2025 Annual Water Quality Report

(Monitoring Performed January through December 2024)

SOUTH MARENGO COUNTY WATER AND FIRE PROTECTION AUTHORITY

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We are pleased to present to you this year's Annual Water Quality Report. This report includes information on our water sources, results of water analyses, plain language definitions, and other important information about water and health. We work diligently to provide high quality water that meets or exceeds State and Federal drinking water standards. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

Water Sources	Purchased water from Town of Pine Hill Water System (Alabama River)
	Purchased water from Thomaston Water Works (groundwater well)
	Purchased water from Linden Utility Board (groundwater well)
Additional Connection	Myrtlewood Water System for emergency use
Storage Capacity	3 tanks with a total capacity of 400,000 gallons
Number of Customers	Approximately 1480 service connections
Treatment	Chlorination
Board Members	Wilfred Dailey, Chairman
	Gloria H. Pritchett, Secretary
	Sharon McKinney, Member
Staff Members	Suzanne Drinkard, Office Manager
	Randall Jones, Certified Water Operator
	Robin Schroeder, Asst. Office Manager
	Shannon Stockman, Operations Manager
	Fernando Williams, Maintenance

Source Water Protection

In compliance with the Alabama Department of Environmental Management (ADEM), Thomaston Water Works and Pine Hill Water System have developed a Wellhead Protection Plan (Thomaston) and a Source Water Assessment Plan (Pine Hill) that assist in protecting our water sources. The Plans provide information such as potential sources of contamination. They include a susceptibility analysis, which classifies potential contaminants as high, moderate, or non-susceptible to contaminating the water source. The assessments have been performed, public notification was completed, and the programs have been approved by ADEM. The Plans are available for review with prior arrangement.

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.

Health Information about Lead

As required by ADEM, we conducted a Lead Service Line Inventory during 2024, and it was concluded that our system contains no known lead service lines, nor is there any record of lead lines ever existing. The Lead Service Line Inventory report and results from our latest Lead results are available for review in our office upon request.

Lead is rarely found in source water but is primarily from corrosion of materials and components associated with home plumbing. Your water system is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. As required by federal and state agencies, we utilize an outside laboratory to analyze the samples we monitor for Lead. Even though we have not had a problem with Lead in our distribution system, the following information about Lead is required to be in this report. If present, elevated levels of Lead can cause serious health problems, especially for pregnant women and young children.

The Environmental Protection Agency (EPA) and the Center for Disease Control (CDC) make the following recommendations:

- Before using any tap water for drinking or cooking, flush your water system by running the kitchen tap (or any other tap you take drinking or cooking water from) on COLD for 1–2 minutes. Flushing can minimize the potential for lead exposure, especially if the water has been sitting undisturbed for several hours, as in overnight.
- In all situations, especially for making baby formula, drink or cook only with water that comes out of the cold tap. Warm or hot tap water is more likely to cause lead to leach from plumbing materials.
- Periodically remove the aerator on the tip of the faucet and wash out any debris such as metal particles.
- Remember - Boiling will NOT reduce the amount of lead in your water.

The actions recommended above are likely to be effective in reducing lead levels because most of the lead in household water comes from household plumbing materials. 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 www.epa.gov/safewater or by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791.

General Drinking Water Information

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. MCL's, defined in a 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.

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.

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.

Radon can move up through the ground into a home through cracks and holes in the foundation. It may also get into indoor air when released from tap water. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source of radon in indoor air. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home consider having the home tested. Testing is easy and inexpensive. For more information call EPA's Radon Hotline at (800-SOS-RADON).

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 other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk should seek advice about drinking water from their health care providers.

In 2008, Pine Hill Water began testing their raw source water (a surface water source) for pathogens, such as Cryptosporidium and Giardia. These pathogens can enter the water from animal or human waste. For people who may be immuno-compromised, 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). This language does *not* indicate the presence of cryptosporidium in your drinking water. *Cryptosporidium and Giardia have not been detected in our finished drinking water.*

Questions?

If you have any questions about this report or concerning your water utility, please contact Suzanne Drinkard. 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 of each month at 10:00 a.m.at the South Marengo County Water Office at 245 Duck Pond Road, Linden, AL 36748.

Monitoring Schedule and Results

South Marengo County Water and Fire Protection Authority *routinely* monitors for constituents in your drinking water according to Federal and State laws. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

Constituent Monitored	S. Marengo	Pine Hill	Thomaston	Linden
Inorganic Contaminants		2024	2023 partial	2022
Lead/Copper	2023	2023	2023	2023
Microbiological Contaminants	current	monthly	current	monthly
Nitrates		2023	2024	2024
Radioactive Contaminants		2021	2019	2020
Synthetic Organic Contaminants (including pesticides and herbicides)		2024 partial	2024	2024
Volatile Organic Contaminants		2023	2024	2024
Disinfection Byproducts	2024	2024	2024	2024
Cryptosporidium		2020	Not required	Not required
PFAS Contaminants		2024	2020	2020

DETECTED DRINKING WATER CONTAMINANTS									
Contaminants	**Violation Y/N**	**S.Marengo Detected**	**Pine Hill Detected**	**Thomaston Detected**	**Linden Detected**	**Unit Msmt**	**MCLG**	**MCL**	**Likely Source of Contamination**
Total Coliform Bacteria	NO	1 present [1]	Absent	Absent	Absent	Present or Absent	0	presence in 5% of monthly samples	Naturally present in the environment; used as an indicator that other bacteria may be present
Chlorine	NO		1.3-3.1			ppm	MRDLG= 4	MRDL = 4	Water additive used to control microbes
Turbidity	NO		0.088			NTU	n/a	TT	Soil runoff
Total Organic Carbon	NO		1.3-1.9			ppm	n/a	TT	Soil runoff
Barium	NO		0.03	0.025	ND	ppm	2	2	Drilling wastes; metal refinery discharge; erosion
Copper	NO	0.130 [2] (0.0015-0.22)	0.130 [2] (0.0058-0.47)	0. 200 [2] (0.0058-0.47)	0.078[1] (0.0063-0.150)	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion of natural deposits; leaching from preservatives
Fluoride	NO		0.53	0.65	0.38	ppm	4	4	Erosion; water additive which promotes strong teeth; discharge from factories
Lead	NO	ND [2] (ND-0.0075)	ND [2] (ND-0.0014)	ND [2] (ND-0.0014)	ND [2] (ND-0.0027)	ppm	0	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	NO		0.21	ND	ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM [Total trihalomethanes]	NO	Annual 2.8-8.8	LRAA 64.8 (31.0-96.0)	Annual ND-13.0	Annual 3.103.40	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	Annual 1.7-3.5	LRAA 39.3 (13.0-51.0)	Annual ND-2.20	ND	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants									
Chloroform	NO		11.0	ND	ND	ppb	n/a	n/a	Naturally occurring or from discharge or runoff
Bromodichloromethane	NO		2.90	ND	ND	ppb	n/a	n/a	Naturally occurring or from discharge or runoff
Secondary Contaminants									
Aluminum	NO		0.02	ND	0.11	ppm	n/a	0.2	Erosion; treatment with water additives
Chloride	NO		8.4	358	4.8	ppm	n/a	250	Naturally occurring or from discharge or runoff
Hardness	NO		46.8	15.8	ND	ppm	n/a	n/a	Naturally occurring or from water treatment
Manganese	NO		ND	0.02	ND	ppm	n/a	0.05	Erosion; leaching from pipes
pH	NO		6.8	7.8	8.3	S.U.	n/a	n/a	Naturally occurring or from water treatment
Sodium	NO		18.3	341	44.8	ppm	n/a	n/a	Naturally occurring in the environment
Sulfate	NO		28.3	ND	4.5	ppm	n/a	250	Naturally occurring or from discharge or runoff
Total Dissolved Solids	NO		142	802	108	ppm	n/a	500	Naturally occurring or from discharge or runoff
Zinc	NO		0.38	ND	ND	ppm	n/a	5	Erosion; refinery discharge; landfill runoff

[1] One coliform present sample occurred in December 2024. All follow up samples were negative for coliform bacteria.

[2] Result shown is 90th percentile of latest round of sampling, and number of sample sites exceeding the Action Level (AL) = 0.

PFAS Contaminants: PFAS are a group of manmade chemicals that have been in use since the 1940s. PFAS have been found in a wide variety of consumer products and have been found in firefighting foam. PFAS manufacturing and processing facilities. airports, and military installations are some of the contributors of PFAS releases into the air, soil, and water. Because of their widespread use, most people have been exposed to PFAS. and there is evidence that exposure to PFAS may lead to adverse health effects.

Below is a list of PFAS contaminants for which Pine Hill Water monitored in 2024 as required and the results of that monitoring.

PFAS CONTAMINANTS – Pine Hill Water					
Contaminant	**Unit Msmt**	**Level Detected**	**Contaminant**	**Unit Msmt**	**Level Detected**
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ppb	ND	Perfluoroheptanoic acid	ppb	0.0025-0.0044
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	ppb	ND	Perfluorohexanesulfonic acid	ppb	ND-0.0021
4,8-dioxa-3H-perfluorononanoic acid	ppb	ND	Perfluorononanoic acid	ppb	ND
Hexafluoropropylene oxide dimer acid	ppb	ND	Perfluorooctanesulfonic acid	ppb	0.0047-0.016
N-ethylperfluorooctanesulfonamidoacetic acid	ppb	ND	Perfluorooctanoic acid	ppb	0.0055-0.017
N-methylperfluorooctanesulfonamidoacetic acid	ppb	ND	Perfluorotetradecanoic acid	ppb	ND
Perfluorobutanesulfonic acid	ppb	0.036-0.049	Perfluorotridecanoic acid	ppb	ND
Perfluorodecanoic acid	ppb	ND	Perfluoroundecanoic acid	ppb	ND
Perfluorohexanoic acid	ppb	0.0075-0.012	Total PFAS	ppb	ND-0.095
Perfluorododecanoic acid	ppb	ND			

South Marengo was not required to monitor for PFAS. Thomaston and Linden monitored for PFAS in 2020, and PFAS was not detected.

For more information on PFAS contaminants, please consult www.epa.gov/pfas

Plain Language 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.
Disinfection byproducts (DBPs): formed when disinfectants react with bromide or natural organic matter present in the source water.
Distribution System Evaluation (DSE): a 4-quarter study to test for disinfection byproducts in different areas of the distribution
Hazard Index (HI): used to determine health concerns associated with mixtures of certain PFAS in finished drinking water. An HI greater than 1 requires a system to take action.
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.
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): highest level of a disinfectant allowed in drinking water. There is convincing evidence that disinfection 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 contaminants.
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.
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.
Treatment Technique (TT): a required process intended to reduce the level of a contaminant in drinking water.
Turbidity: a measure of the cloudiness of the water, a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
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.

Below is a table of contaminants for which we monitor, if required, on a schedule set by the Environmental Protection Agency and the Alabama Department of Environmental Management.

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS

Contaminant	MCL	Unit of Msmt	Detections	Contaminant	MCL	Unit of Msmt	Detections
Bacteriological Contaminants				1,1-Dichloroethylene	7	ppb	ND
Total Coliform Bacteria	<5%	Present or absent	1 present	cis-1,2-Dichloroethylene	70	ppb	ND
Fecal Coliform and E.coli	0	Present or absent	absent	trans-1,2-Dichloroethylene	100	ppb	ND
Turbidity	TT	NTU		Dichloromethane	5	ppb	ND
Cryptosporidium	TT	Calc.organisms/l		1,2-Dichloropropane	5	ppb	ND
Radiological Contaminants				Di (2-ethylhexyl)adipate	400	ppb	ND
Beta/photon emitters	4	mrem/yr	ND	Di (2-ethylhexyl)phthalate	6	ppb	ND
Alpha emitters	15	pCi/l	ND	Dinoseb	7	ppb	ND
Combined radium	5	pCi/l	ND	Dioxin [2,3,7,8-TCDD]	30	ppq	ND
Uranium	30	pCi/l	ND	Diquat	20	ppb	ND
Inorganic Chemicals				Endothall	100	ppb	ND
Antimony	6	ppb	ND	Endrin	2	ppb	ND
Arsenic	10	ppb	ND	Epichlorohydrin	TT	TT	ND
Asbestos	7	MFL	ND	Ethylbenzene	700	ppb	ND
Barium	2	ppm	ND	Ethylene dibromide	50	ppt	ND
Beryllium	4	ppb	ND	Glyphosate	700	ppb	ND
Cadmium	5	ppb	ND	Heptachlor	400	ppt	ND
Chromium	100	ppb	ND	Heptachlor epoxide	200	ppt	ND
Copper	AL=1.3	ppm	0.0015-0.22	Hexachlorobenzene	1	ppb	ND
Cyanide	200	ppb	ND	Hexachlorocyclopentadiene	50	ppb	ND
Fluoride	4	ppm	ND	Lindane	200	ppt	ND
Lead	AL=15	ppb	ND	Methoxychlor	40	ppb	ND
Mercury	2	ppb	ND-0.0075	Oxamyl [Vydate]	200	ppb	ND
Nitrate	10	ppm	ND	Polychlorinated biphenyls	0.5	ppb	ND
Nitrite	1	ppm	ND	Pentachlorophenol	1	ppb	ND
Selenium	.05	ppm	ND	Picloram	500	ppb	ND
Thallium	.002	ppm	ND	Simazine	4	ppb	ND
Organic Contaminants				Styrene	100	ppb	ND
2,4-D	70	ppb	ND	Tetrachloroethylene	5	ppb	ND
Acrylamide	TT	TT	ND	Toluene	1	ppm	ND
Alachlor	2	ppb	ND	Toxaphene	3	ppb	ND
Benzene	5	ppb	ND	2,4,5-TP(Silvex)	50	ppb	ND
Benzo(a)pyrene [PAHs]	200	ppt	ND	1,2,4-Trichlorobenzene	.07	ppm	ND
Carbofuran	40	ppb	ND	1,1,1-Trichloroethane	200	ppb	ND
Carbon tetrachloride	5	ppb	ND	1,1,2-Trichloroethane	5	ppb	ND
Chlordane	2	ppb	ND	Trichloroethylene	5	ppb	ND
Chlorobenzene	100	ppb	ND	Vinyl Chloride	2	ppb	ND
Dalapon	200	ppb	ND	Xylenes	10	ppm	ND
Dibromochloropropane	200	ppt	ND	**Disinfectants & Disinfection Byproducts**			
1,2-Dichlorobenzene	1000	ppb	ND	TTHM [Total trihalomethanes]	80	ppb	2.8-8.8
1,4-Dichlorobenzene (para)	75	ppb	ND	HAA5 [Total haloacetic acids]	60	ppb	1.7-3.5
o-Dichlorobenzene	600	ppb	ND				
1,2-Dichloroethane	5	ppb	ND				

SECONDARY CONTAMINANTS

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

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).