River. This water is piped and stored, prior to treatment, in five reservoirs owned and operated by Newport News Waterworks. A secondary source of your drinking water is brackish (slightly salty) ground water pumped from deep wells in the Lee Hall area. Water from both sources (reservoir and ground water) is separately treated and mixed together before distribution.

QUESTIONS?

Call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

About Local Drinking Water Quality:

- At Joint Base Langley-Eustis (formerly Fort Eustis), call Susan Miller at (757) 888-0485.
- Newport News Waterworks, Customer Service, at 926-1000, Monday through Friday, 8 a.m. to 5 p.m.
- Or call the Virginia Department of Health Office of Drinking Water at (757) 683-2000 (www.vdh.virginia.gov/ODW).

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Failure to Sample for Disinfection By-Products

Old Dominion Utility Services, Inc. routinely monitors for disinfection by-products. The contracting laboratory failed to sample for Stage 2 Disinfectants and Disinfection By-Products on Dec 2, 2016, for fourth-quarter monitoring.

What Should I Do?

- You do not need to boil your water or take other corrective actions.
- You do not need to use an alternative (i.e., bottled) water supply.

What Does this Mean?

This is not an emergency. If it had been, you would have been notified immediately.

Disinfection by-products are a by-product of drinking water chlorination to control microbial growth.

What Was Done?

The 1st Quarter Stage 2 Disinfectants and Disinfection By-Products were monitored on March 7, 2017, putting the Ft. Eustis drinking water system back in profile monitoring compliance. The situation is now resolved. The drinking water system is flushed every day of the year to keep the drinking water continuously fresh. The drinking water is monitored weekly for Total Chlorine Residual to meet quality standards in connection with the Disinfection By-Products.

For more information, or to learn more about water quality, please contact Cleve Branton at (757) 888-0485.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This message is sent by Old Dominion Utility Services, Inc.

State Water System ID# 3700100. Date Distributed: 7/1/17.

About *Cryptosporidium*

Cryptosporidium is a parasitic microbe found in surface waters throughout the U.S. Our monitoring indicates the presence of these organisms at very low levels in our source water but not in our treated water. Current test methods approved by the U.S. EPA do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps.

Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at 800-426-4791.



Results of Detected Contaminants

Joint Base Langley Eustis (JBLE; formerly Fort Eustis) and Newport News Waterworks constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The tables list only those contaminants that had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment.

The following tables list the drinking water contaminants that were detected during the 2016 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in these tables are from testing done January 1 to December 31, 2016. The state requires JBLE 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, are more than one year old.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2016	2	2	0.022	0.020–0.022	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters ¹ (pCi/L)	2016	50	0	2.5	1.4–2.5	No	Decay of natural and man-made deposits
Chloramines (ppm)	2016	[4]	[4]	2.23	1.98–2.79	No	Water additive used to control microbes
<i>Cryptosporidium</i> ² (#/Liter)	2016	TT	NA	0.041	<0.041–0.041	No	Human or animal fecal waste
Fluoride (ppm)	2016	4	4	0.88	0.8–0.88	No	Erosion of natural deposits; Water additive which promotes strong teeth
Haloacetic Acids [HAA] ³ (ppb)	2016	60	NA	4	ND–5	No	By-product of drinking water disinfection
Nitrate (ppm)	2016	10	10	0.054	0.053–0.054	No	Runoff from fertilizer use; Erosion of natural deposits
Radium-228 (pCi/L)	2016	5	0	0.6	<0.6–0.6	No	Erosion of natural deposits
TTHMs [Total Trihalomethanes] ³	2016	80	NA	15	7.5–19.7	No	By-product of drinking water disinfection
Total Organic Carbon (removal ratio)	2016	TT	NA	1.25	1.04–1.9	No	Naturally present in the environment
Turbidity ⁴ (NTU)	2016	TT	NA	0.22	0.02–0.22	No	Soil runoff
Tap Water Samples Collected for Lead and Copper Analyses from Sample Sites throughout the Community							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2015	1.3	1.3	0.161	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2015	15	0	ND	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
UNREGULATED SUBSTANCES ^{5 6}							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE			
Bromodichloromethane (ppb)	2016	1.6	1.3–1.8	By-product of chlorination			
Chloroform (ppb)	2016	2.2	1.4–3.1	By-product of chlorination			
Dibromochloromethane (ppb)	2016	0.6	0.6–0.7	By-product of chlorination			

UNREGULATED CONTAMINANT MONITORING RULE - PART 3 (UCMR3) ⁶

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Chlorate (ppb)	2014	266	240–290	Naturally occurring; Disinfectant by-product; Agricultural defoliant
Chromium [Total] (ppb)	2014	0.21	ND–0.47	Naturally occurring; Used to make stainless steel
Chromium-6 (ppb)	2014	0.06	0.05–0.09	Naturally occurring; Used to make stainless steel
Strontium (ppb)	2014	207	170–231	Naturally occurring; Used in some televisions
Vanadium (ppb)	2014	0.80	0.6–0.9	Naturally occurring metal used in automotive industry

¹The MCL for beta particles is 4 mrem/year. U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

²Found in source water only, not in treated water.

³Three-quarter running average. The fourth-quarter profile monitoring was not sampled by the contract laboratory.

⁴Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of disinfectants. One hundred percent of samples were within the turbidity limit.

⁵Monitored at treatment plant.

⁶Unregulated contaminant monitoring helps the EPA determine where certain contaminants occur and whether the Agency should consider regulating those contaminants in the future.

Definitions

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

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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