# 2023 Annual Drinking Water Quality Report

Town of Silverhill

MAYOR AND COUNCIL							
Jared Lyles, Mayor	Steve Brooks	Wayne Gruenloh					
Bert Jones	Tonie Norden	Gerald Ardoin					
	EMPLOYEES						
Scottie Smith, Water Superintendent	James Morton	Austin Keith					
Connor Long		Thomas Moss					
	<b>BOARD MEETING TIME</b>						

The Town of Silverhill Town Council meetings are held the 1<sup>st</sup> and 3<sup>rd</sup> Monday of each month at 6 P.M. at Silverhill Town Hall located at 15965 Silverhill Ave.

The Town of Silverhill is pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water 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.

We have a Source Water Protection Plan available. We are continually working on it to ensure it provides more information such as potential sources of contamination. We are pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Scottie Smith, 251-945-5198 or attend any of our regularly scheduled council meetings.

Silverhill routinely monitors for constituents 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>, 2023. All drinking water, including bottled 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. 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 (1-800-426-4791).

The Town of Silverhill monitors for contaminants according to a schedule assigned to us by the Alabama Department of Environmental Management (ADEM), using EPA approved methods and a state certified laboratory. ADEM allows us to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently.

#### PLAIN LANGUAGE DEFINITIONS

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Not Required (NR) – Laboratory analysis not required due to waiver granted by the Environmental Protection Agency for the State of Alabama 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 hillion corresponds to one minute in 2,000 years or a single penny in \$10,000.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Maximum Contaminant Level Goal - (mandatory language) 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.

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.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity more than 5 NTU is just noticeable to the average person.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a 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) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - (mandatory language) 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.

## **Table of Primary Contaminants**

At high levels some primary contaminants are known to pose a health risk to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
Bacteriological			Endothall	100	<9.0
Total Coliform Bacteria	< 5%	0	Endrin	2	0.6
Turbidity	TT	0.02	Epichlorohydrin	TT	ND
Radiological			Glyphosate	700	<6.0
Beta/photon emitters (mrem/yr)	4	ND	Heptachlor	400	0.04
Alpha emitters (pci/l)	15	NR	Heptachlor epoxide	200	0.02
Combined radium (pci/l)	5	ND	Hexachlorobenzene	1	0.1
Inorganic			Hexachloropentadiene	1	0.1
Antimony (ppb)	6	ND	Lindane	200	ND
Arsenic (ppb)	50	ND	Methoxychlor	40	0.1
Asbestos (MFL)	7	NR	Oxamyl [Vydate]	200	ND
Barium (ppm)	2	.020	PCBs	500	ND
Beryllium (ppb)	4		Pentachlorophenol	1	0.04
Cadmium (ppb)	-		Picloram	500	ND
Chromium (ppb)	100		Simazine	4	ND
Copper (ppm)	AL=15		Toxaphene	3	1.0
Cyanide (ppb)	200		Benzene	5	0.5
Fluoride (ppm)	4		Carbon Tetrachloride	5	0.5
Lead (ppb)	AL=15		Chlorobenzene	100	0.5
Mercury (ppb)	2		Dibromochloropropane	200	2.0
Nitrate (ppm)	10		0-Dichlorobenzene	600	ND
Nitrite (ppm)	1	.01	p-Dichlorobenzene	75	ND
Selenium	50	ND	1,2-Dichloroethane	5	0.5
Thallium	2	ND	1,1-Dichloroethylene	7	0.5
Organic Chemicals			Cis-1,2-Dichloroethylene	70	0.5
2,4-D	70	0.1	trans-1,2-Dichloroethylene	100	0.5
2,4,5-TP (Silvex)	50	0.1	Dichloromethane	5	0.5
Acrylamide	TT	ND	1,2-Dichloropropane	5	0.5
Alachlor	2	ND	Ethylbenzene	700	0.5
Atrazine	3	ND	Ethylene dibromide	50	ND
Benzo(a)pyrene [PHAs]	200	0.02	Styrene	100	0.5
Carbofuran	40	ND	Tetrachloroethylene	5	0.5
Chlordane	2	0.1	1,2,4-Trichlorobenzene	70	0.5
Dalapon	200	1.0	1,1,1-Trichloroethane	200	0.5
Di-(2-ethylhexyl) adipate	400	0.6	1,1,2-Trichloroethane	5	0.5
Di(2-ethylhexyl) phthalates	6	0.6	Trichloroethylene	5	0.5
Dinoseb	7	0.1	TTHM	80	NR
Diquat	20	<0.4	Toluene	1	0.5
Dioxin[2,3,7,8-TCDD]	30	ND	Vinyl Chloride	2	0.5
HAA5's	60	NR	Xylenes	10	0.5

In addition to the primary drinking water contaminants, we monitor regularly for the following unregulated and secondary contaminants as regulated by the Alabama Department of Environmental Management. ADEM has proposed regulations under consideration at the time of this publication to require any detects of these contaminants to be reported in all subsequent water quality reports. The requirement of this additional monitoring and reporting will further ensure the safety of your drinking water.

# SECONDARY CONTAMINANTS TABLE OF DETECTS

<b>CONTAMINA</b>	NT			<b>CONTAMINANT</b>			
	MCL	UNIT MEASUREM	ENT		MCL	UNIT ME	CASUREMENT
			Amount dete	cted		Amount de	etected
Aluminum	0.2	mg/l	0.050	Manganese	0.05	0.001	mg/l
Chloride	250	mg/l	6.5	Odor	3	1.	threshold odor #
Color	15	PCU	5	Sulfate	250	55.9	mg/l
Copper	1	mg/l	0.0026	Total Dissolved Solids	500	52	mg/l
Foaming Agents	0.5	mg/l	0.02	Zinc	5	0.002	ND
Iron	0.3	mg/l	ND	Silver	0.1	.004	ND

## **Unregulated Contaminants Table**

CONTAMINANT	Average	Ra	nge	CONTAMINANT	Average	Range		
1,1 – Di chloropropene	< 0.5	0.000 -	0.000	Chloroform	0.014	0.000 -	0.000	
1,1,1,2-Tetrachloroethane	<0.5	0.000 -	0.000	Chloromethane	<0.5	0.000 -	0.000	
Trans-1,3-Dichloropropene	<0.5	0.000 -	0.000	Monochlorobenzene	ND	0.000 -	0.000	
o-Xylene	ND	0.000 -	0.000	M, p-Xylene	ND	0.000 -	0.000	
Methyl-t-Butyl Ether	<0.5	0.000 -	0.000	Chlorodibromomethane	ND	0.000 -	0.000	
1,1,2,2-Tetrachloroethane	<0.5	0.000 -	0.000	Dibromochloromethane	0.003	0.000 -	0.000	
1,1-Dichloroethane	< 0.5	0.000 -	0.000	Dibromomethane	< 0.5	0.000 -	0.000	
1,2,3 - Trichlorobenzene	<0.5	0.000 -	0.000	Dicamba	ND	0.000 -	0.000	
1,2,3 - Trichloropropane	< 0.5	0.000 -	0.000	Dichlorodifluoromethane	ND	0.000 -	0.000	
1,2,4 - Trimethylbenzene	<0.5	0.000 -	0.000	Dieldrin	< 0.1	0.000 -	0.000	
1,3 – Dichloropropane	<0.5	0.000 -	0.000	Hexachlorobutadiene	< 0.5	0.000 -	0.000	
1,3 – Dichloropropene	ND	0.000 -	0.000	Isoprpylbenzene	<0.5	0.000 -	0.000	
1,3,5 - Trimethylbenzene	<0.5	0.000 -	0.000	M-Dichlorobenzene	ND	0.000 -	0.000	
2,2 – Dichloropropane	<0.5	0.000 -	0.000	Methomyl	ND	0.000 -	0.000	
3-Hydroxycarbofuran	ND	0.000 -	0.000	MTBE	ND	0.000 -	0.000	
Aldicarb	<0.5	0.000 -	0.000	Metolachlor	<0.1	0.000 -	0.000	
Aldicarb Sulfone	<0.7	0.000 -	0.000	Metribuzin	< 0.1	0.000 -	0.000	
Aldicarb Sulfoxide	<0.5	0.000 -	0.000	N – Butylbenzene	<0.5	0.000 -	0.000	
Aldrin	< 0.1	0.000 -	0.000	Naphthalene	< 0.5	0.000 -	0.000	
Bromobenzene	<0.5	0.000 -	0.000	N-Propylbenzene	<0.5	0.000 -	0.000	
Bromochloromethane	<0.5	0.000 -	0.000	O-Chlorotoluene	ND	0.000 -	0.000	
Bromodichloromethane	<0.5	0.000 -	0.000	P-Chlorotoluene	ND	0.000 -	0.000	
Bromoform	< 0.5	0.000 -	0.000	P-Isopropyltoluene	ND	0.000 -	0.000	
Bromomethane	< 0.5	0.000 -	0.000	Propachlor	<0.1	0.000 -	0.000	
Butachlor	ND	0.000 -	0.000	Sec – Butylbenzene	<0.5	0.000 -	0.000	
Carbaryl	<0.5	0.000 -	0.000	Tert – Butylbenzene	<0.5	0.000 -	0.000	
Chloroethane	ND	0.000 -	0.000	Trichlorfluoromethane	<0.5	0.000 -	0.000	
Flourotrichloromethane	ND	0.000 -	0.000					

## **Table of Detected Contaminants**

Contaminant	Violatio n Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
3. Turbidity	NO	0.20	ntu	n/a	TT	Soil runoff
10. Barium	NO	0.020	Ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
14. Copper	NO	0.53	Ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Chromium, Total	NO	0.014	Mg/l	100ppg	100ppg	Discharge from steel and pulp mills; Erosion from natural deposits
5. Alpha emitters	NO	0.6+/-0.3	pCi/1	0	15	Erosion of natural deposits
16. Fluoride	NO	ND	Ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
19. Nitrate (as Nitrogen)	NO	1.2	Ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
73. TTHM [Total trihalomethanes]	NO	0.015	ppb	0	80	By-product of drinking water chlorination
HAA5's	NO	0.0023	ppb	0	60	By-product of drinking water chlorination

### **Detected Table of Special Contaminants**

Amount Detected			Amount Detected	An	nount Detected
Calcium	5.87	PH	8.46	Langelier Index	751
Magnesium	1.04	Carbon Dioxide	ND	Conductivity	57.0
Sodium	3.50	Temperature	23.	Calcium Hardness	NR
Alkalinity	14	Hardness CaCo3	18.9		

- Lead and Copper results, based on the 90<sup>th</sup> percentile, are from the 2021 test period.
- A 1.4 ppm to 1.7 ppm Chlorine level was maintained in 2023.

### **GENERAL INFORMATION**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs & wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals & in some cases, radioactive material & can pick up substances resulting from the presence of animals or human activity.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised, such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or individuals with other immune system disorders, some elderly, and infants, can be particularly at risk from infections. Those at risk should seek advice about drinking water from the 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 (1-800-426-4791).

All 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 (1-800-426-4791).

Based on a study conducted by the ADEM with the approval of the EPA, a statewide waiver for the monitoring of Asbestos and Dioxin was issued. Thus, monitoring for these contaminants was not required.

Our water sources are groundwater. Our wells draw water from the Miocene-Pliocene Aquifer. Well #1 is located at Silverhill ballpark and Well #2 is located behind the Town Hall.

The Town of Silverhill adds chlorine to the water to kill bacteria. Lime is added to produce a desirable water quality by raising the pH level to reduce corrosion and acidic conditions.

We at the Town of Silverhill work around the clock to provide top quality water to every tap. We ask that all of our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.