2024 Annual Drinking Water Quality Report for the Cherokee County Water and Sewer Authority

We are 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.

Our water sources are two springs located here in Cherokee county; ***Sanford Springs*** (combination ground/surface water)**,** located at 4101 County Road 33, and ***Bristow Springs*** (combination ground/surface water) located at Bristow Gap Road. Bristow Spring produces water from a layer of rock called the Fort Payne Chert and Sanford Spring produces water from rocks called the Knox Group. We produce approximately 1.2 to 1.8 million gallons of water each day depending on demand. After disinfection and treatment, the water is pumped to a water storage system consisting of five ground-level tanks totaling approximately 2,600,000 gallons of storage. Our network of waterlines (approximately 400 miles) allows us to interconnect with and purchase water from the Calhoun County Water and Fire Protection Authority, the WWB of the Town of Centre, and the Piedmont Utilities Board, as needed. No water purchases in excess of 30 consecutive days from Calhoun County W&FP, Piedmont Utilities, or WWB of the Town of Centre were made in 2024. The systems, their water sources, and treatment types are listed below.

System	**Water Source/Type**	**Treatment**
Cherokee County - Centre, AL	Bristow Spring/Ground & Surface Water	Chlorinate
	Sanford Spring /Ground & Surface Water	Filter and Chlorinate

This report shows our water quality and what it means. If you have any questions about this report or concerning your water quality, please contact **Mr. Sid Garrett at (256) 927-8348**. We want our valued customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on **the second Monday of each month, at 4:00 p.m., at the office of the Cherokee County Water and Sewer Authority, located at 161 East Main Street, Centre, Alabama.**

The Cherokee County Water and Sewer Authority routinely monitors for constituents in your drinking water according to Federal and State laws. The table included in this report shows the detected contaminants, resulting from our monitoring for the period of January 1st to December 31st, 2024. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

1. ***Non-Detects (ND)*** - laboratory analysis indicates that the constituent is not present.
2. ***Not Required (NR)*** – laboratory analysis not required due to waiver.
3. ***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.
4. ***Parts per billion (ppb) or Micrograms per liter (μg/l)*** - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
5. ***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.
6. ***Parts per quadrillion (ppq) or picograms per litre (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.
7. ***Picocuries per liter (ρCi/l)*** – picocuries per liter is a measure of the radioactivity in water.
8. ***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.
9. ***Action Level*** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
10. ***Treatment Technique (TT)*** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
11. ***Maximum Contaminant Level*** - 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.
13. ***Maximum Contaminant Level Goal*** - 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.
14. ***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.
15. ***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.

Cherokee County Water and Sewer Authority
Standard List of Primary Drinking Water Contaminants

Contaminant	MCL	Amount Detected	Contaminant	MCL	Amount Detected
Bacteriological			Endrin(2023)	2 ppb	ND
Total Coliform Bacteria (2024)	<5%	ND	Epichlorohydrin	TT	ND
Turbidity (Bristow Spr.) (2024) Turbitity (Stanford Springs) (2024)	TT	2.72 0.021	Glyphosate (2023)	700 ppb	ND
Fecal Coliform and *E. coli* (2024)	0	ND	Heptachlor (2023)	400 ppt	ND
Radiological			Heptachlor epoxide (2023)	200 ppt	ND
Beta/Photon emitters (mrem/yr)	4	ND	Hexachlorobenzene (2023)	1 ppb	ND
Alpha, Gross (ρCi/l) (Sanford) (2021)	15	0.6 ± 1.13	Hexachlorocyclopentadiene (2023)	50 ppm	ND
Radium-228 (ρCi/l) (Sanford) (2021)	5	0.761 ± 0.456	Lindane (2023)	200 ppt	ND
Uranium	30 ρCi/l	ND	Methoxyclor (2023)	40 ppb	ND
Inorganic Chemicals			Oxamyl [Vydate] (2023)	200 ppb	ND
Antimony	6 ppb	ND	PCBs (2023)	500 ppt	ND
Arsenic	10 ppb	ND	Pentachlorophenol (2023)	1 ppb	ND
Asbestos (MFL)	7	Waived	Picloram (2023)	500 ppb	ND
Barium	2 ppm	0.020	Simazine (2023)	4 ppb	ND
Beryllium	4 ppb	ND	Toxaphene	3 ppb	ND
Cadmium	5 ppb	ND	Benzene (2023)	5 ppb	ND
Chromium	100 ppb	ND	Carbon Tetrachloride (2023)	5 ppb	ND
Copper (2022)	AL=1.3 ppm	0.011	Chlorobenzene (2023)	100 ppb	ND
Cyanide	200 ppb	ND	Dibromochloropropane, 1,2-Dibromo-3-chloropropane (2023)	200 ppt	ND
Fluoride (2024)	4 ppm	0.248	o-Dichlorobenzene (2023)	600 ppb	ND
Lead (2022)	AL=15 ppb	ND	p-Dichlorobenzene (2023)	75 ppb	ND
Mercury	2 ppb	ND	1,2-Dichloroethane (2023)	5 ppb	ND
Nitrate (Sanford Spring) (2024) (Bristow Spring) (2024)	10 ppm	0.21 0.19	1,1-Dichloroethylene (2023)	7 ppb	ND
Nitrite	1 ppm	ND	cis-1,2-Dichloroehtylene (2023)	70 ppb	ND
Selenium	50 ppb	ND	trans-1,2-Dichloroethylene (2023)	100 ppb	ND
Thallium	2 ppb	ND	Dichloromethane (2023)	5 ppb	ND
Organic Chemicals			1,2-Dichloropropane (2023)	5 ppb	ND
2,4-D (2023)	70 ppb	ND	Ethylbenzene (2023)	700 ppb	ND
2,4,5-TP (Silvex) (2023)	50 ppb	ND	Ethylene Dibromide, 1,2-Dibromoethane (EDB) (2023)	50 ppt	ND
Acrylamide	TT	ND	Styrene (2023)	100 ppb	ND
Alachlor (2023)	2 ppb	ND	Tetrachloroethylene (2023)	5 ppb	ND
Benzo(a)pyrene [PAHs] (2023)	200 ppt	ND	1,1,1-Trichloroethane (2023)	200 ppb	ND
Carbofuran (2023)	40 ppb	ND	1,1,2-Trichloroethane (2023)	5 ppb	ND
Chlordane (2023)	2 ppb	ND	1,2,4-Trichlorobenzene (2023)	70 ppb	ND
Dalapon (2023)	200 ppb	ND	Trichloroethylene (2023)	5 ppb	ND
Di (2-ethylhexyl)adipate (2023)	400 ppb	ND	TTHM (2024)	80 ppb	19
Di (2-ethylhexyl)phthalates (2023)	6 ppb	ND	Toluene (2023)	1 ppm	ND
Dinoseb (2023)	7 ppb	ND	Vinyl Chloride (2023)	2 ppb	ND
Diquat (2023)	20 ppb	ND	Xylenes (2023)	10 ppm	ND
Dioxin [2,3,7,8-TCDD]	30 ppq	Waived	TOC	TT	ND
Chloramines	4 ppm	ND	Chlorine (2024)	4 ppm	2
Chlorite	1 ppm	ND	Chlorine Dioxide	800 ppb	ND
HAA5 (2024)	60 ppb	19	Bromate (2023)	10 ppb	ND
Endothall (2023)	100 ppb	ND			

TABLE OF DETECTED CONTAMINANTS						
Contaminant	**Detection Range**	**Level Detected**	**Unit Measurement**	**MCLG**	**MCL**	**LIKELY SOURCE OF CONTAMINATION**
BACTERIOLOGICAL CONTAMINANTS						
Turbidity Stanford Spring (2024)	0.018-0.021	0.021	NTU	N/A	≤ 0.3 NTU in 95% of filtered samples/mo	Soil runoff.
Turbidity Bristow Spring (2024)	0.286-2.726	2.72	NTU	N/A	5.0	Soil runoff.
RADIOLOGICAL CONTAMINANTS						
Alpha emitters Cherokee County (2021)	0.6 ± 1.13	0.6 ± 1.13	ρci/l	0	15	Erosion of natural deposits.
Combined Radium Cherokee County (2021)	0.761 ± 0.456	0.761 ± 0.456	ρci/l	0	5	Erosion of natural deposits.
INORGANIC CONTAMINANTS						
Fluoride Stanford Springs (2024)	0.21-0.248	0.248	ppm	0	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories.
Lead Cherokee County (2022)	ND	ND	ppb	0	AL=15	Corrosion of household plumbing systems,; erosion of natural deposits. <5 is the 90th percentile. 0 sites above the Action Level.
Copper Cherokee County (2022)	ND-0.016	0.016	ppm	1.0	1.0	Corrosion of household plumbing systems,; erosion of natural deposits. <5 is the 90th percentile. 0 sites above the Action Level.
Nitrate Bristow (2024) Sanford Spring (2024)	0.21 0.19	0.21	ppm	0	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
ORGANIC CONTAMINANTS						
TTHM Cherokee County (Site #3) (2024)	ND – 19	19	ppb	0	80	By-product of drinking water chlorination. Annual System Average is <1.
HAA5 Cherokee County (Site #3) (2024)	ND -19	19	ppb	0	60	By-product of drinking water chlorination. Annual System Average is <1.
Chlorine Cherokee County (2024)	1.0-2.0	2.0	ppm	MRDLG 4 ppm	MRDL 250 ppm	Water additive used to control microbes. Annual average (Highest month)
SECONDARY CONTAMINANTS						
Alkalinity Cherokee County (2022)	108-122	122	ppm	N/A	N/A	Naturally occurring in the environment or as a result of treatment with water additives.
Aluminum Cherokee County (2022)	0.022-0.12	0.12	Ppm	N/A	0.2	Naturally occurring in the environment or as a result of treatment with water additives.
Calcium Cherokee County (2022)	27.6-48.8	48.8	Ppm	N/A	N/A	Naturally occurring in the environment or as a result of treatment with water additives.
Carbon Dioxide Cherokee County (2022)	14.2-23.5	23.5	ppm	N/A	N/A	Naturally occurring in the environment or as a result of treatment with water additives.
Chloride Cherokee County (2022)	2.8-4.5	4.5	ppm	N/A	250	Naturally occurring in the environment or as a result of industrial disch. or ag. Runoff; byproduct of chlorination.
Hardness (As CaCO3) Cherokee County (2022)	116-134	134	ppm	N/A	N/A	Naturally occurring in the environment or as a result of treatment with water additives.
Magnesium Cherokee County (2022)	3-11.4	11.4	ppm	N/A	N/A	Naturally occurring in the environment or as a result of treatment with water additives.
pH Staford Springs (2024)	7.1	7.1	su	N/A	N/A	Naturally occurring in the environment or as a result of treatment with water additives.
Sodium Cherokee County (2022)	ND	ND	ppm	N/A	N/A	Naturally occurring in the environment or as a result of treatment with water additives.
Specific Conductance Cherokee County (2019)	214-242	242	Umohs/cm	N/A	N/A	Naturally occurring in the environment or as a result of treatment with water additives.
Sulfate Cherokee County (2022)	3.1-4.3	4.3	Ppm	N/A	250	Naturally occurring in the environment, erosion of natural deposits.
Total Dissolved Solids Cherokee County (2022)	121-134	121	ppm	N/A	500	Naturally occurring in the environment or as a result of industrial discharge or ag. runoff.

Contaminant	Detection Range	Level Detected	Unit Measurement	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
UCMR4 TESTING						
alpha-BHC Bristow (2020) Sanford Spring(2020)	3.2	 3.2 3.2	ppm	N/A	N/A	
Chlorpyrifos Bristow (2020) Sanford Spring (2020)	9.6 – 9.7	 9.6 9.7	ppm	N/A	N/A	
Dimethipin Bristow (2020) Sanford Spring (2020)	64 - 65	 64 65	ppm	N/A	N/A	
Ethoprop Bristow (2020) Sanford Spring (2020)	9.6 – 9.7	 9.6 9.7	ppm	N/A	N/A	
Merphos-Oxone Bristow (2020) Sanford Spring (2020)	22	 22 22	ppm	N/A	N/A	
Oxyfluorfen Bristow (2020) Sanford Spring (2020)	16	 16 16	ppm	N/A	N/A	
Permethrin Bristow (2020) Sanford Spring (2020)	12 - 13	 12 13	ppm	N/A	N/A	
Profenofos Bristow (2020) Sanford Spring (2020)	96 - 97	 96 97	ppm	N/A	N/A	
Tebuconazole Bristow (2020) Sanford Spring	64 - 65	 64 65	ppm	N/A	N/A	
UCMR4 SEMIVOLATILES						
Butylated Hydroxyanisole Bristow (2020) Sanford Spring (2020)	9.6 – 9.8	 9.6 9.8	ppm	N/A	N/A	
Quinoline Bristow (2020 Sanford Spring (2020))	6.4 – 6.5	 6.4 6.5	ppm	N/A	N/A	
O-Toluidine Bristow (2020) Sanford Spring (2020)	2.2	 2.2 2.2	ppm	N/A	N/A	
UCMR4 ALCOHOLS						
n-Butanol Bristow (2020) Sanford Spring (2020)	0.67	 0.67 0.67	ppb	N/A	N/A	
2-Methyoxyethanol Bristow (2020 Sanford Spring (2020))	0.13	 0.13 0.13	ppb	N/A	N/A	
2-Propen-1-01 (Allyl alcohol) Bristow (2020) Sanford Spring (2020)	0.17	 0.17 0.17	ppb	N/A	N/A	
MET ICPMS UCMR						
Germanium Bristow (2020) Sanford Spring (2020)	0.10	 0.10 0.10	ppb	N/A	N/A	
Manganese Bristow (2024) Sanford Spring (2024))	0.007-0.009	0.009	ppm	N/A	N/A	
Bromide Bristow (2020) Sanford Spring (2020)	11.0 – 17.7	 17.7 11.0	ppb	N/A	N/A	
HALOACETIC ACIDS						
HAA9 Group (2020)	0.67 – 3.9	1.48 (Avg.)	ppb	N/A	N/A	

Cherokee County Water and Sewer Authority is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

We at Cherokee County Water and Sewer Authority work around the clock to provide top quality water to every tap and pledge to continue this service. Should you have any questions please contact Sid Garrett (256-927-8348).

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.

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 constituents have been detected. 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 from the presence of animals or from human activity. Those contaminants can be microbes, pesticides, herbicides, organic or inorganic chemicals, or radioactive materials. 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Drinking Water Hotline at 1-800-426-4791 or by visiting their website at http://www.epa.gov.

MCL's 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.

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. 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 the service lines and home plumbing. ***Cherokee County Water and Sewer Authority*** 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 drinking water, testing methods, and steps you can take to minimize exposure is available from Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

SOURCE WATER ASSESSMENT

A Source Water Assessment (SWA) has been completed for our source water and a copy of is available at our office for viewing along with information regarding how individuals may obtain copies. The SWA is a study to define the recharge area for our water sources.

RISK AND RESILIENCE ASSESSMENT AND EMERGENCY RESPONSE PLANS

A Risk and Resilience Assessment (R&R) has been completed to help protect the water system from intentional or naturally occurring damage. The Emergency Response Plans (ERPs) have been updated and are available in the event of an emergency. Certifications for the completion of the R&R and the ERPs have been submitted to the EPA.

We at the ***Cherokee County Water and Sewer Authority*** 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. Please call our office if you have any questions.

Cherokee County Water and Sewer Authority Board Members

Mr. Ronnie Kisor	Ms. Tammi East	Mr. Wae Ellis	Mr. Sid Garrett
Chairman	Member	Member	Manager