

Utilities Board of the City of Andalusia

strives to provide a dependable and safe supply of water to all consumers.

As you can see from the table, our system had no violations of allowable limits of contaminants in your drinking water. We are 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 EPA has determined that your water IS SAFE at these levels. However, the Utilities Board of the City of Andalusia system incurred an Inorganic Compound (IOC) reporting non-compliance in May 2023 for failing to submit results by the appropriate deadline. Should you have any questions concerning this non-compliance or monitoring and reporting requirements, please contact Joey Raybon at (334) 222-1332.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these 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 sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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.

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.

The Utilities Board wants you to be aware that there is not a problem with lead in your drinking water. 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 Utilities Board 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>.

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 (1-800-426-4791).

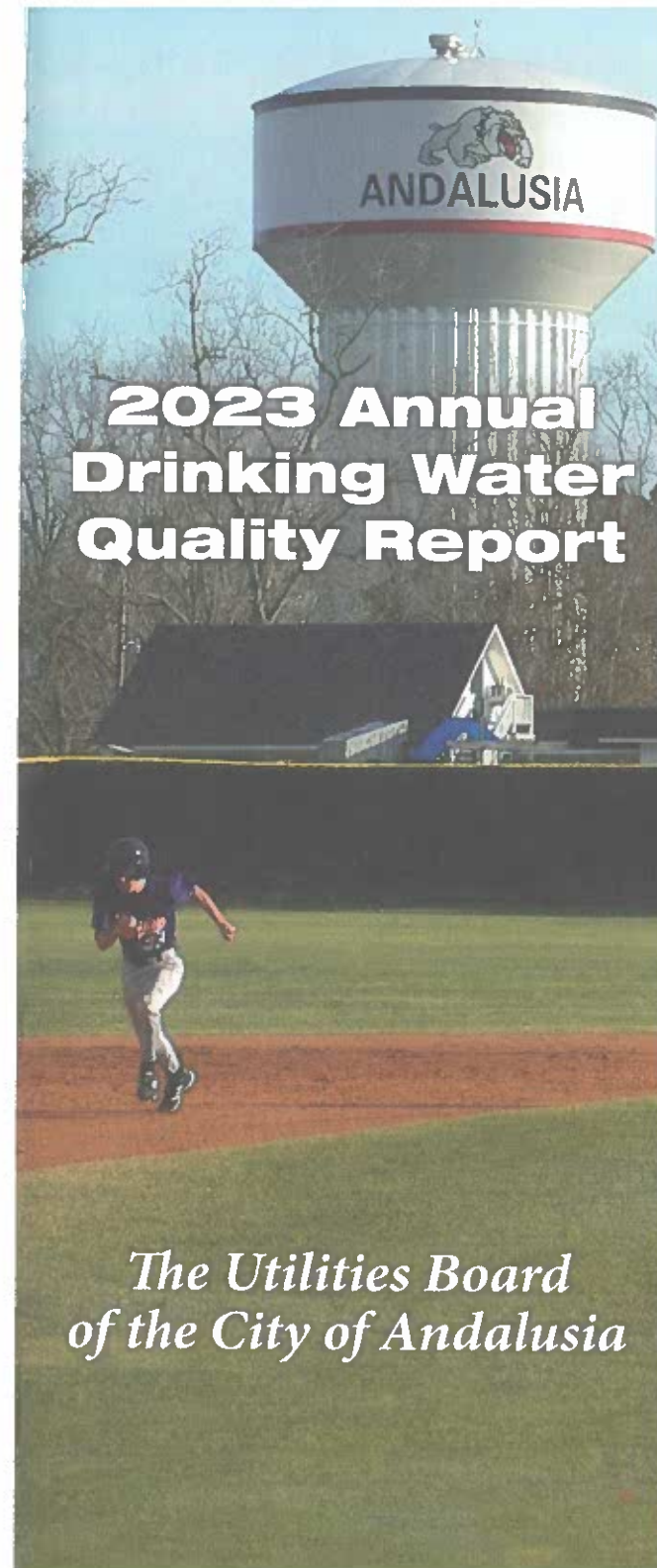
The Utilities Board of the City of Andalusia also tests for disinfection byproducts in your water, such as trihalomethanes and haloacetic acids. Disinfection byproducts are contaminants that develop when chlorine breaks down over an extended period of time. All test results were well within state and federal standards.

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 is not required.

The Utilities Board of the City of Andalusia strives to provide a dependable and safe supply of water to all consumers. We ask that you be considerate when accidents or mother nature hinder our efforts to supply your water. Regardless of the time, or weather, Utility Board personnel are on call and working to keep your water flowing. Please help us protect our water sources, which are a vital part of our lives, and our children's future.

Utilities Board of the City of Andalusia Board of Directors

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2023 Annual Drinking Water Quality Report

The Utilities Board of the City of Andalusia

The Utilities Board of the City of Andalusia is very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide you a safe and dependable supply of drinking water. We want you to understand our efforts to maintain and continually improve the water you receive and to protect our water supply.

Our water source is groundwater drawn from nine (9) wells. Three (3) wells draw from the Tuscahoma Sands/Hatchegbee aquifer, three (3) wells draw from the Nanafalia aquifer and three (3) well draws from the Clayton Limestone aquifer. Each water system must complete a Source Water Assessment Program (SWAP). The SWAP is comprised of four distinct activities: delineation of the source water assessment area, contaminant inventory, susceptibility analysis and public awareness. The Utilities Board has completed each required component of the source water assessment. A copy of the assessment report is available for review in our office. Chlorine is added at each well as a disinfectant.

The Utilities Board is pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact the Andalusia Utilities Board at (334) 222-1332.

If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the third Thursday of each month, at 12:00 p.m. in Room 112 of City Hall. The Utilities Board routinely monitors 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, 2023. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. This table has many abbreviations you might not be familiar with. To help you better understand these abbreviations we have provided the following definitions:

definitions:

- Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.
- 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 (µg/L) – 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 (ng/L) – one part per trillion corresponds to one minute in \$10,000,000,000 years, or a single penny in \$10,000,000,000.
- Parts per quadrillion (ppq) or picograms per liter (pg/L) – one part per quadrillion corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000.
- Picocuries per liter (pCi/l) – picocuries per liter is a measure of radioactivity in water.
- Millirems per year (mrem/yr) – measure of radiation absorbed by the body.
- Nephelometric Turbidity Units (NTU) – a measure of the clarity of water. Turbidity more than 5 NTU is just noticeable to the average person.
- 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.
- 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.
- 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.
- Maximum Residual Disinfectant Level (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.
- MFL – Million Fibers per Liter.
- AL – Action Level – the concentrations of a contaminant, which, if exceeded, triggers, treatment, or other requirements, which a water system must follow.
- TT – Treatment Technique – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- Variances and Exemptions – The Department or EPA permission not to meet and MCL or a treatment technique under certain conditions.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity (2020)	No	.20	NTU	n/a	TT	Soil runoff
Radioactive Contaminants						
Alpha emitters (2020)	No	3.4±2.0	pCi/l	N/A	15	Erosion of natural deposits
Radium 228 (2020)	No	0.8±0.4	pCi/l	N/A	5	Erosion of natural deposits
Inorganic Contaminants						
Copper (2022)	No	0.33	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	0.67	ppm	4	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate	No	0.10	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
(THM) Total trihalomethanes	No	36.7	ppb	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAAS)	No	7.3	ppb	N/A	60	By-product of drinking water chlorination
Xylenes (2020)	No	0.74	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

Table of Primary Contaminants - At high levels some primary contaminants are known to pose a health risk to humans. This table provides a quick glance of any primary contaminant detections.

Contaminant	MCL	Andalusia	Contaminant	MCL	Andalusia
Bacteriological					
Total Coliform Bacteria	<5%	ND	Enfithin	2 ppb	ND
Turbidity (2020)	5.0 NTU	0.20	Epichlorohydrin	11	ND
Fecal coliform and E. coli	TT	ND	Glyphosate	700 ppb	ND
Radiological					
Beta Photon Emitters	4	ND	Total Organic Carbon (TOC)	11 ppm	ND
Alpha Emitters	15	ND	Heptachlor	400 ppt	ND
Combined Radium	5	ND	Heptachlor epoxide	200 ppt	ND
Inorganic					
Antimony	6 ppb	ND	Hexachlorobenzene	1 ppb	ND
Arsenic	10 ppb	ND	Hexachlorocyclopentadiene	50 ppb	ND
Asbestos (MFL)	7	ND	Lindane	200 ppt	ND
Barium	2 ppm	ND	Methoxychlor	40 ppt	ND
Beryllium	4 ppb	ND	Oxamyl (Vedate)	200 ppb	ND
Cadmium	5 ppb	ND	PCBs	500 ppt	ND
Chromium	100 ppb	ND	Pentachlorophenol	1 ppb	ND
Copper (2022)	AL=1.3 ppm	0.33	Picloram	500 ppb	ND
Cyanide	200 ppb	ND	Simazine	4 ppb	ND
Fluoride	4 ppm	.67	Toxaphene	3 ppb	ND
Lead (2022)	AL=15 ppb	.35	Benzene	5 ppb	ND
Mercury	2 ppb	ND	Carbon tetrachloride	5 ppb	ND
Nitrate	10 ppm	ND	Chlorobenzene	100 ppb	ND
Nitrate	1 ppm	ND	Dibromo chloropropane	200 ppt	ND
Selenium	50 ppb	ND	o-Dichlorobenzene	600 ppb	ND
Thallium	2 ppb	ND	p-Dichlorobenzene	75 ppb	ND
Organic Chemicals					
2,4-D	70 ppb	ND	1,2-Dichloroethane	5 ppb	ND
2,4,5-TR (Sivex)	50 ppb	ND	trans-1,2-Dichloroethane	100 ppb	ND
Acrylamide	11	ND	Dichloromethane	5 ppb	ND
Alachlor	2 ppb	ND	1,2-Dichloropropane	5 ppb	ND
Atrazine	3 ppb	ND	Ethylbenzene	700 ppb	ND
Benz[a]pyrene (PbA)	200 ppt	ND	Ethylene dibromide	50 ppt	ND
Carbaryl	40 ppb	ND	Styrene	100 ppb	ND
Chlordane	2 ppb	ND	Tetrachloroethylene	5 ppb	ND
Dalapon	200 ppb	ND	1,2,4-trichlorobenzene	70 ppb	ND
Di-(2-ethylhexyl) adipate	400 ppb	ND	1,1,1-trichloroethane	200 ppb	ND
Di-(2-ethylhexyl) phthalates	5 ppb	ND	1,1,2-trichloroethane	5 ppb	ND
Dinoseb	7 ppb	ND	Trichloroethylene	5 ppb	ND
Diquat	20 ppb	ND	THM	80 ppb	36.7
Dioxin (2,3,7,8-TCDD)	30 ppt	ND	HAAS	60 ppb	7.3
Endrin	100 ppb	ND	1,4-dioxane	3 ppm	ND
			Vinyl chloride	2 ppb	ND
			Xylenes	10 ppm	ND

The table below list the contaminants that are not regulated by the EPA or ADEM but are tested for in your drinking water. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested for to provide historical data on components presence in drinking water over time.

Test Results – Unregulated

Contaminant Table | Monitoring results in ppb

CONTAMINANT	Low Result	High Result	CONTAMINANT	Low Result	High Result
1,1-Dichloroethane	ND	ND	Chloroform	ND	11
1,1,1-Trichloroethane	ND	ND	Chloromethane	ND	ND
1,1,2-Trichloroethane	ND	ND	Dibromochloromethane	7	9.3
1,1-Dibromochloroethane	ND	ND	Dibromomethane	ND	ND
1,2,3-Trichlorobenzene	ND	ND	Dicamba	ND	ND
1,2,4-Trichlorobenzene	ND	ND	Dichlorodifluoromethane	ND	ND
1,1-Dichloroethane	ND	ND	Dieldrin	ND	ND
1,1-Dichlorobenzene	ND	ND	Hexachlorocyclopentadiene	ND	ND
1,1,1-Trichloroethane	ND	ND	Isopropylbenzene	ND	ND
2,2-Trichloropropane	ND	ND	1,4-Dichlorobenzene	ND	ND
1,1-Dichloroethane	ND	ND	Methoxy	ND	ND
1,1,1-Trichloroethane	ND	ND	MFL	ND	ND
1,1-Dichloroethane	ND	ND	Mendobut	ND	ND
1,1-Dichloroethane	ND	ND	Methoxy	ND	ND
1,1-Dichloroethane	ND	ND	N-Butylbenzene	ND	ND
1,1-Dichloroethane	ND	ND	Naphthalene	ND	ND
1,1-Dichloroethane	ND	ND	N-Propyl benzene	ND	ND
1,1-Dichloroethane	ND	ND	O-Chloroethane	ND	ND
1,1-Dichloroethane	ND	ND	P-4-Dioxane	ND	ND
1,1-Dichloroethane	ND	ND	P-Isopropylbenzene	ND	ND
1,1-Dichloroethane	ND	ND	Propachlor	ND	ND
1,1-Dichloroethane	ND	ND	Sec-Butylbenzene	ND	ND
1,1-Dichloroethane	ND	ND	Tert-Butylbenzene	ND	ND
1,1-Dichloroethane	ND	ND	Trichlorofluoromethane	ND	ND

The third Unregulated Contaminant Rule (UCMR3) was initiated by EPA in 2012. UCMR3 requires the monitoring of two viruses and 28 unregulated chemical contaminants. These contaminants pose many of the same health risks as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested for to provide historical data on components presence in drinking water over time.

Third Unregulated Contaminant

Monitoring (UCMR 3) | Monitoring results in ppb

CONTAMINANT	DETECTED	CONTAMINANT	DETECTED
1,2,3-trichloropropane	ND	cobalt	ND
1,3-butadiene	ND	chromium	ND
chloromethane (methyl chloride)	ND	chromium-63	ND
1,1-dichloroethane	ND	chromium-68	ND
bromomethane	ND	chlorate	ND
dibromodifluoromethane (DBDF-22)	ND	perfluorooctanesulfonic acid (PFOS)	ND
bromochloromethane (Bromo-1011)	ND	perfluoroundecanoic acid (PFUA)	ND
1,4-dioxane	ND	perfluorododecanoic acid (PFDA)	ND
Vanadium	ND	perfluorotridecanoic acid (PFTrS)	ND
Methoxychlor	ND	perfluorotetradecanoic acid (PFTeS)	ND
oxyphosphen	ND	perfluoropentadecanoic acid (PFPeS)	ND
1,1,1-trichloroethane	ND	perfluorohexadecanoic acid (PFHxS)	ND
estriol	ND	perfluorooctanoic acid (PFPA)	ND
estron	ND	estriol	ND
estrogen	ND	estrone	ND
estrone	ND	estradiol	ND
estradiol	ND	estrone	ND
estrone	ND	estrone	ND
estrone	ND	estrone	ND
estrone	ND	estrone	ND

The fourth Unregulated Contaminant Rule (UCMR4) was initiated by EPA in 2016. UCMR4 requires the monitoring of 10 cyanotoxins and 20 additional unregulated chemical contaminants. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested for to provide historical data on components present in drinking water over time.

Fourth Unregulated Contaminant

Monitoring (UCMR 4) | Monitoring results in ppb

CONTAMINANT	DETECTED	CONTAMINANT	DETECTED
Germoxim	ND	isobutol	ND
Managose	ND	1-butanol	ND
Alkyl-bis(2-chloroethyl) ether	ND	2-methoxyethanol	ND
Chloroform	ND	2-propen-1-ol	ND
Dimethyltin	ND	Butylated hydroxyanisole	ND
Diethyltin	ND	C-hexidine	ND
Diethyltin	ND	Quinoline	ND
Diethyltin	ND	Total Organic Carbon (TOC)	ND
Diethyltin	ND	Benzoate	ND
Diethyltin	ND	Monochloroacetic Acid	ND
Diethyltin	ND	Dichloroacetic Acid	ND
Diethyltin	ND	Trichloroacetic Acid	ND
Diethyltin	ND	Trichloroacetic Acid	ND
Diethyltin	ND	Trichloroacetic Acid	ND