General Information

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.

Maximum Contaminant Levels (MCLs - defined in the List of Definitions in this report) are set at very stringent levels. 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.

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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- 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 run-off, 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, storm water run-off, 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 prescribes regulations which limit the levels of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

Based on a study conducted by 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.

Information about Lead

Lead in drinking water is rarely found in source water but is primarily from materials and components associated with service lines and home plumbing. Your water system is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Use only water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is more likely to cause leaching of lead from plumbing materials. 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. These recommended actions are very important to the health of your family. Lead levels in your drinking water are likely to be higher if:

- Your home or water system has lead pipes, or
- Your home has faucets or fittings made of brass which contains some lead, or
- Your home has copper pipes with lead solder and you have naturally soft water, and
- Water often sits in the pipes for several hours.

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 (1-800-426-4791) or from EPA's website at www.epa.gov/safewater/lead.

DEFINITIONS

Action Level: the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.
Coliform Absent (ca): laboratory analysis indicates that the contaminant is not present.
Detected contaminant: any regulated or unregulated contaminant detected at or above its method detection limit (or reportable limit)
Disinfection byproducts (DBPs): formed when disinfectants react with bromide or natural organic matter present in the source water.
Distribution System Evaluation (DSE): a one-time study conducted by water systems to identify distribution system locations with high concentrations of THMs and HAAs.
Locational Running Annual Average (LRAA) – yearly average of all the DPB results at each specific sampling site
Maximum Contaminant Level (MCL): 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 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): highest level of a disinfectant allowed in drinking water
Micrograms per liter (ug/L): equivalent to parts per billion (ppb) since one liter of water is equal in weight to one billion micrograms.
Microsiemens per centimeter (µs/cm): unit of measurement for Specific Conductance.
Milligrams per liter (mg/L): equivalent to parts per million
Millirems per year (mrem/yr): a measure of radiation absorbed by the body.
Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
90th Percentile: The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.
Not Detected (ND): laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.
Parts per billion (ppb) or Micrograms per liter (µg/l): corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Parts per million (ppm) or Milligrams per liter (mg/l): corresponds to one minute in two years or a single penny in $10,000.
Parts per quadrillion (ppq) or Picograms per liter (picograms/l): corresponds to one minute in 2,000,000,000 years, or a single penny in $10,000,000,000,000.
Parts per trillion (ppt) or Nanograms per liter (nanograms/l): corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.
Picocuries per liter (pCi/L): a measure of the radioactivity in water.
Running Annual Average (RAA): yearly average of all the DPB results at each specific sampling site in the distribution system. **Standard Units (S.U.)**: pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas.
Treatment Technique (TT): a required process intended to reduce the level of a contaminant in drinking water.
Unregulated Contaminants: contaminants for which the EPA has not established MCLs.
Variances & Exemptions (V&E): State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

OEL Exceedance 2022: Based on Stage 2 Disinfection Byproduct (DBP) monitoring results from the first three quarters of 2022, Holtville Water System exceeded the Operational Evaluation Level (OEL) of 80 ug//L for total trihalomethanes (TTHM) at one sampling site, with an OEL calculation result of 84.0 ug/L. An OEL exceedance is not a MCL violation, but rather, it is a prediction or early warning that the MCL for disinfection byproducts may be exceeded in the future. The purpose of the calculation is to alert of potential problems so that preventative measures may be taken.

Upon receiving notice of an OEL exceedance, we performed an OEL evaluation report as required. The evaluation report included information about treatment, storage, and distribution system practices, including any changes that may have affected DBP levels. The report also identified steps we take currently or that we plan to take to reduce disinfection byproduct levels.

The results of our TTHM monitoring for the fourth quarter of 2022 were lower and brought our OEL well below the OEL exceedance level. If you have questions about the OEL exceedance or this report, please contact Greg Welch at 334-569-2105.

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HOLTVILLE WATER SYSTEM
10048 Holtville Road
Deatsville, AL 36022

2024 Annual Water Quality Report

(Testing Performed January through December 2023)

HOLTVILLE WATER SYSTEM

PWSID AL0000540
10048 Holtville Road
Deatsville, AL 36022

Phone 334-569-2105
holtvillewater.com

We are pleased to present to you this year's Annual Water Quality Report. Our drinking water supply surpassed the strict regulations of the Alabama Department of Environmental Management (ADEM) and the U. S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare and distribute reports like this one every year.

Primary Source	Purchased, pretreated water from Five Star Water Supply (surface water from Lake Jordan)
Secondary Sources	City of Wetumpka, Elmore Water, Alabama Depart. of Corrections
Emergency Connections	City of Wetumpka and Elmore Water Authority
Storage Capacity	Six tanks with a total capacity of 1,617,000 gal.
Number of Customers	Approximately 3000
Water System Staff	Greg Welch, General Manager/Operator Adam Davis, Field Supervisor Michael Blankenship, Maintenance/Meter Reader Brady Richardson, Maintenance Gage Strength, Operator Tony Pugh, Part-time Operator Jamie Blankenship, Office Manager Judy Lowe, Office Assistant
Water Board	Chuck Billings, Chairman Joey Kreauter, Secretary Michael Morgan Phillip Rountree

Source Water Assessment

In compliance with the Alabama Department of Environmental Management (ADEM), Source Water Assessment Plans have been developed by the water systems that supply your drinking water. These plans assist in protecting our water sources. The plans provide additional information such as potential sources of contamination and a Susceptibility Analysis, which classifies potential contaminants as high, moderate, or non-susceptible to contaminating the water source. It was determined that the Five Star potential contamination sources are at low risk. Please call our office to find out how to review a copy of any of these Plans, or you may obtain a copy for a minimal reproduction fee.

Please help us make this effort worthwhile by protecting our source water. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints and waste oil.

Questions

If you have any questions about this report or concerning your water utility, please contact Greg Welch at 334-569-2105. We want 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 first Thursday bi-monthly at 6 p.m. at Holtville Water System office (10048 Holtville Road).

More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

Monitoring Schedule and Results

The Holtville Water System and Five Star Water District *routinely* monitor for constituents in your drinking water according to Federal and State laws. Federal and State laws allow us to monitor some contaminants less than once per year because the concentrations do not change frequently. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

Constituent Monitored	Holtville	Five Star
Inorganic Contaminants		2023
Lead/Copper	2022	2022
Microbiological Contaminants	monthly	Monthly
Nitrates		2023
Radioactive Contaminants		2022
Synthetic Organic Contaminants (including pesticides and herbicides)		2022
Volatile Organic Contaminants		2022
Disinfection By-products	2023	2023
Cryptosporidium		2017
PFAS Contaminants		2023

HOLTVILLE WATER SYSTEM
DETECTED DRINKING WATER CONTAMINANTS

Contaminants	Violation Y/N	Level Detected	Unit Msmt.	MCLG	MCL	Likely Source of Contamination
Copper	NO	0.230 *	ppm	1.3	AL=1.3	Household plumbing corrosion, erosion; leaching
Total trihalomethanes (TTHM)	NO	LRAA 61.8 Range 49.3-75.1	ppb	0	80	By-product of drinking water chlorination
Haloacetic acids (HAA5)	NO	LRAA 29.0 Range 9.40-41.8	ppb	0	60	By-product of drinking water chlorination

* Level Detected is 90th percentile of sample sites.

FIVE STAR WATER DISTRICT
DETECTED DRINKING WATER CONTAMINANTS

Contaminants	Violation	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Turbidity	NO	0. 09	NTU	none	TT	Soil runoff (Measure of cloudiness of the water)
Total Organic Carbon	NO	0.86-1.68	ppm	none	TT	Soil runoff
Arsenic	NO	0.54	ppb	n/a	10	Erosion; runoff from orchards and glass & electronics production
Barium	NO	0.03	ppm	2	2	Drilling wastes; metal refineries discharge; erosion
Chromium	NO	1.1	ppb	100	100	Discharge from steel and pulp mills; erosion
Copper	NO	0.009 *	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion; leaching from wood preservatives
Fluoride	NO	0.44	ppm	4	4	Erosion; water additive for tooth health; factory waste
Nitrate (as Nitrogen)	NO	0.11	ppm	10	10	Fertilizer run-off; septic tank leaching; sewage; erosion
Total trihalomethanes (TTHM)	NO	18.2-45.5	ppb	0	80	By-product of drinking water chlorination
Haloacetic acids (HAA5)	NO	1.60-42.4	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants						
Chloroform	NO	14.6-39.0	ppb	70	none	Naturally occurring or from runoff or industrial discharge
Bromodichloromethane	NO	2.0-6.6	ppb	none	none	Naturally occurring or from runoff or industrial discharge
Chlorodibromomethane	NO	ND-1.7	ppb	60	none	Naturally occurring or from runoff or industrial discharge
Secondary Contaminants						
Aluminum	NO	0.02	ppm	n/a	0.2	Erosion of natural deposits or from treatment with water additives
Chloride	NO	5.33	ppm	none	250	Naturally occurring or from runoff
Manganese	NO	0.01	ppm	n/a	0.05	Erosion of natural deposits; leaching from pipes
pH	NO	7.2-8.25	S.U.	none	8.5	Naturally occurring or from water treatment
Sulfate	NO	20.3	ppm	none	250	Naturally occurring in the environment; erosion
Total Dissolved Solids	NO	24.7	ppm	none	500	Naturally occurring or from runoff
Zinc	NO	0.01	ppm	n/a	5	Erosion; discharge from refineries and factories; landfill runoff

* Level Detected is 90th percentile of sample sites.

FIVE STAR WATER DISTRICT - PFAS Contaminants

Abbreviation	Contaminant	MCLG	MCL	Detected	Abbreviation	Contaminant	MCLG	MCL	Detected
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	--	--	ND	PFDoA	Perfluorododecanoic acid	--	--	ND
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	--	--	ND	PFHpA	Perfluoroheptanoic acid	--	--	0.011-0.019
ADONA	4,8-dioxa-3H-perfluorononanoic acid	--	--	ND	PFHxS	Perfluorohexanesulfonic acid	0.010	0.010	0.011-0.019
HFPO-DA	Hexafluoropropylene oxide dimer acidA	0.010	0.010	ND	PFNA	Perfluorononanoic acid	0.010	0.010	ND
NEtFOSAA	N-ethylperfluorooctanesulfonamidoacetic acid	--	--	ND	PFOS	Perfluorooctanesulfonic acid	0	0.004	0.0093-0.022
NMeFOSAA	N-methylperfluorooctanesulfonamidoacetic acid	--	--	ND	PFOA	Perfluorooctanoic acid	0	0.004	0.010-0.017
PFBS	Perfluorobutanesulfonic acid	--	--	.029-.067	PFTeDA	Perfluorotetradecanoic acid	--	--	ND
PFDA	Perfluorodecanoic acid	--	--	ND-0.0018	PFTrDA	Perfluorotridecanoic acid	--	--	ND
PFHxA	Perfluorohexanoic acid	--	--	0.011-0.019	PFUnA	Perfluoroundecanoic acid	--	--	ND

Note: In April 2024, the EPA finalized a Primary Drinking Water Regulation establishing individual MCLGs and MCLs for five (5) PFAS contaminants in drinking water. PFOA, PFOS, PFHxS, PFNA, & HFPO-DA. Mixtures containing 2 or more of PFHxS, PFNA, HFPO-DA, & PFBS were assigned MCL of 1 (unitless) Hazard Index. For more information on PFAS contaminants, please refer to *www.epa.gov/pfas*.

Below is a table of contaminants for which the Environmental Protection Agency and the Alabama Department of Environmental Management require testing. These contaminants were not detected in your drinking water unless they are also listed in the Detected Drinking Water Contaminants table elsewhere in this report.

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS

Contaminant	MCL	Unit of Msmt	Contaminant	MCL	Unit of Msmt
Bacteriological Contaminants			trans-1,2-Dichloroethylene	100	ppb
Total Coliform Bacteria	<5%	present/absent	Dichloromethane	5	ppb
Fecal Coliform and E. coli	0	present/absent	1,2-Dichloropropane	5	ppb
Turbidity	TT	NTU	Di (2-ethylhexyl)adipate	400	ppb
Cryptosporidium	TT	Calc.organisms/l	Di (2-ethylhexyl)phthalate	6	ppb
Radiological Contaminants			Dinoseb	7	ppb
Beta/photon emitters	4	mrem/yr	Dioxin [2,3,7,8-TCDD]	30	ppq
Alpha emitters	15	pCi/l	Diquat	20	ppb
Combined radium	5	pCi/l	Endothall	100	ppb
Uranium	30	pCi/l	Endrin	2	ppb
Inorganic Chemicals			Epichlorohydrin	TT	TT
Antimony	6	ppb	Ethylbenzene	700	ppb
Arsenic	10	ppb	Ethylene dibromide	50	ppt
Asbestos	7	MFL	Glyphosate	700	ppb
Barium	2	ppm	Heptachlor	400	ppt
Beryllium	4	ppb	Heptachlor epoxide	200	ppt
Cadmium	5	ppb	Hexachlorobenzene	1	ppb
Chromium	100	ppb	Hexachlorocyclopentadiene	50	ppb
Copper	AL=1.3	ppm	Lindane	200	ppt
Cyanide	200	ppb	Methoxychlor	40	ppb
Fluoride	4	ppm	Oxamyl [Vydate]	200	ppb
Lead	AL=15	ppb	Polychlorinated biphenyls	0.5	ppb
Mercury	2	ppb	Pentachlorophenol	1	ppb
Nitrate	10	ppm	Picloram	500	ppb
Nitrite	1	ppm	Simazine	4	ppb
Selenium	.05	ppm	Styrene	100	ppb
Thallium	.002	ppm	Tetrachloroethylene	5	ppb
Organic Contaminants			Toluene	1	ppm
2,4-D	70	ppb	Toxaphene	3	ppb
Acrylamide	TT	TT	2,4,5-TP(Silvex)	50	ppb
Alachlor	2	ppb	1,2,4-Trichlorobenzene	.07	ppm
Benzene	5	ppb	1,1,1-Trichloroethane	200	ppb
Benzo(a)pyrene [PAHs]	200	ppt	1,1,2-Trichloroethane	5	ppb
Carbofuran	40	ppb	Trichloroethylene	5	ppb
Carbon tetrachloride	5	ppb	Vinyl Chloride	2	ppb
Chlordane	2	ppb	Xylenes	10	ppm
Chlorobenzene	100	ppb	**Disinfectants & Disinfection Byproducts**		
Dalapon	200	ppb	Chlorine	4	ppm
Dibromochloropropane	200	ppt	Chlorine Dioxide	800	ppb
1,2-Dichlorobenzene	1000	ppb	Chloramines	4	ppm
1,4-Dichlorobenzene (para)	75	ppb	Bromate	10	ppb
o-Dichlorobenzene	600	ppb	Chlorite	1	ppm
1,2-Dichloroethane	5	ppb	HAA5 [Total haloacetic acids]	60	ppb
1,1-Dichloroethylene	7	ppb	TTHM [Total trihalomethanes]	80	ppb
cis-1,2-Dichloroethylene	70	ppb			

LIST OF UNREGULATED CONTAMINANTS

1,1 – Dichloropropene	Aldicarb	Chloroform	Metolachlor
1,1,1,2-Tetrachloroethane	Aldicarb Sulfone	Chloromethane	Metribuzin
1,1,2,2-Tetrachloroethane	Aldicarb Sulfoxide	Dibromochloromethane	N - Butylbenzene
1,1-Dichloroethane	Aldrin	Dibromomethane	Naphthalene
1,2,3 - Trichlorobenzene	Bromobenzene	Dicamba	N-Propylbenzene
1,2,3 - Trichloropropane	Bromochloromethane	Dichlorodifluoromethane	O-Chlorotoluene
1,2,4 - Trimethylbenzene	Bromodichloromethane	Dieldrin	P-Chlorotoluene
1,3 – Dichloropropane	Bromoform	Hexachlorobutadiene	P-Isopropyltoluene
1,3 – Dichloropropene	Bromomethane	Isoprpylbenzene	Propachlor
1,3,5 - Trimethylbenzene	Butachlor	M-Dichlorobenzene	Sec - Butylbenzene
2,2 – Dichloropropane	Carbaryl	Methomyl	Tert - Butylbenzene
3-Hydroxycarbofuran	Chloroethane	MTBE	Trichlorfluoromethane

LIST OF SECONDARY CONTAMINANTS

Alkalinity, Total (as CA, Co_3)	Copper	Magnesium	Silver
Aluminum	Corrosivity	Manganese	Sodium
Calcium, as Ca	Foaming agents (MBAS)	Odor	Sulfate
Chloride	Hardness	Nickel	Total Dissolved Solids
Color	Iron	pH	Zinc