

Estill Springs Water Quality Report 2022

Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 12 of these contaminants. We found all of these contaminants at safe levels.

What is the source of my water?

Your water comes from an underground spring. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water supply to contamination. A well head protection plan is available for your review by contacting Mr. John k. Jones at Estill Springs Water Dept between 7:30A.M and 3:30 p.m. During the time period of January 28, 2022 through March 29, 2022 Water was purchased from Decherd water system and Winchester Utilities due to water treatment plant renovations. Within this CCR both utilities water quality data is included. For any questions regarding this data please contact Estill Springs City Hall at (931)-649-5188.

Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Community water systems are required to disclose the detection of contaminants; however, bottled water companies are not required to comply with this regulation. 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).

For more information about your drinking water, please call Estill Springs City Hall at (931) 649-5188

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

How can I get involved?

Our Water Board meets on the first Thursday of each month at 7:00 p.m. at 308 South Main St, Estill Springs, TN. Please feel free to get your name on the agenda to participate in these meetings.

Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. We want you to know that we pay attention to all the rules.

Other Information

Due to all water containing dissolved contaminants, occasionally your water may exhibit slight discoloration. We strive to maintain the standards to prevent this. We at Estill Springs Water System work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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 under-gone 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 not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Water Quality Data

What does this chart mean?

- **MCLG** - Maximum Contaminant Level Goal, or 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.
- **MCL** - Maximum Contaminant Level or 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. 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 described health effect.
- **AL** - Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **(ppm)** -- Parts per million or Milligrams per liter (mg/l) - explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **(ppb)** - Parts per billion or Micrograms per liter - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **NTU** - Nephelometric Turbidity Unit – is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to most people.
- **TT** - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.
- * **MRDL**- Maximum Residential Disinfectant Level 'The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- **MRDLG** - Maximum Residential Disinfectant Level Goal'-The level of 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. Unless otherwise noted, the data presented in this table is from sampling performed during the 2020 calendar year.
- * **ND** - Non Detects – Laboratory analysis indicates that the contaminant is not present

Contaminant	Violation Yes/No	Level Found	Range of Detection	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	No	all-neg	n/a	2022	n/a	0	>1 positive sample	Naturally present in the environment
Turbidity	No	.0695 avg	.03-.15	2022	NTU	N/A	TT	Soil runoff
Fluoride	No	.72 avg	.38-.98	2022	ppm	0.70	2.0	Water additive promoting strong teeth;
Nitrate	No	1.2		8/22	ppm	N/A	10.0	Run off from fertilizer use;
Copper	No	90% 0.723		8/22	ppm	1.3	AL=1.3	leaking from septic tanks, sewage, erosion from natural deposits.
Lead	No	90% ND		8/22	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Sodium	No	5.05		8/20	ppm	N/A	N/A	Corrosion of household plumbing systems, erosion of natural deposits
Total Organic Carbon	No	process ND	ND	2022	ppm	N/A	TT	Erosion of natural deposits: used in water treatment
Haloacetic Acids (HAA5s)	No	.00109	0-.00121	8/22	ppm	N/A	.060	Naturally present in the environment
Total Trihalomethanes (TTHMs)	No	.00356	0-.00454	8/22	ppm	N/A	.080	By-product of drinking water disinfection
Chlorine	No	1.37 avg	1.04-1.53	2021	ppm	MRDLG =4 ppm	MRDL =4 ppm	By-product of drinking water chlorination
Atrazine	No	ND	ND	4/20	ppb	3	3	Drinking water disinfectant
								Run off from herbicide used on row crops

Winchester Utilities

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	No	1		2022		0	TT Treatment Technique	Naturally present in the environment
TOC ¹ (Total Organic Carbon)	No	48.20% removal		2022		35% removal	TT	Naturally occurring in the environment
Turbidity ²	No	0.12	.	2022	NTU	N/A	TT	Soil runoff
Copper ³	No	90th%=0.13		2020	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead ³	No	90th%=0.002		2020	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Chlorine	No	2.59 Avg.		2022	ppm	MRDLG 4	MRDL=4	Disinfectant to control microbes
Sodium	No	4.93		2022	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
THAA (Total Haloacetic Acids)	No	31 Avg.	6-55	2022	ppb	0	60	By-product of drinking water chlorination
THM (Total Trihalomethanes ⁴)	No	27 Avg.	9-80	2022	ppb	0	80	By-product of drinking water chlorination
Chlorite	No	0.407 Avg.	0.01-0.99	2022	ppm	0.8	1	By-product of chlorine dioxide use
Chlorine Dioxide	No	0.07 Avg.	1-260	2022	Ppb	800	800	Disinfectant to control microbes
Atrazine	No	0.0001	0	2022	mg/l	0.003	0.003	Herbicide-Weed Control
2, 4-D	No	ND	0	2022	mg/l	0.07	0.07	Herbicide -Weed Control
Tim's Ford Lake Cryptosporidium	No	0.017	0-1.3	2018	Oocysts/L	N/A	N/A	Human or Animal Waste
Nitrate	No	0.606	0	2022	Mg/l	10	10	Nitrate accumulates in agricultural watersheds where spread inorganic fertilizers and animal manures on cropland.

UCMR4 Winchester Utilities

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Manganese	No	1.16 avg.	0.40-2.1	Quarterly	ppb	N/A	N/A	Naturally Present in Environment
Bromochloroacetic Acid	No	2.04 avg.	1.4-2.6	Quarterly	ppb	N/A	N/A	By-product of Drinking water disinfection
Bromodichloroacetic Acid	No	1.99 avg.	1.4-2.4	Quarterly	ppb	N/A	N/A	By-product of Drinking water disinfection
Chlorodibromoacetic Acid	No	0.35 avg.	0.00-0.50	Quarterly	ppb	N/A	N/A	By-product of Drinking water disinfection
Dibromoacetic Acid	No	0.05 avg.	0.00-0.34	Quarterly	ppb	N/A	N/A	By-product of Drinking water disinfection
Dichloroacetic Acid	No	13.92 avg.	9.2-18.5	Quarterly	ppb	N/A	N/A	By-product of Drinking water disinfection
Monobromoacetic Acid	No	0.05 avg.	0.00-0.36	Quarterly	ppb	N/A	N/A	By-product of Drinking water disinfection
Monochloroacetic Acid	No	0.05 avg.	0.00-0.36	Quarterly	ppb	N/A	N/A	By-product of Drinking water disinfection
Trichloroacetic Acid	No	13.18 avg.	8.6-19.7	Quarterly	ppb	N/A	N/A	By-product of Drinking water disinfection

These are Unregulated Contaminant Monitoring (UCMR4) Sampling as required by EPA - May 2019 start date. These Unregulated contaminants don't yet have a drinking water standard set by EPA. The purpose is to assist the EPA in determining the occurrence of the unregulated

contaminants in the drinking water. This will determine if the contaminants should have a standard.

Notice

Estill Springs Water Department inspects for possible **cross connections**. Cross connections shall mean any physical connection whereby the public water system is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture or other waste or liquid of unknown or unsafe quality, which may be capable of imparting contamination to the public water system as a result of backflow or back siphonage. Bypass arrangement, jumper connections, removable sections, swivel or changeover devices, through which or because of which backflow could occur, are considered to be cross connections.

A spring is the source of Estill Springs water. Your water comes from Upper Elk Watershed. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water supply to contamination. The Tennessee Dept. of Environment & Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the water supplies to potential contamination. Water sources have been rated as reasonably susceptible (high), moderately susceptible (moderate) or slightly susceptible (low) based on geological factors and human activities in vicinity of the water source. The Estill Springs water system is rated moderately susceptible to potential contamination.

An explanation of Tennessee's Source water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or contact the Water System Manager, John K. Jones at 931-649-5188 or TDEC at 1-888-891-TDEC for copies of specific assessments.

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 might be present in source water :

- : 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 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.
- : 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 and the Tennessee Department of Environment and Conservation prescribe 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.

“ 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. The Town of Estill Springs 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/safe water/lead](http://www.epa.gov/safe-water/lead)

***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.

Systems required to comply with Rule 0400-45-01-.41.

(i) Any system required to comply with the Level 1 assessment requirement or a Level 2 assessment requirement that is not due to an E. coli MCL violation must include in the report the text found in items (I), (II), and (III) of this subpart as appropriate, filling in the blanks accordingly, and the text found in subitems (IV)I and II of this subpart if appropriate.

(I) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

(II) During the past year we were required to conduct 0 Level 1 assessment(s). 0 Level 1 assessment(s) were completed. In addition, we were required to take 0 corrective actions and we completed 0 of these actions.

(III) During the past year 0 Level 2 assessments were required to be completed for our water system. 0 Level 2 assessments were completed. In addition, we were required to take 0 corrective actions and we completed 0 of these actions.