

# ***2023 Annual Drinking Water Quality Report***

## **Fayetteville Public Works Commission**

Water System Number NC 03-26-010

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.**

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. **If you have any questions about this report or concerning your water, please contact Jason Green at 910-223-4710. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at 955 Old Wilmington Drive on second and fourth Wednesday of each month.**

### **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. Immuno-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).

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. [Name of Utility] 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 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 <http://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. 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and 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 number 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 water that is used by this system is the Cape Fear River and Little Cross Creek watershed. The P.O. Hoffer Facility is located at 508 Hoffer Drive and the Glenville Lake Facility is located at 628 Filter Plant Drive.

## Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (DEQ), 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 Fayetteville Public Works Commission 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 are summarized in the table below:

### Susceptibility of Sources to Potential Contaminant Sources (PCSs)

| Source Name     | Susceptibility Rating | SWAP Report Date |
|-----------------|-----------------------|------------------|
| Cape Fear River | Higher                | September 2020   |
| Glenville Lake  | Higher                | September 2020   |

### Surface Water Source Information

| Source Name     | Watershed Classification | Source Location |
|-----------------|--------------------------|-----------------|
| Cape Fear River | WS-IV                    | Direct Stream   |
| Glenville Lake  | WS-IV                    | Class I         |

The complete SWAP Assessment report for Fayetteville Public Works Commission may be viewed on the Web at: <https://www.ncwater.org/?page=600> Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to [swap@deq.nc.gov](mailto:swap@deq.nc.gov). Please indicate your system name, number, 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 by phone 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.

## Help Protect Your Source Water

Protection of drinking water is everyone’s responsibility. We have a robust and proactive watershed management program that helps protect our valuable water resources. Please visit <https://www.faypwc.com/watershed-protection> for more information. You can help protect your community’s drinking water sources in several ways: by disposing of chemicals properly; taking used motor oil to a recycling center, volunteering in your community to participate in group efforts to protect your source, etc.).

### **Important Drinking Water Definitions:**

- *Not-Applicable (N/A)* – Information not applicable/not required for that particular water system or for that particular rule.
  - *Non-Detects (ND)* - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.
  - *Parts per million (ppm) or Milligrams per liter (mg/L)* - One part per million corresponds 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 Picograms per liter (picograms/L)* - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
  - *Picocuries per liter (pCi/L)* - Picocuries per liter is a measure 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. Turbidity in excess of 5 NTU is just noticeable to the average person.
  - *Variances and Exceptions* – State or EPA permission not to meet an MCL or Treatment Technique under certain conditions.
  - *Action Level (AL)* - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
  - *Treatment Technique (TT)* - A required process intended to reduce the level of a contaminant in drinking water.
  - *Maximum Residual Disinfection 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 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.
  - *Locational Running Annual Average (LRAA)* – 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.
  - *Running Annual Average (RAA)* – The average of sample analytical results for samples taken during the previous four calendar quarters.
  - *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.
  - *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 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.
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## Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2023.** The EPA and the State allow 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.

### REVISED TOTAL COLIFORM RULE:

#### Microbiological Contaminants in the Distribution System

| Contaminant (units)                           | MCL Violation Y/N | Number of Positive/Present Samples | MCLG | MCL                                                                                                                                                                                                                                                                                                                                                                                                                       | Likely Source of Contamination       |
|-----------------------------------------------|-------------------|------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Total Coliform Bacteria (presence or absence) | N/A               | N/A                                | N/A  | TT*                                                                                                                                                                                                                                                                                                                                                                                                                       | Naturally present in the environment |
| <i>E. coli</i> (presence or absence)          | N                 | 0                                  | 0    | Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive, or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i><br><br><u>Note:</u> If either an original routine sample and/or its repeat samples(s) are <i>E. coli</i> positive, a Tier 1 violation exists. | Human and animal fecal waste         |

#### Microbiological Contaminants in the Source Water

| Fecal Indicator                                       | Number of "Positive/Present" Samples | Date(s) of fecal indicator-positive source water samples | Source of fecal contamination, if known | Significant Deficiency Cited by the State? Y/N | MCLG | MCL | Likely Source of Contamination |
|-------------------------------------------------------|--------------------------------------|----------------------------------------------------------|-----------------------------------------|------------------------------------------------|------|-----|--------------------------------|
| <i>E. coli</i> , (presence or absence)                | 365                                  | 1/1 – 12/31                                              | Runoff, Upstream Dischargers            | N                                              | 0    | 0   | Human and animal fecal waste   |
| <i>enterococci</i> or coliphage (presence or absence) | 365                                  | 1/1 – 12/31                                              | Runoff, Upstream Dischargers            | N                                              | N/A  | TT  | Human and animal fecal waste   |

#### Turbidity\*

| Contaminant (units)                                                               | Treatment Technique (TT) Violation Y/N | Your Water | MCLG | Treatment Technique (TT) Violation if:                        | Likely Source of Contamination |
|-----------------------------------------------------------------------------------|----------------------------------------|------------|------|---------------------------------------------------------------|--------------------------------|
| Turbidity (NTU) - Highest single turbidity measurement                            | N                                      | 0.25 NTU   | N/A  | Turbidity > 1 NTU                                             | Soil runoff                    |
| Turbidity (%) - Lowest monthly percentage (%) of samples meeting turbidity limits | N                                      | 100%       | N/A  | Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU |                                |

\* 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 Y/N | Your Water | Range |      | MCLG | MCL | Likely Source of Contamination                                                                                            |
|---------------------|-------------|-------------------|------------|-------|------|------|-----|---------------------------------------------------------------------------------------------------------------------------|
|                     |             |                   |            | Low   | High |      |     |                                                                                                                           |
| Fluoride (ppm)      | 12/31/23    | N                 | 0.693 mg/L | 0.0   | 0.95 | 4    | 4   | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |

### Lead and Copper Contaminants

| Contaminant (units)                        | Sample Date | Your Water (90 <sup>th</sup> Percentile) | Number of sites found above the AL | MCLG | AL     | Likely Source of Contamination                                       |
|--------------------------------------------|-------------|------------------------------------------|------------------------------------|------|--------|----------------------------------------------------------------------|
| Copper (ppm) (90 <sup>th</sup> percentile) | June 2023   | ND                                       | 0                                  | 1.3  | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) (90 <sup>th</sup> percentile)   | June 2023   | ND                                       | 0                                  | 0    | AL=15  | Corrosion of household plumbing systems; erosion of natural deposits |

### Total Organic Carbon (TOC)

| Contaminant (units)                                 | TT Violation Y/N | Your Water (lowest RAA) | Range Monthly Removal Ratio Low - High | MCLG | Treatment Technique (TT) violation if:                                  | Likely Source of Contamination       |
|-----------------------------------------------------|------------------|-------------------------|----------------------------------------|------|-------------------------------------------------------------------------|--------------------------------------|
| Total Organic Carbon (TOC) Removal Ratio (no units) | N                | 1.23                    | 1.23 – 1.93                            | N/A  | Removal Ratio RAA <1.00 and alternative compliance criteria was not met | Naturally present in the environment |

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

### Other Miscellaneous Water Characteristics Contaminants

| Contaminant (units) | Sample Date | Your Water | Range |       | SMCL       |
|---------------------|-------------|------------|-------|-------|------------|
|                     |             |            | Low   | High  |            |
| Sodium (ppm)        | 1/9/23      | 30.60      | 18.60 | 30.60 | N/A        |
| Sulfate (ppm)       | 1/9/23      | 49         | ND    | 49    | 250        |
| pH                  | 1/1 – 12-31 | 7.78       | 6.9   | 8.5   | 6.5 to 8.5 |

### Disinfectant Residuals Summary

| Disinfectant      | MRDL Violation Y/N | Your Water (RAA) | Range |      | MRDLG | MRDL | Likely Source of Contamination          |
|-------------------|--------------------|------------------|-------|------|-------|------|-----------------------------------------|
|                   |                    |                  | Low   | High |       |      |                                         |
| Chlorine (ppm)    | N                  | 1.97 mg/L        | 1.55  | 2.20 | 4     | 4.0  | Water additive used to control microbes |
| Chloramines (ppm) | N                  | 3.03 mg/L        | 1.37  | 3.49 | 4     | 4.0  | Water additive used to control microbes |

## Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5)

| Disinfection Byproduct | Year Sampled | MCL Violation Y/N | Your Water (Highest LRAA) | Range<br>Low High | MCLG | MCL | Likely Source of Contamination           |
|------------------------|--------------|-------------------|---------------------------|-------------------|------|-----|------------------------------------------|
| TTHM (ppb)             | 2023         | N                 |                           |                   | N/A  | 80  | Byproduct of drinking water disinfection |
| B01                    |              |                   | 48                        | 35 - 68           |      |     |                                          |
| B02                    |              |                   | 48                        | 37 - 65           |      |     |                                          |
| B03                    |              |                   | 50                        | 39 - 65           |      |     |                                          |
| B04                    |              |                   | 47                        | 35 - 63           |      |     |                                          |
| B05                    |              |                   | 50                        | 34 - 71           |      |     |                                          |
| B06                    |              |                   | 50                        | 37 - 61           |      |     |                                          |
| B07                    |              |                   | 49                        | 38 - 67           |      |     |                                          |
| B08                    |              |                   | 45                        | 30 - 64           |      |     |                                          |
| HAA5 (ppb)             | 2023         | N                 |                           |                   | N/A  | 60  | Byproduct of drinking water disinfection |
| B01                    |              |                   | 27                        | 21 - 45           |      |     |                                          |
| B02                    |              |                   | 27                        | 17 - 41           |      |     |                                          |
| B03                    |              |                   | 27                        | 18 - 42           |      |     |                                          |
| B04                    |              |                   | 27                        | 16 - 38           |      |     |                                          |
| B05                    |              |                   | 30                        | 20 - 48           |      |     |                                          |
| B06                    |              |                   | 32                        | 18 - 49           |      |     |                                          |
| B07                    |              |                   | 28                        | 19 - 42           |      |     |                                          |
| B08                    |              |                   | 26                        | 17 - 38           |      |     |                                          |

## *Cryptosporidium*

Our system monitored for *Cryptosporidium* and found levels of 0.09 oocysts/liter in April 2017. In 2017, the highest concentration found in the Cape Fear River was 0.09 oocysts/liter in April of that year.

*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they can cause disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

## Unregulated Contaminants

### **1,4-dioxane**

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determine the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted. Although, the EPA has not set a Maximum Contaminant Level for 1,4-dioxane, they have issued an advisory lifetime health goal of less than 35 ug/L for drinking water.

| Sample Dates<br>2022 | P.O. Hoffer<br>Point of Entry (ug/L) |
|----------------------|--------------------------------------|
| 1/25/22              | 0.36                                 |
| 2/9/22               | 0.47                                 |
| 3/14/22              | 0.28                                 |
| 4/12/22              | 0.39                                 |
| 5/16/22              | 0.36                                 |
| 6/23/22              | BQL                                  |
| 7/20/22              | 1.23                                 |
| 8/24/22              | BQL                                  |
| 9/19/22              | BQL                                  |
| 10/13/22             | BQL                                  |
| 11/10/22             | BQL                                  |
| 12/7/22              | 1.15                                 |

| Sample Dates<br>2023 | P.O. Hoffer<br>Point of Entry (ug/L) |
|----------------------|--------------------------------------|
| 1/17/23              | BQL                                  |
| 2/15/23              | BQL                                  |
| 3/15/23              | BQL                                  |
| 4/20/23              | BQL                                  |
| 5/23/23              | BQL                                  |
| 6/7/23               | BQL                                  |
| 7/20/23              | BQL                                  |
| 8/9/23               | 0.75                                 |
| 9/13/23              | BQL                                  |
| 10/19/23             | 0.49                                 |
| 11/15/23             | 0.50                                 |
| 12/14/23             | 0.55                                 |

\*BQL – Below Quantifiable Limit

*PWC meets or surpasses all the standard requirements annually. While 1,4-Dioxane has been detected in the Cape Fear River as well as other areas in our region, state and nation, the Environmental Protection Agency (EPA) currently has no standards for 1,4-Dioxane and has not yet issued regulated safe limits. If the EPA believed 1,4 Dioxane was an immediate threat, a directive would have been issued. Since 1,4-Dioxane cannot be removed through our traditional water treatment process, we have partnered with other communities to research and identify its sources to reduce or eliminate it so there will be no long-term exposure to our customers. You can find additional information on our website: [www.faypwc.com/the-facts-about-1-4-dioxane/](http://www.faypwc.com/the-facts-about-1-4-dioxane/)*

## Per- and Polyfluoroalkyl Substances (PFOA and PFOS)

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that have been in use since the 1940s and are (or have been) found in many consumer products like cookware, food packaging, and stain repellants. PFAS manufacturing and processing facilities, airports, and military installations that use firefighting foams are some of the main sources of PFAS. PFAS may be released into the air, soil, and water, including sources of drinking water. Perfluorooctanesulfonic acid (PFOA) and Perfluorooctanoic acid (PFOS) are the most studied PFAS chemicals and have been voluntarily phased out by industry, though they are still persistent in the environment.

Recent testing has detected PFOA and PFOS in Fayetteville's drinking water. The table below shows our monitoring results for combined PFOS and PFOA at PWC's water treatment Point of Entry (POE). POE refers to water that has undergone all treatment steps at the water treatment facilities, and is ready to be pumped to you, our customer.

EPA issues *health advisories*, which are based on the best available peer-reviewed studies about the health effects of the unregulated chemicals. *Health advisories* provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's *health advisories* are non-enforceable and non-regulatory and provide technical information to states agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water.

Fayetteville PWC is working to stay ahead of the science, as these substances continue to be measured at ever smaller concentrations. With modern laboratory methods, these substances can now be measured down to parts per trillion concentrations. For comparison, 1 part per trillion is approximately the equivalent of one drop of water in 10 million gallons of water. PWC reports the formal results of regulatory testing and unregulated contaminant monitoring in our annual Consumer Confidence Report, which provides an annual summary of water system operations and water quality management throughout the water system.

*The table below shows the total concentration of the 42 PFAS unregulated compounds for which PWC monitors quarterly, as well as the total concentration of the combination of PFOS and PFOA, which although unregulated, does have an EPA Health Advisory level of 40 ppt.*

| Date    | P.O. Hoffer<br>Source Water<br>Total PFAS<br>(ppt) | EPA Proposed<br>MCL<br>(ppt) | P.O. Hoffer<br>Point of Entry<br>Total PFAS<br>(ppt) | EPA<br>Proposed<br>MCL<br>Exceeded |
|---------|----------------------------------------------------|------------------------------|------------------------------------------------------|------------------------------------|
| 01/2023 | 46.99                                              | 4                            | 48.20                                                | Yes                                |
| 03/2023 | 51.45                                              | 4                            | 64.44                                                | Yes                                |
| 05/2023 | 62.91                                              | 4                            | 59.88                                                | Yes                                |
| 07/2023 | 34.48                                              | 4                            | 39.97                                                | Yes                                |
| 10/2023 | 96.60                                              | 4                            | 92.30                                                | Yes                                |

| Date    | Glenville Lake<br>Source Water<br>Total PFAS<br>(ppt) | EPA Proposed<br>MCL<br>(ppt) | Glenville Lake<br>Point of Entry<br>Total PFAS<br>(ppt) | EPA<br>Proposed<br>MCL<br>Exceeded |
|---------|-------------------------------------------------------|------------------------------|---------------------------------------------------------|------------------------------------|
| 01/2023 | 77.87                                                 | 4                            | 19.20                                                   | Yes                                |
| 03/2023 | 74.21                                                 | 4                            | 76.28                                                   | Yes                                |
| 05/2023 | 65.50                                                 | 4                            | 73.40                                                   | Yes                                |
| 07/2023 | 71.59                                                 | 4                            | 65.31                                                   | Yes                                |
| 10/2023 | 78.95                                                 | 4                            | 113.40                                                  | Yes                                |

## ***2023 Annual Drinking Water Quality Report***

### ***DOC-MCCAIN HOSPITAL***

Water System Number: NC0347108

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.**

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### **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. Immuno-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).

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. Doc-McCain Hospital 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 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 <http://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. 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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 water that is used by this system is 100 % ground water sourced from 4 wells located within Hoke County.

### **Source Water Assessment Program (SWAP) Results**

The North Carolina Department of Environmental Quality (DEQ), 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 Doc-McCain Hospital 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 are summarized in the table below:

| Susceptibility of Sources to Potential Contaminant Sources (PCSs) |                       |                  |
|-------------------------------------------------------------------|-----------------------|------------------|
| Source Name                                                       | Susceptibility Rating | SWAP Report Date |
| Well # 1                                                          | Moderate              | September 2020   |
| Well #3                                                           | Moderate              | September 2020   |
| Well #5                                                           | Moderate              | September 2020   |
| Well #7                                                           | Moderate              | September 2020   |

The complete SWAP Assessment report for Doc-McCain Hospital may be viewed on the Web at: <https://www.ncwater.org/?page=600> Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to [swap@deq.nc.gov](mailto:swap@deq.nc.gov). Please indicate your system name, number, 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 by phone 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.

### Help Protect Your Source Water

Protection of drinking water is everyone’s responsibility. We have implemented the following source water protection actions: Wellhead Protection Plan. You can help protect your community’s drinking water source(s) in several ways: (examples: dispose of chemicals properly; take used motor oil to a recycling center, volunteer in your community to participate in group efforts to protect your source, etc.).

### Violations that Your Water System Received for the Report Year

We are pleased to report that there were no violations during the 2023 compliance period.

### Important Drinking Water Definitions:

- *Not-Applicable (N/A)* – Information not applicable/not required for that particular water system or for that particular rule.
- *Non-Detects (ND)* - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.
- *Parts per million (ppm) or Milligrams per liter (mg/L)* - One part per million corresponds 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.
- *Picocuries per liter (pCi/L)* - Picocuries per liter is a measure of the radioactivity in water.
- *Locational Running Annual Average (LRAA)* – 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.
- *Running Annual Average (RAA)* – The average of sample analytical results for samples taken during the previous four calendar quarters.
- *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.

### Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2023.** The EPA and the State allow 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.

**Nitrate/Nitrite Contaminants**

| Contaminant (units)         | Sample Date | MCL Violation Y/N | Your Water | Range |      | MCLG | MCL | Likely Source of Contamination                                                              |
|-----------------------------|-------------|-------------------|------------|-------|------|------|-----|---------------------------------------------------------------------------------------------|
|                             |             |                   |            | Low   | High |      |     |                                                                                             |
| Nitrate (as Nitrogen) (ppm) | 02-2023     | N                 | 1.27 ppm   | N/A   |      | 10   | 10  | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Nitrite (as Nitrogen) (ppm) | 02-2023     | N                 | ND         | N/A   |      | 1    | 1   | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

**Radiological Contaminants**

| Contaminant (units)     | Sample Date | MCL Violation Y/N | Your Water (RAA) | Range |      | MCLG | MCL | Likely Source of Contamination |
|-------------------------|-------------|-------------------|------------------|-------|------|------|-----|--------------------------------|
|                         |             |                   |                  | Low   | High |      |     |                                |
| Combined radium (pCi/L) | 05-2022     | N                 | 3.9              | N/A   |      | 0    | 5   | Erosion of natural deposits    |

**Disinfectant Residuals Summary**

|                | MRDL Violation Y/N | Your Water (RAA) | Range       |      | MRDLG | MRDL | Likely Source of Contamination          |
|----------------|--------------------|------------------|-------------|------|-------|------|-----------------------------------------|
|                |                    |                  | Low         | High |       |      |                                         |
| Chlorine (ppm) | N                  | 1.5              | 1.44 - 1.56 |      | 4     | 4.0  | Water additive used to control microbes |

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

**Other Miscellaneous Water Characteristics Contaminants**

| Contaminant (units) | Sample Date | Your Water | Range |      | SMCL       |
|---------------------|-------------|------------|-------|------|------------|
|                     |             |            | Low   | High |            |
| Sodium (ppm)        | 03-2022     | 10.10 ppm  | N/A   |      | N/A        |
| pH                  | 03-2022     | 6.96       | N/A   |      | 6.5 to 8.5 |

**FOG (fats, oils, and grease)**

You may not be aware of it, but every time you pour fat, oil, or grease (FOG) down your sink (e.g., bacon grease), you are contributing to a costly problem in the sewer collection system. FOG coats the inner walls of the plumbing in your house as well as the walls of underground piping throughout the community. Over time, these greasy materials build up and form blockages in pipes, which can lead to wastewater backing up into parks, yards, streets, and storm drains. These backups allow FOG to contaminate local waters, including drinking water. Exposure to untreated wastewater is a public health hazard. FOG discharged into septic systems and drain fields can also cause malfunctions, resulting in more frequent tank pump-outs and other expenses. Communities spend billions of dollars every year to unplug or replace grease-blocked pipes, repair pump stations, and clean up costly and illegal wastewater spills. Here are some tips that you and your family can follow to help maintain a well-run system now and in the future.

**NEVER:**

- Pour fats, oil, or grease down the house or storm drains.
- Dispose of food scraps by flushing them.
- Use the toilet as a waste basket.

**ALWAYS:**

- Scrape and collect fat, oil, and grease into a waste container such as an empty coffee can; and dispose of it with your garbage.
- Place food scraps in waste containers or garbage bags for disposal with solid wastes.
- Place a wastebasket in each bathroom for solid wastes like disposable diapers, creams and lotions, and personal hygiene products, including nonbiodegradable wipes.

## ***2023 Annual Drinking Water Quality Report***

*Hoke County Regional Water System – PWS ID# 03-47-025*

*Hoke County/Rockfish Water System – PWS ID# 03-47-030*

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 providing you with this information because informed customers are our best allies. **If you have any questions about this report or concerning your water, please contact Randy Wright, Hoke County Water Treatment ORC at 910-875-6704. We want our valued customers to be informed about their water utility.**

### **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. Immuno-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).

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. Hoke County Regional Water System 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 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 <http://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. 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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 (Eastern & Southern Hoke County)**

The water that is used by this system is groundwater from wells located throughout Hoke County. We have wells on Twin Creeks Drive, Noble Drive, Doc Brown Road, Adcox Road, Carolina Drive, Goose Pond Road, MacKay Court, McDougald Drive, Brock Road, Johnson Mill Road, Scull Road and Golf Course Road.

Each well has a 100-foot protected area from potential sources of contamination. Our treatment process includes disinfection, pH adjustment and corrosion control at each entry point. We have iron filtration treatment at Goose Pond Road and Golf Course Road. Some of the water used in our system (Rockfish area) is purchased from the Fayetteville Works Commission (PWC). PWC's water comes from the Cape Fear River, Little Cross Creek Watershed and Big Cross Creek.

### **When You Turn on Your Tap, Consider the Source (Western Hoke County)**

The water serving your home or business may have been pumped from a deep well located on Neill Sinclair road which draws from the Black Creek aquifer or purchased from McCain Correctional Hospital owned by the State of North Carolina Department of Corrections. McCain has four deep wells that draw from the Black Creek aquifer. All are located in the McCain Community, east of NC #211 near the Fort Liberty military reservation boundary.

### **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 Hoke County Regional Water System 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 are summarized in the table below:

#### **Susceptibility of Sources to Potential Contaminant Sources (PCSs)**

| Source Name                           | Susceptibility Rating | SWAP Report Date   |
|---------------------------------------|-----------------------|--------------------|
| Wells #1 & #2, Antioch (EP1)          | Moderate              | September 10, 2020 |
| Wells #3 & #10, Airport (EP2)         | Moderate              | September 10, 2020 |
| Wells #4, #5A** & #9**, Wayside (EP3) | Higher                | September 10, 2020 |
| Wells #6 #14, Doc Brown Road (EP4)    | Moderate              | September 10, 2020 |
| Wells #7 & #17, Arabia (EP5)          | Moderate              | September 10, 2020 |
| Wells #13 & #18, Neill Sinclair (EP9) | Moderate              | September 10, 2020 |
| Wells #15 & #16, Adcox Road (E10)     | Moderate              | September 10, 2020 |
| Well #19 (E19)                        | Moderate              | September 10, 2020 |
| Well #20 (E20)                        | Moderate              | September 10, 2020 |
| Well #21 (E21)                        | Moderate              | September 10, 2020 |
| Wells #22, 23 & #24, Brock (E23)      | Moderate              | September 10, 2020 |
| Wells #25, #26, #27, #28, Brock (E26) | Moderate              | September 10, 2020 |

\*\*Wells 5A and 9 are rated as Moderate

In addition to the sources listed above, this water system has interconnections to allow for the purchase of water from the following water system(s) or seller system(s): Fayetteville PWC A, Hillcrest-Scurlock Water, McCain Hospital A and B, and Robeson Co. Water Systems A, B, C. 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 complete SWAP Assessment report for Hoke County Regional Water may be viewed on the Web at: <https://www.ncwater.org/?page=600>. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to [swap@ncdenr.gov](mailto:swap@ncdenr.gov). Please indicate your system name, number 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 by phone at 919-707-9098.

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the systems’ potential to become contaminated by PCS’s in the assessment area

### **Help Protect Your Source Water**

Protection of drinking water is everyone’s responsibility. You can help protect your community’s drinking water sources in several ways: disposing of chemicals properly; taking used motor oil to a recycling center, volunteering in your community to participate in group efforts to protect your source are a few examples.

### **Violations that Your Water System Received for the Report Year**

During 2023, we are pleased to announce we had no violations.

### **Important Drinking Water Definitions:**

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

**Non-Detects (ND)** - Lab analysis indicates the contaminant is not present at the level of detection set for the particular methodology used.

**Parts per million (ppm) or Milligrams per liter (mg/L)** - One part per million corresponds to one minute in 2 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.

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

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

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

**Maximum Residual Disinfection 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 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.

**Locational Running Annual Average (LRAA)** – 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 / Disinfection Byproducts Rule.

**Running Annual Average (RAA)** – The average of sample analytical results for samples taken during the previous four calendar quarters.

**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.

### **Water Quality Data Tables of Detected Contaminants**

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2023.** The EPA and the State allow 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.

#### **Disinfectant Residuals Summary (03-47-025)**

| Contaminant (units) | Year Sampled | MRDL Violation Y/N | Your Water (highest RAA) | Range Low High | MRDLG | MRDL | Likely Source of Contamination          |
|---------------------|--------------|--------------------|--------------------------|----------------|-------|------|-----------------------------------------|
| Chlorine (ppm)      | 2023         | N                  | 1.20                     | 1.13 1.26      | 4     | 4.0  | Water additive used to control microbes |

#### **Disinfectant Residuals Summary (03-47-030)**

| Contaminant (units) | Year Sampled | MRDL Violation Y/N | Your Water (highest RAA) | Range Low High | MRDLG | MRDL | Likely Source of Contamination          |
|---------------------|--------------|--------------------|--------------------------|----------------|-------|------|-----------------------------------------|
| Chlorine (ppm)      | 2023         | N                  | 1.23                     | 1.10 1.36      | 4     | 4.0  | Water additive used to control microbes |
| Chloramine (ppm)    | 2023         | N                  | 2.38                     | 2.31 2.44      | 4     | 4.0  | Water additive used to control microbes |

#### **Lead and Copper Contaminants (03-47-030)**

| Contaminant (units)                        | Sample Date | Your Water | # of sites found above the AL | MCLG | AL     | Likely Source of Contamination                                       |
|--------------------------------------------|-------------|------------|-------------------------------|------|--------|----------------------------------------------------------------------|
| Copper (ppm) (90 <sup>th</sup> percentile) | 09-2022     | 0.05       | 0                             | 1.3  | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |

#### **Stage 2 Disinfection Byproduct Compliance - Based upon Locational Running Annual Average (LRAA) (03-47-025)**

| Disinfection Byproduct | Sample Date | MCL Violation Y/N | Your Water (highest LRAA) (ppb) | Range Low High | MCLG | MCL | Likely Source of Contamination           |
|------------------------|-------------|-------------------|---------------------------------|----------------|------|-----|------------------------------------------|
| TTHM - Site B01        | 2023        | N                 | 7.14                            | 0 – 8.3        | N/A  | 80  | Byproduct of drinking water disinfection |
| HAA5 - Site B01        | 2023        | N                 | 6.0                             | 0 – 1          | N/A  | 60  |                                          |

**Stage 2 Disinfection Byproduct Compliance - Based upon Locational Running Annual Average (LRAA) (03-47-030)**

| Disinfection Byproduct | Sample Date | MCL Violation Y/N | Your Water (highest LRAA) (ppb) | Range Low High | MCLG | MCL | Likely Source of Contamination           |
|------------------------|-------------|-------------------|---------------------------------|----------------|------|-----|------------------------------------------|
| TTHM - Site B01        | 2023        | N                 | 49.8                            | 31.4 – 69.3    | N/A  | 80  | Byproduct of drinking water disinfection |
| TTHM - Site B02        | 2023        | N                 | 48.9                            | 35.7 – 63.4    | N/A  | 80  |                                          |
| HAA5 - Site B01        | 2023        | N                 | 24.8                            | 17 – 35        | N/A  | 60  |                                          |
| HAA5 - Site B02        | 2023        | N                 | 28.8                            | 19 – 36        | N/A  | 60  |                                          |

**Nitrate/Nitrite Contaminants (11/2023) (03-47-025)**

| Contaminant (ppm)         | MCL Violation Y/N | Your Water | Range Low High | MCLG | MCL | Likely Source of Contamination                                                              |
|---------------------------|-------------------|------------|----------------|------|-----|---------------------------------------------------------------------------------------------|
| Nitrate (as Nitrogen) ppm |                   |            |                |      |     |                                                                                             |
| EP2                       | N                 | 3.5        | N/A            | 10   | 10  | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| EP3                       | N                 | 3.3        |                |      |     |                                                                                             |
| EP9                       | N                 | 1.8        |                |      |     |                                                                                             |
| E10                       | N                 | 1.7        |                |      |     |                                                                                             |
| E23                       | N                 | 3.5        |                |      |     |                                                                                             |
| E26                       | N                 | 2.5        |                |      |     |                                                                                             |

**UCMR4 - Metals Testing (03-47-025)**

| Location                 | Sample Date | Analysis              |                       |
|--------------------------|-------------|-----------------------|-----------------------|
|                          |             | Manganese (EPA 200.8) | Germanium (EPA 200.8) |
| EP1 Wells 1 & 2          | 03/18/20    | 21 ug/L               |                       |
| EP2 Wells 3 & 10         | 03/18/20    | 3.1 ug/L              |                       |
| EP3 Wells 4, 5A & 9      | 03/17/20    | 13 ug/L               |                       |
| EP4 Wells 6 & 14         | 03/17/20    | 1 ug/L                |                       |
| EP5 Wells 7 & 17         | 03/18/20    | 8 ug/L                |                       |
| EP9 Wells 13 & 18        | 03/18/20    | 2 ug/L                |                       |
| E19 Well 19              | 04/22/20    | 3.9 ug/L              |                       |
| E21 Well 21              | 03/17/20    | 12 ug/L               |                       |
| E23 Wells 22, 23, 24     | 03/17/20    | 12 ug/L               |                       |
| CM5 Wells 15 & 16        | 04/22/20    | 15 ug/L               | 0.30 ug/L             |
| CM9 Wells 25, 26, 27, 28 | 04/22/20    | 8.2 ug/L              |                       |
| EP1 Wells 1 & 2          | 09/18/20    | 22 ug/L               |                       |
| EP2 Wells 3 & 10         | 09/18/20    | 1.7 ug/L              |                       |
| EP3 Wells 4, 5A & 9      | 09/22/20    | 16 ug/L               |                       |
| EP4 Wells 6 & 14         | 09/22/20    | 1.1 ug/L              |                       |
| EP5 Wells 7 & 17         | 09/18/20    | 12 ug/L               |                       |
| EP9 Wells 13 & 18        | 09/18/20    | 1.8 ug/L              |                       |
| E19 Well 19              | 09/22/20    | 3.5 ug/L              |                       |
| E21 Well 21              | 09/22/20    | 3.4 ug/L              |                       |
| E23 Wells 22, 23, 24     | 09/22/20    | 6.8 ug/L              |                       |
| E29 Wells 29 & 30        | 09/18/20    | 0.82 ug/L             |                       |
| CM5 Wells 15 & 16        | 09/22/20    | 15 ug/L               | 0.33 ug/L             |
| CM9 Wells 25, 26, 27, 28 | 09/18/20    | 12 ug/L               |                       |

**Inorganic Contaminants (03-47-025)**

| Contaminant (units)  | Sample Date | MCL Violation Y/N | Your Water | Range Low High | MCLG | MCL | Likely Source of Contamination                                                                                            |
|----------------------|-------------|-------------------|------------|----------------|------|-----|---------------------------------------------------------------------------------------------------------------------------|
| Fluoride (ppm) – E10 | 11/2022     | N                 | 0.13       | N/A            | 4    | 4   | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Fluoride (ppm) – E20 | 11/2022     | N                 | 0.11       | N/A            | 4    | 4   | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

#### Other Miscellaneous Water Characteristics Contaminants (03-47-025)

| Contaminant (mg/L) | Sample Date | Well | Your Water (mg/L) | Range Low High | Secondary MCL |
|--------------------|-------------|------|-------------------|----------------|---------------|
| Iron               | 11/2022     | EP1  | 0.14              | N/A            | 0.3 mg/L      |
| Iron               | 11/2022     | EP5  | 0.78              | N/A            | 0.3 mg/L      |
| Iron               | 11/2022     | E10  | 0.34              | N/A            | 0.3 mg/L      |
| Manganese          | 11/2022     | EP1  | 0.020             | N/A            | 0.05 mg/L     |
| Manganese          | 11/2022     | EP3  | 0.016             | N/A            | 0.05 mg/L     |
| Manganese          | 11/2022     | E10  | 0.017             | N/A            | 0.05 mg/L     |
| Manganese          | 11/2022     | E23  | 0.014             | N/A            | 0.05 mg/L     |
| pH                 | 11/2022     | EP1  | 7.4               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | EP2  | 7.0               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | EP3  | 9.3               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | EP4  | 7.5               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | EP5  | 7.0               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | EP9  | 5.5               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | E10  | 7.6               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | E19  | 7.1               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | E20  | 7.2               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | E21  | 7.3               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | E23  | 7.2               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | E26  | 7.1               | N/A            | 6.5 to 8.5    |
| pH                 | 11/2022     | E29  | 7.0               | N/A            | 6.5 to 8.5    |
| Sodium             | 11/2022     | EP1  | 10.6              | N/A            | N/A           |
| Sodium             | 11/2022     | EP2  | 16.7              | N/A            | N/A           |
| Sodium             | 11/2022     | EP3  | 49.6              | N/A            | N/A           |
| Sodium             | 11/2022     | EP4  | 13.6              | N/A            | N/A           |
| Sodium             | 11/2022     | EP5  | 11.5              | N/A            | N/A           |
| Sodium             | 11/2022     | EP9  | 4.4               | N/A            | N/A           |
| Sodium             | 11/2022     | E10  | 25.2              | N/A            | N/A           |
| Sodium             | 11/2022     | E19  | 16.6              | N/A            | N/A           |
| Sodium             | 11/2022     | E20  | 34.9              | N/A            | N/A           |
| Sodium             | 11/2022     | E21  | 15.7              | N/A            | N/A           |
| Sodium             | 11/2022     | E23  | 24.0              | N/A            | N/A           |
| Sodium             | 11/2022     | E26  | 21.4              | N/A            | N/A           |
| Sodium             | 11/2022     | E29  | 15.2              | N/A            | N/A           |

#### Radioactive Contaminants (03-47-025)

| Contaminant (units)                                                 | Sample Date        | MCL Violation Y/N | Your Water (average) | MCLG | MCL | Likely Source of Contamination |
|---------------------------------------------------------------------|--------------------|-------------------|----------------------|------|-----|--------------------------------|
| Alpha emitters (pCi/L)<br>(Gross Alpha Excluding Radon and Uranium) |                    |                   |                      |      |     |                                |
| EP3                                                                 | 11/2022            | N                 | 7.2                  | 0    | 5   | Erosion of natural deposits    |
| E10                                                                 | 11/2022            | N                 | 3.3                  |      |     |                                |
| E26                                                                 | 11/2022            | N                 | 6.8                  |      |     |                                |
| Combined radium (pCi/L)                                             |                    |                   |                      |      |     |                                |
| E10                                                                 | 11/2022            | N                 | 1.0                  | 0    | 5   | Erosion of natural deposits    |
| E20                                                                 | 12/18 & 2.5,8/2019 | N                 | 1.5                  |      |     |                                |
| E26                                                                 | 8/2019             | N                 | 1.5                  |      |     |                                |