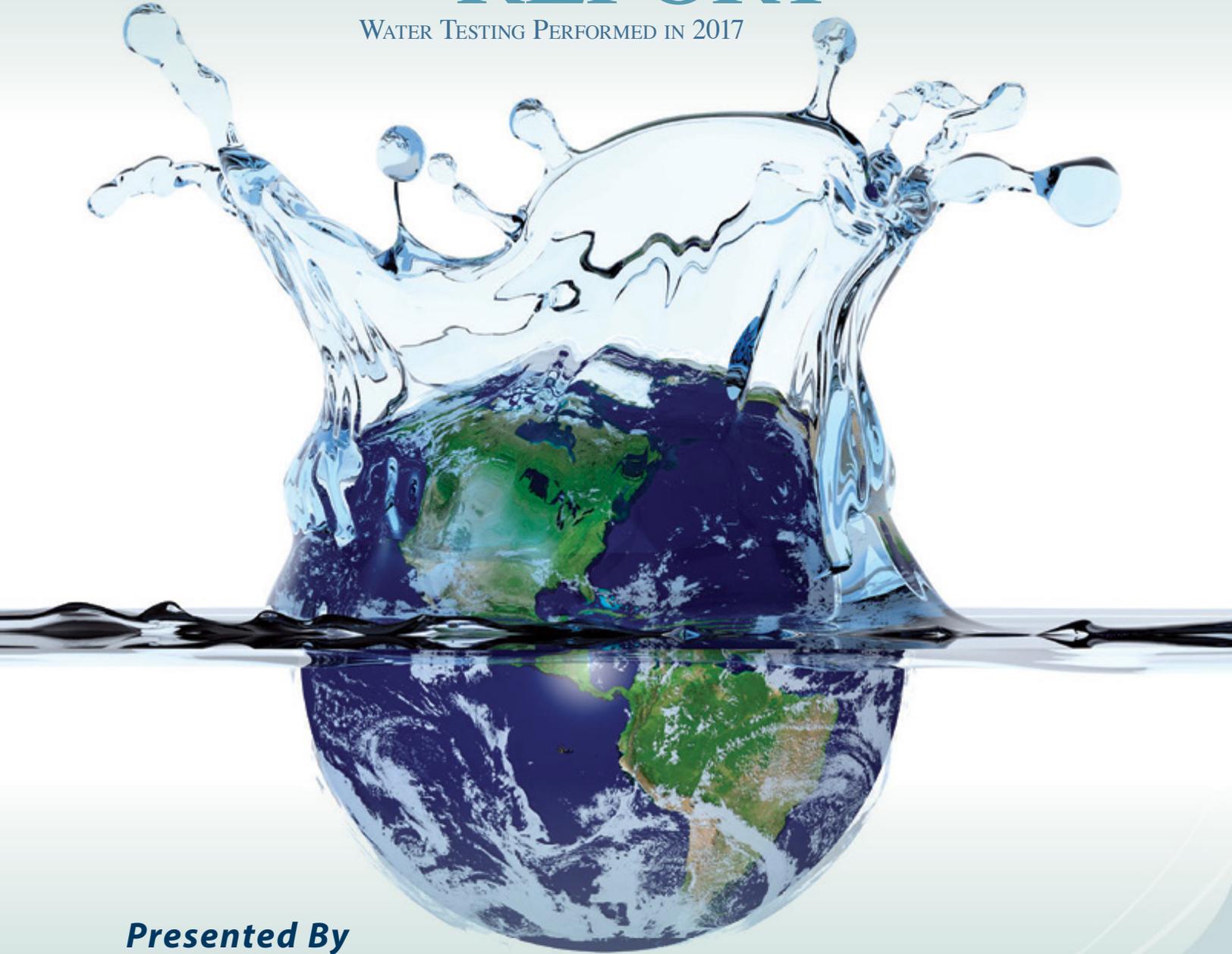


# ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2017



*Presented By*



**Old North**  
Utility Services, Inc.

A Subsidiary of American States Utility Services, Inc

**Camp Mackall/ATF**

## Quality First

We are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

### Where Does My Water Come From?

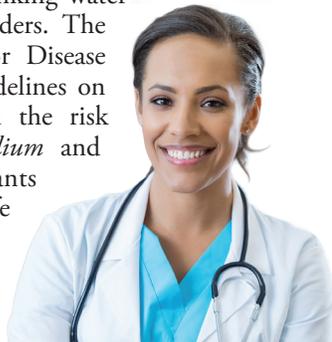
Camp Mackall receives treated surface water from the Southern Pines Water Treatment Plant (SPWTP). The SPWTP gets its water supply from a surface water source located at Drowning Creek.



ATF receives ground water from a well located within the Drowning Creek basin.

## 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 <http://water.epa.gov/drink/hotline>.



## 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](http://www.epa.gov/lead).

## 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 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 by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater 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.

## Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to potential contaminant sources (PCSs). The results of the assessment are available in SWAP Assessment reports that include maps, background information, and a relative susceptibility rating of Higher, Moderate, or Lower. The relative susceptibility rating of each source for the Town of Southern Pines was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area).

The assessment findings for Susceptibility of Sources to PCSs are as follows:

SOURCE NAME:	SUSCEPTIBILITY RATING:	SWAP REPORT DATE:
Drowning Creek	Moderate	September 13, 2017

The complete SWAP Assessment report for the Town of Southern Pines may be viewed on the Internet at: <https://www.ncwater.org/?page=600>. The SWAP results and reports are periodically updated; therefore, the results available on this website may differ from the results that were available at the time this CCR was prepared. To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program - Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email a request to [swap@ncdenr.gov](mailto:swap@ncdenr.gov).

Please indicate the SPWTP system name, PWSID #03-63-010, and provide your name, mailing address, and phone number. If you have any questions about the SWAP report, please contact the Source Water Assessment staff at (919) 707-9098. It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the system’s potential to become contaminated by PCSs in the assessment area.

The relative susceptibility rating of each source for Old North Utility Services, Inc.--Aberdeen Training Facility was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area).

The assessment findings for Susceptibility of Sources to PCSs are as follows:

SOURCE NAME:	SUSCEPTIBILITY RATING:	SWAP REPORT DATE:
Well #1	Moderate	April 20, 2017

The complete SWAP Assessment report for Old North Utility Services, Inc.--Aberdeen Training Facility may be viewed on the Internet at: <https://www.ncwater.org/?page=600>.

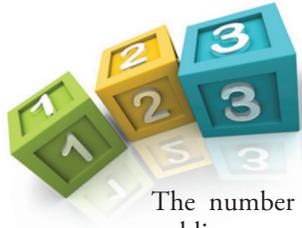
## About Our Exceedance

We routinely sample water at consumers’ taps for lead. In June 2017, the tests at Aberdeen Training Facility showed lead levels in the water above the limit, or “action level” (AL). Therefore, we performed an optimal corrosion control treatment evaluation and submitted our findings to the State. Subsequently, the State recommended installation of corrosion control treatment. This treatment helps prevent lead in the pipes from dissolving into the water. We have begun the process of installing the recommended corrosion control treatment. Samples taken since performing the evaluation have not exceeded EPA set limits. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.



## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Meaghan Till, Environmental Coordinator for Old North Utility Services, Inc., at (910) 495-1311, ext 102.



## BY THE NUMBERS

The number of gallons of water produced daily by public water systems in the U.S.

**34**  
BILLION

**1**  
MILLION The number of miles of drinking water distribution mains in the U.S.

The amount of money spent annually on maintaining the public water infrastructure in the U.S.

**135**  
BILLION

**300**  
MILLION The number of Americans who receive water from a public water system.

The age in years of the world's oldest water found in a mine at a depth of nearly two miles.

**2**  
BILLION

**151**  
THOUSAND The number of active public water systems in the U.S.

The number of highly trained and licensed water professionals serving in the U.S.

**199**  
THOUSAND

**93** The number of federally regulated contaminants tested for in drinking water.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables shows those substances that were detected between January 1 and December 31, 2017. The State recommends monitoring for certain substances less than once per year because the concentration of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

REGULATED SUBSTANCES											
				Old North Utility Services, Inc. Camp Mackall		Southern Pines		Old North Utility Services, Inc. ATF			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloramines (ppm)	2017	[4]	[4]	1.78	0.87–2.20	NA	NA	NA	NA	No	Water additive used to control microbes
Chlorine (ppm)	2017	[4]	[4]	1.85	0.52–2.20	2.3	1.2–3.2	2.12	1.28–3.1	No	Water additive used to control microbes
Chlorobenzene (ppb)	2017	100	100	NA	NA	NA	NA	1.3	NA	No	Discharge from chemical and agricultural chemical factories
Fluoride (ppm)	2017	4	4	NA	NA	1.0	0.5–1.0	NA	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2017	60	NA	17	17–19.7	30	2.0–42.1	7.5	NA	No	By-product of drinking water disinfection
o-Dichlorobenzene (ppb)	2017	600	600	NA	NA	NA	NA	0.7	NA	No	Discharge from industrial chemical factories
TTHMs [Total Trihalomethanes] (ppb)	2017	80	NA	9.0	8.7–12.3	14.2	5.8–23.9	3.6	NA	No	By-product of drinking water disinfection
Total Organic Carbon [TOC] <sup>1</sup> (removal ratio)	2017	TT	NA	NA	NA	1.42	1.17–1.65	NA	NA	No	Naturally present in the environment
Turbidity <sup>2</sup> (NTU)	2017	TT = 1 NTU	NA	NA	NA	0.15	0.01–0.15	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2017	TT = 95% of samples meet the limit	NA	NA	NA	100	NA	NA	NA	No	Soil runoff
Tap water samples were collected for lead and copper analyses from sample sites throughout the community											
				Old North Utility Services, Inc Camp Mackall		Southern Pines		Old North Utility Services, Inc. ATF			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	EXCEEDANCE	TYPICAL SOURCE
Copper (ppm)	2015	1.3	1.3	0.427	0/5	0.109	0	0.28 <sup>3</sup>	0/11 <sup>3</sup>	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2015	15	0	<3	0/5	4	0	15 <sup>3</sup>	1/11 <sup>3</sup>	Yes	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>1</sup> Depending on the TOC in our source water, the system MUST have a certain percentage removal of TOC or must achieve alternative compliance criteria. If we do not achieve that percentage removal, there is an alternative percentage removal. If we fail to meet the alternative percentage removal, we are in violation of a Treatment Technique.

<sup>2</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. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

<sup>3</sup> Sampled in 2017.

## 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 under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

**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

**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.

**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).

**removal ratio:** A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

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