

Annual Drinking Water Quality Report for 2025

For the Village of Union Springs

Prepared and written by Water Operator Kevin Thurston

Public Water System ID# 0501725

Number of water systems 445

INTRODUCTION

To comply with State regulations, Village of Union Springs, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact someone from the list below. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the third Tuesday of the month at 6 p.m. at the village office 26 Chapel Street.

	<u>Home</u>	<u>Work</u>
Village Office		315-889-7341
Water Commissioner-Bill Boyd	315-889-5692	
Water Operator-Kevin Thurston		315-916-4200
Cayuga County Health Department		315-253-1405

WHERE DOES OUR WATER COME FROM?

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water supply is located on Route 90 Union Springs across from the high school. We have two drilled wells with a good supply of water and two well houses, labeled North Well house and South Well house.

We pump with 30 HP Goulds submersible pumps. In each pumping cycle, we alternate wells and pumps. Each cycle is recorded on a chart as well as the tank levels. We calculate a total of gallons pumped daily. The water then goes to the air stripper tower for removal of the volatile organic chemicals (VOC's). Next it is chlorinated and the chlorine is checked once each day. The system is equipped with an alarm system. If there is any failure in the system, the alarm will dial out until someone answers the call. We

have eight miles of water mains in the Village. There are seven pressure reducing pits in the Village, 445 metered water customers, and two water storage tanks. The Center Street water tank has 200,000-gallon capacity, and the Grove Street water tank has a 189,00-gallon capacity. Each tank has a control pit for the signal equipment. In recent years, the Village has expanded the water system to provide water to a portion of the Town of Springport. Overall, you have an investment of 3,500,00 in the water system.

The NYS DOH has completed a source water assessment for our system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface of the wells. The susceptibility rating is an estimate of potential for contamination of the source water. It does not mean that the water delivered to consumers is or will become contaminated. See section “Are these contaminants in our drinking water?” for a list of the contaminants that have been detected. The source assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from two drilled wells. The source assessment has rated these wells as having a high susceptibility to microbials, industrial organics, and petroleum products. These ratings are due primarily to the close proximity of gas wells and animal pastures in relation to the wells as well as the documentation of the presence of halogenated solvents and nitrates in the ground water. In addition, the wells draw from an unconfirmed aquifer with high hydraulic conductivity. Please note that, while source water assessment rates our well as being susceptible to microbials, our water is disinfected to ensure that the finished water delivered into your home meets the New York State drinking water standards for microbial contamination.

The county and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the assessment is available for review by calling the Cayuga County Health Department at 315-253-1405.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

The village of Union Springs routinely monitors for contaminants in your drinking water according to Federal and State laws. We test the drinking water for 27 inorganic compounds, nitrate, nitrite, 60 volatile organic compounds, total trihalomethanes, and 52 synthetic organic compounds. In addition, we test the water for coliform bacteria once a month and chlorine once a day. The table presented below depicts which compounds were detected in your drinking water. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of the data, though representative of the water quality, is more than one year old. See Chart A attached

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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 EPA’s Safe Drinking Water Hotline (800-426-4791) or the Cayuga County Health Department at 315-253-1405.

CHART A North Well (N.W.) South Well (S.W.)							
Contaminants	Violation Y/N	Date of Sample	Level Detected Max Range	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants							
Barium	No	10-21-24	88.0	ug/L	2000	2000	Discharge of drilling waste, and metal refineries; erosion of natural deposits
Fluoride-free	No	10-21-24	0.2	mg/L	n/a	2.2	Erosion of natural deposits
Copper ¹	No	7-30-24	0.263 ¹ Range: 0.005-0.26	mg/L	1.3	AL-1.3	Corrosion of household plumbing system; leaching from wood preservation; erosion of natural deposits
Lead ²	No	7-30-24	4.2 ² Range: ≤0.001-6.3	ug/L	0	AL=15	Corrosion of household plumbing; erosion of natural deposits
Nitrate (NW)	No	10/15/25	3.25	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate (SW)	No	10/15/25	3.11	mg/L	10	10	
Sodium (SW)	No	10/15/25	48.3	mg/L	N/A	N/A	Naturally occurring; road salt; water softeners; animal waste
Sodium (NW)	No	10/15/25	40.7	mg/L	N/A	N/A	
Organic Contaminants							
Cis-1,2 Dichloroethene	No	2/19/25 5/14/25 8/13/25 11/12/25	RAW Range: 0.83 to 1.20	ug/L	N/A	5.0	Discharge from industrial chemical factories
1,4 dioxane (NW)	No	4/10/25	ND	ug/L	N/A	N/A	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites
1,4-dioxane (SW)	No	4/10/25	ND	ug/L	N/A	N/A	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites
Perfluorobutanoic acid (PFBA)	No	3/11/24	1.3 (north) ³ 1.5 (south) ³	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications
Disinfection Byproducts							
Haloacetic Acid	No	8/13/25	Sampling Location 1: 5.1 Location 2: 3.7	ug/L	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms
Total Trihalomethanes	No	8/13/25	Sampling Location 1: 40.5 Location 2: 12.4	ug/L	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter

1 – The level presented is the 90th percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case the ten samples were collected at your water system and the 90th percentile value was the second, highest value, 0.263 mg/L. The action level for copper was not exceeded at any of the sites tested.

2 – The level presented represents the 90th percentile of the samples collected at the 10 sites tested. The action level for lead was not exceeded at any of the 10 sites tested.

3– Detected below the Reporting limit (lowest calibration standard) therefore result is an estimated concentration.

Definitions we use:

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.

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant 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 contamination.

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.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

SUMMARY OF NON-DETECTED CONTAMINANTS:

Union Springs was required to sample for the following additional contaminants which were **not detected** in the water supply.

10/21/2024: Aldicarb Sulfoxide, Aldicarb Sulfone, Oxamyl (Vydate), Methomyl (Lannate), 3-Hydroxy Carbofuran, Aldicarb (Temik), Propoxur (Baygon), Carbofuran, Carbaryl (Sevin), Methiocarb, Pentachlorophenol, 2,4,5-TP (Silvex), 2,4,5-T, 2,4-DB, Dinoseb, Picloram, Acifluorfen, Simazine, Atrazine, Metribuzin, Alachlor (Lasso), Metolachlor (Dual), Butachlor, Hexachlorocyclopentadiene (C-56), Hexachlorobenzene, HCH, Alpha, HCH, Gamma (Lindane), HCH, Beta, HCH, Delta, Heptachlor, Aldrin, Heptachlor epoxide, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoxychlor, Mirex, Toxaphene, Chlordane, technical, Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, 1,2-Dibromoethane (EDB), 1,2,3-Trichloropropane, Dibromo-3-chloropropane, Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, Methylene Chloride, trans-1,2-Dichloroethene, Methyl-t-Butyl-Ether, 1,1-Dichloroethane, Methyl Ethyl Ketone, cis-1,2-Dichloroethene, Bromochloromethane, Chloroform, 2,2-Dichloropropane, 1,2-Dichloroethane, 1,1,1-Trichloroethane, 1,1-Dichloropropene, Carbon Tetrachloride, Benzene, Dibromomethane, 1,2-Dichloropropane, Trichloroethene, Bromodichloromethane, cis-1,3-Dichloropropene, Methyl Isobutyl Ketone, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Toluene, 1,3-

Dichloropropane, Dibromochloromethane, Tetrachloroethene, 1,1,1,2-Tetrachloroethane, Chlorobenzene, Ethylbenzene, Bromoform, m/p-Xylene, Styrene, 1,1,2,2-Tetrachloroethane, o-Xylene, 1,2,3-Trichloropropane, Isopropylbenzene, Bromobenzene, n-Propylbenzene, 2-Chlorotoluene, 4-Chlorotoluene, 1,3,5-Trimethylbenzene, tert-Butylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, p-Cymene, 1,2-Dichlorobenzene, n-Butylbenzene, 1,2,4-Trichlorobenzene, Naphthalene, Hexachlorobutadiene (C-46), 1,2,3-Trichlorobenzene, Fluoride, Free, Beryllium, Chromium, Nickel, Arsenic, Selenium, Cadmium, Antimony, Thallium, Lead, Mercury, Cyanide. Monthly in 2024: Total Coliform Bacteria.

Annually in 2024: Perfluorooctane Acid (PFOA) and Perfluorooctane sulfonate (PFOS).

Quarterly in 2024: Volatile Organic Contaminants: Benzene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromoform, Bromomethane, N-Butylbenzene, Sec-Butylbenzene, Tert-Butylbenzene, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, Cumene (Isopropyl benzene), Cymene (4-Isopropyltoluene), Cis-1,3-Dichloropropene, Dibromochloromethane, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethane, Trans-1,2-Dichloroethene, 1,2-Dichloropropane, 1,3-Dichloropropane, 2,2-Dichloropropane, 1,1-Dichloropropane, Trans-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Methylene Chloride, Naphthalene, N-Propyl benzene, Styrene, Toluene, Trichloroethene, Trichlorofluoromethane, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,2-Trichloroethane, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,1,1-Trichloroethane, Vinyl Chloride, M+P Xylenes, O-Xylenes.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

We are required to present the following information on lead in drinking water:

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. *Village of Union Springs* is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact *The Village of Union Springs* 315-

889-7341, 26 Chapel St. PO Box 99 Union Springs, NY 13060. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2025, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

INFORMATION ON LEAD SERVICE LINE INVENTORY

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by and/or visiting our website at: <https://unionspringsny.gov>

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

The Village of Union Springs added an air stripper tower to its water system in 2001. The job that the air stripper does will reflect in our contaminant levels listed in our Annual Drinking Water Quality Report. Since all water must pass through the air stripper, those levels will be referred to as Raw water and finished water for either well head. At the present time the air stripper is doing a great job; hopefully this will put many minds at rest. We will continue to sample quality and list the results in our Annual Drinking Water Quality Report. We would like to thank you for allowing us to continue to provide you with clean, quality water this year. 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.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;

- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.