

**2017 Annual Drinking Water Quality Report**  
**Town of Stanley**  
**PWS ID # 01-36-035**

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information because informed customers are our best allies.

**What EPA Wants You to Know**

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 (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/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 (800-426-4791).

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. 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 metal, which 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; 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; and radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order 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. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

## **When You Turn on Your Tap, Consider the Source**

The Town of Stanley purchases all of its drinking water from the CITY of Mt. Holly. The City of Mt. Holly is supplied by surface water from Mountain Island Lake located off N.C. Hwy. 273 in northeast Gaston County. All water treatment is done by the City of Mt. Holly and distributed by the Town of Stanley within the service area.

We routinely monitor for over 150 contaminants in your drinking water according to the Federal, State and local laws. The tables below list all of the contaminants that we detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in the tables is from testing done January 1 through December 31, 2016.

The EPA or 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.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

### **Important Drinking Water Definitions**

**Not-Applicable (NA)** - Information not applicable/ not required for that particular water system or for that particular rule

**Non-Detects (ND)** - Contaminant is not present at the level of detection set

**Parts per million (PPM) or Milligram per liter (mg/L)**- One part per million correspond to one minute in two years or a single penny in \$10,000

**Parts per billion (ppb) or Micrograms per liter (ug/L)**- One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000

**Parts per trillion (ppt) or Nanograms per liter (Nanograms/L)**- One part per trillion corresponds to one minute in 2,000,000 years or a single penny in \$10,000,000,000

**Parts per quadrillion (ppq) or Pictograms' per liter (pictograms/L)**- One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000

**Picocuries per liter (pCi/L)** - Picocuries per liter is a measure of the of the radioactivity in water

**Million Fibers per liter (MFL)** - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers

**Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water

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

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

**Maximum Residual Disinfection Level Goal(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.

**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.

**Maximum Contaminant Level (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.

**Maximum Contaminant Level Goal (MCLG)**- 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.

**Extra Note:** MCLs are set at very stringent levels. 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 to have a one-in-a-million chance of having the describe health effect.

### Microbiological Contaminants

| Contaminant (units)                  | MCL Violation | Your Water | MCLG | MCL | Likely Source                        |
|--------------------------------------|---------------|------------|------|-----|--------------------------------------|
| Total Coli form (Presence or absent) | NO            | 0          | 0    | 0   | Naturally present in the environment |
| Fecal Col form (Presence or absent)  | NO            | 0          | 0    | 0   | Human and animal fecal waste         |

### Lead and Copper Contaminants (units)

| Contaminants (units)                    | Sample Date | Your Water | # of sites above AL | MCLG | MCL    | Likely Source                   |
|---|-------------|------------|---------------------|------|--------|---------------------------------|
| Copper (ppm) (90 percentile)            | 9/7/17      | 0.27       | 0                   | 1.3  | AL=1.3 | Corrosion of household plumbing |
| Lead (ppb) 90 <sup>th</sup> percentile) | 9/7/17      | 0.0026     | 0                   | 0    | AL=15  | Corrosion of household 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 metals and components associated with service lines and home plumbing. The Town of Stanley 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 drinking 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### Asbestos Contaminant

| Contaminant (units)  | Sample Date | MCL Violation | Your Water | Range | MCLG | MCL | Likely Source   |
|----------------------|-------------|---------------|------------|-------|------|-----|---|
| Total Asbestos (MFL) | 6/20/12     | NO            | ND         | N/A   | 7    | 7   | Decay of asbestos cement water mains; Erosion of natural deposits |

### Disinfectants and Disinfection Byproducts Contaminants

| Contaminants (Units)                            | MCL/MRDL Violation | Your Water (RAA) | Range     | MCLG | MCL  | Likely Source                             |
|---|--------------------|------------------|-----------|------|------|---|
| TTHM (ppb) (Total chlorination trihalomethanes) | Yes                | .043             | .023-.081 | N/A  | .080 | By-product of drinking water              |
| HAA5 (ppb) (Total Haloacetic Acids)             | NO                 | .015             | .001-.022 | N/A  | .060 | By-product of drinking water chlorination |

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.

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

**All Contaminant Groups Below Sampled by City of Mt. Holly**

**Turbidity**

| Contaminant (units)                        | Treatment Technique (TT) Violation | Your Water | Treatment Technique (TT) Violation if | Likely Source |
|--|------------------------------------|------------|---------------------------------------|---------------|
| Turbidity (NTU) Highest single Measurement | NO                                 | 0.090 NTU  | Turbidity >1NTU                       | Soil runoff   |

|   |    |      |   |             |
|---|----|------|---|-------------|
| Turbidity (NTU) Lowest monthly (%) Meeting limits | NO | 100% | Less than 95% monthly measurements <0.3 NTU | Soil Runoff |
|---|----|------|---|-------------|

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.

**Inorganic Contaminants**

| Contaminant (units) | Sample Date | MCL Violation | Your Water | MCLG | MCL | Likely Source   |
|---------------------|-------------|---------------|------------|------|-----|---|
| Arsenic (ppb)       | 9/6/17      | NO            | ND         | 0    | 10  | Erosion of natural deposits; runoff from Orchards, glass, and Electronic production waste |
| Fluoride (ppm)      | 9/6/17      | NO            | .62        | 4    | 4   | Water additive for Strong teeth   |

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems

**Nitrate/ Nitrite Contaminants**

| Contaminants (units)        | MCL Violation | Your Water | MCLG | MCL | Likely Source   |
|-----------------------------|---------------|------------|------|-----|---|
| Nitrate (as Nitrogen) (ppm) | NO            | 0.17       | 10   | 10  | Runoff from fertilizer Use; leaching from Septic tanks, erosion Of natural deposits |

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

If you have any questions concerning this report, contact city hall at 704-263-4779.