

Annual Drinking Water Quality Report January—December 2018

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Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM) drinking water health standards. Your Local Water officials vigilantly safeguard its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standards. Our water sources are The Shelby County Water Services and the New London Water Authority. The water from the Shelby County Water Service is produced from the Coosa River and The New London Water Authority has ground water wells. The water we supply to our customers requires no specialized treatment. However, Chlorine is added to the water as disinfectant and the required residual is maintained to protect your drinking water from any possible outside contaminants.

Sterrett-Vandiver Water System, Inc.

Important Drinking Water Definitions:

Disinfection Byproducts – contaminants formed when chlorine is used as a disinfectant.
 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 billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
 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.
 Millirems per year (mrem/yr) - measure of radiation absorbed by the body.
 Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
 Variances & Exemptions - ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.
 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.
 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 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.
 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.
 Variances and Exemptions - The Department or EPA permission not to meet an MCL or a treatment technique under certain conditions
 Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.
 Action Level - The concentration of a contaminant that triggers treatment or other requirement a water system shall follow.
 Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

The Sterrett-Vandiver Water System, Inc. routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2018. 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 (800-426-4791).

The Sterrett-Vandiver Water System, Inc. utilizes a Bacteriological Monitoring Plan, and a Cross Connection Policy is in place to insure good safe drinking water for our customers.

Any Questions?
Please attend our regularly scheduled meetings!
Every 3rd Tuesday of each month at 6:30 p.m. at the Sterrett-Vandiver Water Office located at 35 Old Mill Road
Hope to See You There!

Sterrett-Vandiver Water System, Inc.
 P.O. Box 220
 Sterrett, Alabama 35147

A MESSAGE FROM THE BOARD

Thank you for allowing us to continue providing your family with clean, quality 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. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding. We at The Sterrett-Vandiver Water System, Inc. work

around the clock to provide top quality water to every tap. 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.

Sincerely,

Your Board of Directors

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

Consumer Confidence Report Prepared By The Alabama Rural Water Association

General Information

As you can see by the tables, our system had no monitoring violations of allowable limits of contaminants in drinking water. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system. 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.

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. 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).

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 Sterrett-Vandiver Water System, Inc.** 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 2 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>.

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Table of Primary Contaminants

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

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
Bacteriological			Selenium(ppb)	50	1.50	Epichlorohydrin	TT	ND
Total Coliform Bacteria	< 5%	ND	Thallium(ppb)	2	0.14	Ethylbenzene(ppb)	700	ND
Turbidity	TT	0.33	Organic Chemicals			Ethylene dibromide(ppt)	50	ND
Fecal Coliform & E. coli	0	ND	Acrylamide	TT	ND	Glyphosate(ppb)	700	ND
Radiological			Alachlor(ppb)	2	ND	Haloacetic Acids(ppb)	60	21.30
Beta/Photon emitters (mrem/yr)	4	2.27	Atrazine(ppb)	3	ND	Heptachlor(ppt)	400	ND
Alpha emitters (pci/l)	15	0.60	Benzene(ppb)	5	ND	Heptachlor epoxide(ppt)	200	ND
Combined radium (pci/l)	5	1.14	Benzo(a)pyrene[PHAs](ppt)	200	ND	Hexachlorobenzene(ppb)	1	ND
Uranium(pci/l)	30	ND	Carbofuran(ppb)	40	ND	Hexachlorocyclopentadiene(ppb)	50	ND
Inorganic			Carbon Tetrachloride(ppb)	5	ND	Lindane(ppt)	200	ND
Antimony (ppb)	6	ND	Chlordane(ppb)	2	ND	Methoxychlor(ppb)	40	ND
Arsenic (ppb)	10	ND	Chlorobenzene(ppb)	100	ND	Oxamyl [Vydete](ppb)	200	ND
Asbestos (MFL)	7	ND	2,4-D	70	ND	Pentachlorophenol(ppb)	1	ND
Barium (ppm)	2	ND	Dalapon(ppb)	200	ND	Picloram(ppb)	500	ND
Beryllium (ppb)	4	0.78	Dibromochloropropane(ppt)	200	ND	PCBs(ppt)	500	ND
Bromate(ppb)	10	ND	0-Dichlorobenzene(ppb)	600	ND	Simazine(ppb)	4	ND
Cadmium (ppb)	5	ND	p-Dichlorobenzene(ppb)	75	ND	Styrene(ppb)	100	ND
Chloramines(ppm)	4	ND	1,2-Dichloroethane(ppb)	5	ND	Tetrachloroethylene(ppb)	5	ND
Chlorine(ppm)	4	2.70	1,1-Dichloroethylene(ppb)	7	ND	Toluene(ppm)	1	ND
Chlorine dioxide(ppb)	800	340.00	Cis-1,2-Dichloroethylene(ppb)	70	ND	TOC	TT	2.40
Chlorite(ppm)	1000	780.00	trans-1,2-Dichloroethylene(ppb)	100	ND	TTHM(ppb)	80	55.00
Chromium (ppb)	100	0.00	Dichloromethane(ppb)	5	ND	Toxaphene(ppb)	3	ND
Copper (ppm)	AL=1.3	0.00	1,2-Dichloropropane(ppb)	5	ND	2,4,5-TP (Silvex)(ppb)	50	ND
Cyanide (ppb)	200	ND	Di-(2-ethylhexyl)adipate(ppb)	400	ND	1,2,4-Trichlorobenzene(ppb)	70	ND
Fluoride (ppm)	4	1.17	Di(2-ethylhexyl)phthalates(ppb)	6	ND	1,1,1-Trichloroethane(ppb)	200	ND
Lead (ppb)	AL=15	0.14	Dinoseb(ppb)	7	0.08	1,1,2-Trichloroethane(ppb)	5	ND
Mercury (ppb)	2	ND	Dioxin[2,3,7,8-TCDD](ppq)	30	ND	Trichloroethylene(ppb)	5	ND
Nitrate (ppm)	10000	270.00	Diquat(ppb)	20	0.38	Vinyl Chloride(ppb)	2	ND
Nitrite (ppm)	1	ND	Endothall(ppb)	100	ND	Xylenes(ppm)	10	ND
Total Nitrate & Nitrite	10000	270.00	Endrin(ppb)	2	ND			

Table of Secondary and Unregulated Contaminants

Secondary Drinking Water Standards are guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. ADEM has Secondary Drinking Water Standards established in state regulations applicable to water systems required to monitor for the various components. **Unregulated contaminants** are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT
Secondary								
Aluminum	0.2	ND	Foaming Agents	0.5	ND	Silver	7	ND
Chloride	250	10.00	Iron	0.3	ND	Sulfate	70	35.3
Color (PCU)	15	ND	Magnesium	75	5.61	Total Dissolved Solids	500	144
Copper	1	ND	Odor (T.O.N.)	5	ND	Zinc	5	2.65
Special								
Calcium	N/A	22.80	pH (SU)	N/A	7.98	Temperature (*C)	N/A	25.00
Carbon Dioxide	N/A	1.7	Sodium	N/A	8.92	Total Alkalinity	N/A	120
Manganese	0.05	ND	Specific Conductance (umhos)	<500	207.90	Total Hardness (as CaCO3)	N/A	104
Unregulated								
1,1 - Dichloropropene	N/A	ND	Bromobenzene	N/A	ND	Hexachlorobutadiene	N/A	ND
1,1,2,2-Tetrachloroethane	N/A	ND	Bromochloromethane	N/A	ND	Isopropylbenzene	N/A	ND
1,1-Dichloroethane	N/A	ND	Bromodichloromethane	N/A	ND	M-Dichlorobenzene	N/A	ND
1,2,3 - Trichlorobenzene	N/A	ND	Bromoform	N/A	ND	Methomyl	N/A	ND
1,2,3 - Trichloropropane	N/A	ND	Bromomethane	N/A	ND	Metolachlor	N/A	ND
1,2,4 - Trimethylbenzene	N/A	ND	Butachlor	N/A	ND	Metribuzin	N/A	ND
1,2,4-Trichlorobenzene	N/A	ND	Carbaryl	N/A	ND	MTBE	N/A	ND
1,3 - Dichloropropane	N/A	ND	Chloroethane	N/A	ND	N - Butylbenzene	N/A	ND
1,3 - Dichloropropene	N/A	ND	Chlorodibromomethane	N/A	ND	Naphthalene	N/A	ND
1,3,5 - Trimethylbenzene	N/A	ND	Chloroform	N/A	ND	N-Propylbenzene	N/A	ND
2,2 - Dichloropropane	N/A	ND	Chloromethane	N/A	ND	O-Chlorotoluene	N/A	ND
3-Hydroxycarbofuran	N/A	ND	Dibromochloromethane	N/A	ND	P-Chlorotoluene	N/A	ND
Aldicarb	N/A	ND	Dibromomethane	N/A	ND	P-Isopropyltoluene	N/A	ND
Aldicarb Sulfone	N/A	ND	Dichlorodifluoromethane	N/A	ND	Propachlor	N/A	ND
Aldicarb Sulfoxide	N/A	ND	Dieldrin	N/A	ND	Sec - Butylbenzene	N/A	ND
Aldrin	N/A	ND	Fluorotrichloromethane	N/A	ND	Tert - Butylbenzene	N/A	ND

Unregulated Contaminant Monitoring Rule (UCMR4) 2018

As required by the USEPA, monitoring of the following unregulated contaminants was accomplished 2015. Unregulated contaminants are those that don't yet have a drinking water standard set by the USEPA. The purpose of monitoring for these contaminants is to help USEPA decide whether the contaminants should have a standard.

Contaminant	Detection Level	Contaminant	Detection Level	Contaminant	Detection Level
1-butanol (ppb)	ND	Bromide (ppb)	32.2	HAA5 (ppb)	67.2
Manganese (ppb)	41.5	1,3 butadiene	ND	HAA6Br (ppb)	11
HAA9 (ppb)	77.6	Total Organic Carbon (ppb)	3930	Germanium (ppb)	ND

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or ADEM requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Table of Detected Drinking Water Contaminants

CONTAMINANT	MCLG	MCL	Range	Amount Detected	Likely Source of Contamination
Bacteriological Contaminants January - December 2018					
Turbidity	0	TT		0.33	NTU Soil runoff
Radiological Contaminants January - December 2017					
Beta particle and photon	0	4		2.27	mrem/yr Decay of natural and man-made deposits
Alpha emitters	0	15		0.60	pCi/L Erosion of natural deposits
Combined Radium 226 & 228	0	5		1.14	pCi/L Erosion of natural deposits
Inorganic Contaminants January - December 2016-2018					
Beryllium	4	4	ND	0.78	ppb Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Chlorine	MRDLG 4	MRDL 4	2.62	2.70	ppm Water additive used to control microbes
Chlorite	0.8	1	ND	780.00	ppm By-product of drinking water chlorination
Chlorine Dioxide	MRDLG 800	MRDL 800	ND	340.00	ppb Water additive used to control microbes
Chromium	100	100	ND	ND	ppb Discharge from steel and pulp mills erosion of natural deposits
Copper	1.3	AL=1.3	No. of Sites above action level 0	0.002	ppm Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	4	4	0.83	1.17	ppm Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	0	10 Sites AL=15	No. of Sites above action level 0	0.14	ppb Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as N)	10000	10000	270.00	400.00	ppb Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate & Nitrite	10000	10000	270.00	400.00	ppb Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	50	50	ND	ND	ppb Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium	0.5	2	ND	ND	ppb Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Organic Contaminants January - December 2017-2018					
Di(2-ethylhexyl)phthalates	0	6	ND	0.08	ppb Discharge from rubber and chemical factories
Diquat	20	20	ND	0.38	ppb Runoff/leaching from herbicide use
Haloacetic Acids (HAA5)	0	60	15.00	33.00	ppb By-product of drinking water chlorination
Total Organic Carbon (TOC)	N/A	TT	1.20	2.40	TT Naturally present in the environment
Total trihalomethanes (TTHM)	0	80	30.70	114.00	ppb By-product of drinking water chlorination
Secondary Contaminants January - December 2017-2018					
Chloride	N/A	250	9.67	10.00	ppm Naturally occurring in the environment or as a result of agricultural runoff
Magnesium	N/A	0.05	4.21	4.39	ppm Erosion of natural deposits
Sulfate	N/A	250	25.40	35.50	ppm Naturally occurring in the environment
Total Dissolved Solids	N/A	500	92.00	144.00	ppm Erosion of natural deposits
Special Contaminants January - December 2017-2018					
pH	N/A	N/A	6.82	6.83	SU Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	5.31	8.92	ppm Naturally occurring in the environment