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/fittings made of brass containing 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 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) coliform bacteria 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 four-quarter study to identify distribution system locations with high concentrations of THMs and HAAs.
Locational Running Annual Average (LRAA): yearly average of 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: the level of a contaminant in drinking water below which there is no known or expected risk to health.
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/centimeter (µs/cm): 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.
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.

UCMR4 Contaminants: The Fourth Unregulated Contaminant Monitoring Rule (UCMR4) required some systems to monitor for 30 unregulated contaminants during January 2018 through December 2020. Below is a list of the UCMR4 contaminants for which your drinking water was monitored and the results of that monitoring.

UCMR 4 Contaminants					
Contaminant	Unit Msmt	Level Detected	Contaminant	Unit Msmt	Level Detected
Germanium	ppb	ND	1-butanol	ppb	ND
Manganese	ppb	ND-12.5	2-methoxyethanol	ppb	ND
Alpha-hexachlorocyclo-hexane	ppb	ND	2-propen-1-ol	ppb	ND
Chlorpyrifos	ppb	ND	Butylated hydroxyanisole	ppb	ND
Dimethipin	ppb	ND	O-toluidine	ppb	ND
Ethoprop	ppb	ND	Quinoline	ppb	ND-0.02
Oxyfluorfen	ppb	ND	Total organic carbon (TOC)	ppb	ND-5240
Profenofos	ppb	ND	Bromide	ppb	21.3-28.2
Tebuconazole	ppb	ND	HAA9	ppb	ND-7.02
Total permethrin (cis- & trans-)	ppb	ND	HAA6BR	ppb	ND-3.52
Tribufos	ppb	ND	HAA5	ppb	ND-19.3

PFAS Contaminants: Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that have been used in manufacturing and in other consumer applications. The EPA has not established national primary drinking water regulations for PFAS substances. The lifetime health advisory level for PFOA and PFOS is a combined 70 ppt (0.07 ppb). Below is a list of PFAS contaminants for which Calhoun County Water Authority monitored in 2020 and the results of that monitoring. PFAS was *not* detected in our drinking water.

PFAS (in ppb)			
Contaminant	Detects	Contaminant	Detects
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND	Perfluoroheptanoic acid	ND
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	ND	Perfluorohexanesulfonic acid	ND
4,8-dioxa-3H-perfluorononanoic acid	ND	Perfluorononanoic acid	ND
Hexafluoropropylene oxide dimer acidA	ND	Perfluorooctanesulfonic acid	ND
N-ethylperfluorooctanesulfonamidoacetic acid	ND	Perfluorooctanoic acid	ND
N-methylperfluorooctanesulfonamidoacetic acid	ND	Perfluorotetradecanoic acid	ND
Perfluorobutanesulfonic acid	ND	Perfluorotridecanoic acid	ND
Perfluorodecanoic acid	ND	Perfluoroundecanoic acid	ND
Perfluorohexanoic acid	ND	Total PFAS	ND
Perfluorododecanoic acid	ND		

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CALHOUN COUNTY WATER AUTHORITY
P. O. Box 200
2256 Alexandria Wellington Road
Alexandria, AL 36250

2022 Annual Water Quality Report

(Testing Performed January through December 2021)

CALHOUN COUNTY WATER AUTHORITY
P. O. Box 200
2256 Alexandria Wellington Road
Alexandria, AL 36250
Phone 256-820-3940

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. We are committed to ensuring the quality of your water.

Source	3 springs: Reads Mill, Websters Chapel, and Seven Springs - Fort Payne Chert & the Knox Group		
	3 groundwater wells: Choccolocco, Possum Trot, and Ohatchee		
	Purchase from Oxford Water Works - Knox Group		
	Purchase from Anniston Water and Sewer Board		
Treatment	Chlorination, flocculation, and filtration		
Interconnections	Sell water to City of Ohatchee (from Reads Mill Spring & Seven Springs) Emergency connection with Cherokee County Water		
Storage Capacity	19 tanks with a total capacity of 3,255,000 gallons		
Customers	Approximately 10,300		
Water Board Members	Wilks Scarbrough, Chairman Mike Almaroad, Director Joel Prickett, Director Tobi Burt, Director Jeannetta Douthitt Daniel, Director	**Water Authority Contacts**	Greg Warren, Supt. Danny Chandler, Office Mgr. Randy Smith, WTP Mgr

Source Water Assessment: Calhoun County Water Authority has developed a Source Water Assessment plan that will assist in protecting our water sources. This plan provides additional information such as potential sources of contamination. It includes a susceptibility analysis, which classifies potential contaminants as high, moderate, or non-susceptible (low) to contaminating the water source. All the potential contaminants sited in our study area were ranked as low. Upon approval from ADEM, a copy of the report will be available in our office for review during normal business hours, or you may purchase a copy upon request for a nominal 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 call one of the above listed contact persons at the water office. 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 third Tuesday of each month at 9:30 a.m. at the water office, 2256 Alexandria-Wellington Road, Alexandria, Alabama. 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: We routinely monitor your drinking water for contaminants according to Federal and State laws. The Alabama Department of Environmental Management (ADEM) allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule. We have learned through our monitoring and testing that some constituents have been detected. We are pleased to report that our drinking water meets or exceeds federal and state requirements.

Constituent Monitored	Calhoun Co.	Oxford	Anniston
Inorganic Contaminants	2020	2021	2020
Lead/Copper	2020	2019	2020
Microbiological Contaminants	current	current	current
Nitrates	2021	2021	2020
Radioactive Contaminants	2020	2021	2016
Synthetic Organic Contaminants	2021	2021	2018
Volatile Organic Contaminants	2021	2021	2020
Disinfection By-products	2021	2021	2020
UCMR4 Contaminants	2020	2020	2019
PFAS Contaminants	2020	Not required	Not required

We are pleased to report that our drinking water meets federal (EPA) and state (ADEM) requirements. We have learned through our monitoring and testing that some constituents have been detected. This report contains results from the most recent water quality monitoring.

TABLE OF DETECTED DRINKING WATER CONTAMINANTS - Calhoun County Water Authority

Contaminants	Violation Y/N	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Barium	NO	0.03	ppm	2	2	Discharge of drilling wastes; discharge from refineries; erosion
Copper	NO	0.072*	ppm	1.3	AL=1.3	Household plumbing corrosion; erosion; preservative leaching
Nitrate (as Nitrogen)	NO	0.18-0.58	ppm	10	10	Fertilizer runoff; erosion; leaching from septic tanks, sewage
TTHM [Total trihalomethanes]	NO	ND-43.0	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	ND-28.0	ppb	0	60	By-product of drinking water chlorination
Secondary Contaminants						
Aluminum	NO	0.03	ppm	n/a	0.2	Erosion; treatment with water additives
Chloride	NO	4.4	ppm	n/a	250	Naturally occurring or from discharge or runoff
Hardness	NO	137	ppm	n/a	n/a	Naturally occurring or from treatment with water additives
pH	NO	7.9	S.U.	n/a	n/a	Naturally occurring or from treatment with water additives
Sulfate	NO	7.2	ppm	n/a	250	Naturally occurring or from discharge or runoff
Total Dissolved Solids	NO	128	ppm	n/a	500	Naturally occurring or from discharge or runoff

* Figure shown is 90th percentile and number of sites above the Action Level (AL) of 1.3mg/L = 0

DETECTED DRINKING WATER CONTAMINANTS – Oxford Water Works

Contaminants	Violation Y/N	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Total coliform bacteria	NO	1 positive sample *	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	1.01-1.73	ppm	MRDLG=4	MRDL=4	Water additive used to control microbes
Total Organic Carbon	NO	0.66-1.50	ppm	n/a	TT	Soil runoff
Turbidity	NO	Highest 0.044	NTU	n/a	TT	Soil runoff
Barium	NO	0.02	ppm	2	2	Drilling wastes; discharge from refineries; erosion
Copper (customer tap)	NO	0.110 **	ppm	1.3	AL=1.3	Plumbing corrosion; erosion; preservative leaching
Nitrate (as Nitrogen)	NO	0.13-0.96	ppm	10	10	Fertilizer runoff; septic & sewage leachate; erosion
Trichloroethylene	NO	Avg. 1.18 Range ND-2.20	ppb	0	5	Metal degreasing & other industry discharge
TTHM [Total trihalomethanes]	NO	ND-15.3	ppb	0	80	By-product of drinking water chlorination
HAA5 [Haloacetic Acids]	NO	ND-11.0	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants						
Chloroform	NO	ND-3.80	ppb	n/a	n/a	Naturally occurring in the environment or from runoff
Bromodichloromethane	NO	ND-2.90	ppb	n/a	n/a	Naturally occurring in the environment or from runoff
Chlorodibromomethane	NO	ND-1.30	ppb	n/a	n/a	Naturally occurring in the environment or from runoff
Secondary Contaminants						
Chloride	NO	8.4	ppm	n/a	250	Naturally occurring or from discharge or runoff
Hardness	NO	12.9	ppm	n/a	n/a	Naturally occurring or from water additives
pH	NO	8.0	S.U.	n/a	n/a	Naturally occurring or from water additives
Sodium	NO	4.8	ppm	n/a	n/a	Naturally occurring in the environment
Sulfate	NO	2.0	ppm	n/a	250	Naturally occurring or from discharge or runoff
Total Dissolved Solids	NO	154	ppm	n/a	500	Naturally occurring or from discharge or runoff

* One positive sample occurred in July 2021. All follow-up samples were negative for coliform bacteria.
** Figure shown is 90th percentile and # of sites above the Action Level (AL) of 1.3mg/L = 0

TABLE OF DETECTED DRINKING WATER CONTAMINANTS - Anniston Water & Sewer Board

Contaminants	Violation Y/N	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Chlorine	NO	0.2-2.2	ppm	MRDLG=4	MRDL=4	Water additive used to control microbes
Total Organic Carbon	NO	43.1% Removal	ppm	n/a	TT	Soil runoff
Turbidity	NO	0.20	NTU	n/a	TT	Soil runoff
Alpha emitters	NO	2.5 ± 0.9	PCi/l	0	15	Erosion of natural deposits
Barium	NO	0.02	ppm	2	2	Discharge of drilling wastes; discharge from refineries; erosion
Fluoride	NO	0.73	ppm	4	4	Erosion of natural deposits; water additive; discharge
Nitrate (as Nitrogen)	NO	0.67	ppm	10	10	Fertilizer runoff; erosion; leaching from septic tanks, sewage
TTHM [Total trihalomethanes]	NO	34.4	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	22.5	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants						
Chloroform	NO	10.0	ppb	n/a	n/a	Naturally occurring or from discharge or runoff
Bromodichloromethane	NO	4.70	ppb	n/a	n/a	Naturally occurring or from discharge or runoff
Secondary Contaminants						
Aluminum	NO	0.03	ppm	n/a	0.2	Erosion of natural deposits or from treatment with water additives
Chloride	NO	10.3	ppm	n/a	250	Naturally occurring or from discharge or runoff
Hardness	NO	21.5	ppm	n/a	n/a	Naturally occurring or from treatment with water additives
pH	NO	6.9*	S.U.	n/a	n/a	Naturally occurring or from treatment with water additives
Sodium	NO	17.6	ppm	n/a	n/a	Naturally occurring in the environment
Sulfate	NO	20.6	ppm	n/a	250	Naturally occurring or from discharge or runoff
Total Dissolved Solids	NO	98.0	ppm	n/a	500	Naturally occurring or from discharge or runoff

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 SECONDARY CONTAMINANTS

Alkalinity, Total (as CA, Co_3)	Alkalinity, Total (as CA, Co_3)	Alkalinity, Total (as CA, Co_3)	Alkalinity, Total (as CA, Co_3)
Aluminum	Aluminum	Aluminum	Aluminum
Calcium, as Ca	Calcium, as Ca	Calcium, as Ca	Calcium, as Ca
Chloride	Chloride	Chloride	Chloride
Color	Color	Color	Color

LIST OF UNREGULATED CONTAMINANTS

Aldicarb	Chloroethane	Hexachlorobutadiene	Propachlor
Aldicarb Sulfone	Chloroform	3-Hydroxycarbofuran	N-Propylbenzene
Aldicarb Sulfoxide	Chloromethane	Isoprpylbenzene	Propachlor
Aldrin	O-Chlorotoluene	p-Isopropyltoluene	1,1,1,2-Tetrachloroethane
Bromoacetic Acid	P-Chlorotoluene	M-Dichlorobenzene	1,1,2,2-Tetrachloroethane
Bromobenzene	Dibromochloromethane	Methomyl	Tetrachloroethene
Bromochloromethane	Dibromomethane	Methomyl	Trichloroacetic Acid
Bromodichloromethane	1,1-Dichloroethane	Methylene chloride	1,2,3-Trichlorobenzene
Bromoform	1,3-Dichloropropane	Methyl tert-butyl ether	Trichloroethene
Bromomethane	2,2-Dichloropropane	Metolachlor	Trichlorofluoromethane
Butachlor	1,1-Dichloropropene	Metribuzin	1,2,3-Trichloropropane
N-Butylbenzene	1,3-Dichloropropene	MTBE	1,2,4-Trimethylbenzene
Sec-Butylbenzene	Dicamba	Naphthalene	1,3,5-Trimethylbenzene
Tert - Butylbenzene	Dichlorodifluoromethane	1-Naphthol	
Carbaryl	Dieldrin	Paraquat	