

**2022 WATER QUALITY REPORT FOR THE  
ST. JAMES SCHOOL WATER SYSTEM  
PWSID # 0210209  
April, 2023**

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. 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.

The St. James School Water System utilizes a spring as its water source. The spring was determined to be under the direct influence of surface water by the Maryland Department of the Environment in 1999. Therefore, St. James School upgraded the water treatment facility to treat the spring water in accordance with the regulations. This treatment includes filtration, chlorination, pH adjustment, softening and ultra violet disinfection prior to entering the distribution system. In 2003, a well was placed into operation as a back up water supply. However, this water source was not utilized in the water system during 2022.

A source water assessment was performed by the Maryland Department of the Environment (MDE) and is available on their website: ***Results of the assessment can be found on the MDE website:*** [https://mde.maryland.gov/programs/Water/water\\_supply/Source\\_Water\\_Assessment\\_Program/Pages/by\\_county.aspx](https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx)

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/Centers for Disease Control (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).

St. James School routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2022. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- *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* - 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 Microgram per liter*- one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- *Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- *Maximum Contaminant Level* - The “Maximum Allowed” (MCL) is 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* - The “Goal”(MCLG) is 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.
- *Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*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.

#### TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Turbidity	N	0.29	ntu	n/a	TT= 1 NTU	Soil runoff
<b>Inorganic Contaminants</b>						
Copper (distribution) (2021)	N	0.3090	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (distribution) (2021)	N	2.56	ppb	0	15	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate ( measured as Nitrogen) (2022) Range	N	6 4.4-5.6	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits
Fluoride (2022)	N	0.1	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Disinfectants</b>						
Chlorine (2022)	N	0.9	ppm	4	4	Water additive used to control microbes

Radioactive Contaminants						
Combined Radium 226/228 (2021)	N	0.1	pCi/L	0	5	Erosion of natural deposits
Gross Alpha Excluding radon and Uranium (2021)	N	3.9	pCi/L	0	15	Erosion of natural deposits
Disinfection By-products						
TTHM (2022) [Total trihalomethanes]	N	3.03	ppb	0	80	By-product of drinking water chlorination
HAA5 (Haloacetic Acids)	N	1.66	ppb	0	60	By product of drinking water chlorination
Unregulated Contaminants						
PFOS (10/2022)	N	2.36	ppt	n/a	n/a	Human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams.
PFBS (10/2022)	N	2.03	Ppt	n/a	n/a	Human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams.
PFHxS (10/2022)	N	2.07	ppt	n/a	n/a	Human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams.

Note: Test results are for year 2022 unless noted otherwise; testing for all contaminants is not required annually.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

Nitrate [measured as Nitrogen] - 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."

NOTE: As can be seen by results listed in the above tables, lead, is tested in accordance with Federal and State regulations

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. Saint James School is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in

your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Saint James School at 301-733-9330. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

PFAS – or per- and polyfluoroalkyl substances – refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. PFOA and PFOS are two of the most prevalent PFAS compounds. PFOA and PFOS concentrations from samples taken from our water system in 2022 were [0.0] parts per trillion (ppt) and [2.36] ppt, respectively. In March 2023, EPA announced proposed Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs or Hazard Index. EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: [mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx](https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx)

The Maryland Rural Water Association's State Circuit Rider assisted with the completion of this report.

#### **Violation:**

**NITRATE (measured as Nitrogen) MONITORING, ROUTINE MAJOR 10/01/2022-12/31/2022** We failed to test our drinking water for the contaminant and the period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated may die. Symptoms include shortness of breath and baby blue syndrome.

If you have any questions about this report please contact Mr. William Wivel at 301-733-9330.