

## Town of Zolfo Springs – 2022 Annual Drinking Water Quality Report

We are pleased to present to you this year's Town of Zolfo Springs 2022 Annual Water Quality Report. This report is designed to inform you about the quality of water and the 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. Our water source(s) is the Floridan Aquifer.

We are pleased to report that our drinking water meets all federal and state requirements.

This report shows our water quality results and what they mean.

If you have any questions about this report or concerning your water utility, please contact Town Hall. We encourage 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 on the 4<sup>th</sup> Tuesday of each month.

The Town of Zolfo Springs routinely monitors for contaminants in your drinking water according to federal and state laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of Jan. 1 to Dec. 31, 2022. Data obtained before Jan. 1, 2022, and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we have provided the following definitions:

- **Maximum Contaminant Level or 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 or 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.”
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Initial Distribution System Evaluation (IDSE):** An important part of the Stage 2 Disinfection By-Products Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.
- **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.
- **Maximum residual disinfectant level or 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 or 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.

- Million fibers per liter (MFL): measure of the presence of asbestos fibers that are longer than 10 micrometers.
- Millirem per year (mrem/yr): measure of radiation absorbed by the body.
- Nephelometric Turbidity Unit (NTU): measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- ND means not detected and indicates that the substance was not found by laboratory analysis.
- Parts per billion (ppb) or micrograms per liter ( $\mu\text{g/l}$ ): one part by weight of analyte to 1 billion parts by weight of the water sample.
- Parts per million (ppm) or milligrams per liter ( $\text{mg/l}$ ): one part by weight of analyte to 1 million parts by weight of the water sample.
- Parts per quadrillion (ppq) or picograms per liter (picograms/l): one part by weight of analyte to 1 quadrillion parts by weight of the water sample.
- Parts per trillion (ppt) or nanograms per liter (nanograms/l): one part by weight of analyte to 1 trillion parts by weight of the water sample.
- Picocurie per liter (pCi/L): measure of the radioactivity in water.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

### Radioactive Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Radium 226 + 228 or combined radium (pCi/L)	4/21	N	2.8	0	5	Erosion of natural deposits

### Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Antimony (ppb)	3/21	N	2.26	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	3/21	N	1	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Asbestos (MFL)	3/21	N	0.20	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Barium (ppm)	3/21	N	0.040	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	3/21	N	0.078	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	3/21	N	1	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	3/21	N	2	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	4/21	N	5	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	3/21	N	0.704	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Lead (point of entry) (ppb)	3/21	N	1	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Mercury (inorganic) (ppb)	4/21	N	0.198	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel (ppb)	3/21	N	1.18	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	8/22	N	0.030	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Nitrite (as Nitrogen) (ppm)	8/22	N	0.020	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	4/21	N	1.57	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	3/21	N	11.9	N/A	160	Saltwater intrusion, leaching from soil
Thallium (ppb)	3/21	N	0.981	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

### Synthetic Organic Contaminants including Pesticides and Herbicides

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
2,4-D (ppb)	3/21	N	0.0960	70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex) (ppb)	3/21	N	0.053	50	50	Residue of banned herbicide
Alachlor (ppb)	3/21	N	0.0290	0	2	Runoff from herbicide used on row crops
Atrazine (ppb)	3/21	N	0.0140	3	3	Runoff from herbicide used on row crops
Benzo(a)pyrene (PAH) (nanograms/l)	3/21	N	19	0	200	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	3/21	N	0.5900	40	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	4/21	N	0.0360	0	2	Residue of banned termiticide
Dalapon (ppb)	3/21	N	0.29	200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) adipate (ppb)	3/21	N	0.3600	400	400	Discharge from chemical factories
Di(2-ethylhexyl) phthalate (ppb)	3/21	N	0.4600	0	6	Discharge from rubber and chemical factories
Dibromochloropropane (DBCP) (nanograms/l)	3/21	N	14	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	3/21	N	0.1600	7	7	Runoff from herbicide used on soybeans and vegetables
Diquat (ppb)	3/21	N	0.1600	20	20	Runoff from herbicide use
Endothall (ppb)	7/21	N	3.3	100	100	Runoff from herbicide use
Endrin (ppb)	3/21	N	0.0054	2	2	Residue of banned insecticide

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Ethylene dibromide (nanograms/l)	3/21	N	10	0	20	Discharge from petroleum refineries
Glyphosate (ppb)	4/21	N	4.2000	700	700	Runoff from herbicide use
Heptachlor (nanograms/l)	3/21	N	14	0	400	Residue of banned termiticide
Heptachlor epoxide (nanograms/l)	3/21	N	3	0	200	Breakdown of heptachlor
Hexachlorobenzene (ppb)	3/21	N	0.0140	0	1	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)	3/21	N	0.0240	50	50	Discharge from chemical factories
Lindane (nanograms/l)	3/21	N	6.6	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	3/21	N	0.0230	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)	3/21	N	0.4600	200	200	Runoff/leaching from insecticide used on apples, potatoes, and tomatoes
PCBs [Polychlorinated biphenyls] (nanograms/l)	4/21	N	45	0	500	Runoff from landfills; discharge of waste chemicals
Pentachlorophenol (ppb)	3/21	N	0.0140	0	1	Discharge from wood preserving factories
Picloram (ppb)	3/21	N	0.0400	500	500	Herbicide runoff
Simazine (ppb)	3/21	N	0.0400	4	4	Herbicide runoff
Toxaphene (ppb)	4/21	N	0.6900	0	3	Runoff/leaching from insecticide used on cotton and cattle

### Volatile Organic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Benzene (ppb)	4/21	N	0.5	0	1	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	4/21	N	0.5	0	3	Discharge from chemical plants and other industrial activities
Chlorobenzene (ppb)	4/21	N	0.5	100	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	4/21	N	0.5	600	600	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	4/21	N	0.5	75	75	Discharge from industrial chemical factories
1,2 – Dichloroethane (ppb)	4/21	N	0.5	0	3	Discharge from industrial chemical factories
1,1 – Dichloroethylene (ppb)	4/21	N	0.5	7	7	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	4/21	N	0.5	70	70	Discharge from industrial chemical factories
trans – 1,2 Dichloroethylene (ppb)	4/21	N	0.5	100	100	Discharge from industrial chemical factories

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Dichloromethane (ppb)	4/21	N	0.5	0	5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	4/21	N	0.5	0	5	Discharge from industrial chemical factories
Ethylbenzene (ppb)	4/21	N	0.5	700	700	Discharge from petroleum refineries
Styrene (ppb)	4/21	N	0.5	100	100	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (ppb)	4/21	N	0.5	0	3	Discharge from factories and dry cleaners
1,2,4 –Trichlorobenzene (ppb)	4/21	N	0.5	70	70	Discharge from textile-finishing factories
1,1,1 – Trichloroethane (ppb)	4/21	N	0.5	200	200	Discharge from metal degreasing sites and other factories
1,1,2Trichloroethane (ppb)	4/21	N	0.5	3	5	Discharge from industrial chemical factories
Trichloroethylene (ppb)	4/21	N	0.5	0	3	Discharge from metal degreasing sites and other factories
Toluene (ppm)	4/21	N	0.5	1	1	Discharge from petroleum factories
Vinyl Chloride (ppb)	4/21	N	0.5	0	1	Leaching from PVC piping; discharge from plastics factories
Xylenes (ppm)	4/21	N	0.5	10	10	Discharge from petroleum factories; discharge from chemical factories

### Stage 2 Disinfectants and Disinfection By-Products

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation (Y/N)	Level Detected	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	9/22	N	6.82	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	9/22	N	28.1	N/A	80	By-product of drinking water disinfection

### Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded (Y/N)	90 <sup>th</sup> Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	8/21	N	0.090	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	8/21	N	7	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

## Secondary Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Highest Result	MCLG	MCL	Likely Source of Contamination
Aluminum (ppm)	3/21	N	0.028		0.2	Natural occurrence from soil leaching
Chloride (ppm)	4/21	N	16.0		250	Natural occurrence from soil leaching
Color (color units)	3/21	N	5		15	Naturally occurring organics
Copper (ppm)	3/21	N	0.007		1	Corrosion byproduct and natural occurrence from soil leaching
Fluoride (ppm)	3/21	N	0.704		2.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Foaming Agents (ppm)	3/21	N	0.03		0.5	Pollution from soaps and detergents
Iron (ppm)	3/21	N	0.029		0.3	Natural occurrence from soil leaching
Manganese (ppm)	3/21	N	0.001		0.05	Natural occurrence from soil leaching
Odor (threshold odor number)	3/21	N	1		3	Naturally occurring organics
Silver (ppm)	3/21	N	0.002		0.1	Natural occurrence from soil leaching
Zinc (ppm)	3/21	N	0.015		5	Natural occurrence from soil leaching
Sulfate (ppm)	4/21	N	199		250	Natural occurrence from soil leaching
Total Dissolved Solids (ppm)	3/21	N	472		500	Natural occurrence from soil leaching

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 Zolfo 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 two 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:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) 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.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- (D) 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.
- (E) 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, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 the 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 at 1-800-426-4791.

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. U.S. Environmental Protection Agency/Center for Disease Control 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).