

2024 Annual Water Quality Report
(Testing Performed January through December 2023)



ALABASTER WATER BOARD

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*Proudly Serving the Alabaster
Community Since 1955*

The Alabaster Water Board (AWB) is pleased to present this Annual Water Quality Report to inform you about the quality of the water delivered to you. AWB works diligently to provide a high-quality, cost-effective drinking water supply.

Water Sources	Three groundwater wells producing from the Longview Newalla Aquifer	
	Purchased surface water from Shelby County South Water Treatment Plant – Coosa River	
	Purchased surface water from Talladega – Shelby Water Treatment Plant – Coosa River	
	Purchased surface water from Bessemer Water Service – Warrior River via Bessemer GUSC	
Additional Connections	Emergency connections with Montevallo, Calera, and Helena	
Water Treatment	Membrane filtration, chlorination, and fluoridation	
Storage Capacity	Ten (10) tanks with a total storage capacity of 10.2 million gallons	
Number of Customers	Approximately 13,471 active metered service connections	
Water Board General Manager	Laura A. Koon, P.E.	
Water Board Members	Bobby Harris, Chairman	Greg Farrell – Director
	Mike Allen, Vice Chairman	Stacy Rakestraw – Director
	Rick Ellis – Director	

Source Water Assessment

AWB has completed all the components of the required Source Water Assessment Plan (SWAP) in accordance with the Alabama Department of Environmental Management (ADEM) regulations. This plan assists with protecting our water sources. The plan provides information such as the delineation of wellhead protection areas and potential sources of contamination within these areas. It also includes a susceptibility analysis which classifies potential contaminants as high, moderate, or non-susceptible (low) to contaminating the water source. The SWAP is updated as needed.

AWB has also developed a Wellhead Protection Plan (WHPP) that provides additional measures for protecting our water sources. The Wellhead Protection Plan is a voluntary program developed in accordance with the ADEM Wellhead Protection Program Guidance Document. The WHPP and SWAP reports are available in our office for review, or a copy may be purchased upon request for a nominal reproduction fee. Please help us protect 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.

Monitoring Schedule

All water sources for AWB are routinely monitored for contaminants, according to a schedule determined by Federal and State regulations, using Environmental Protection Agency (EPA) – approved methods and State certified laboratories. Every water system has individually assigned monitoring requirements. The ADEM allows monitoring of some contaminants less than once per year because the concentrations of these contaminants do not change frequently. The following table shows the most recent year of monitoring for these contaminant groups.

Constituent Monitored	AWB	Shelby Co. Water	Talladega-Shelby WTP	Bessemer (GUSC)
Inorganic Contaminants	2023	2023	2023	2023
Lead/Copper	2023	2020	2021	2023
Microbiological Contaminants	Monthly	Monthly	Monthly	Monthly
Nitrates	2023	2023	2023	2023
Radioactive Contaminants	2018	2021	2017	2021
Synthetic Organic Contaminants (including pesticides & herbicides)	2023	2021	2022	2022
Volatile Organic Contaminants	2023	2023	2022	2023
Disinfection By-products	2023	2023	2023	2023
PFAS	2023	2023	2022	NR

General 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. Maximum Contaminant Levels (MCLs), 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, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The 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 and 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.

Some individuals may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, individuals with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. Individuals at risk should seek advice from their health care providers about drinking water. EPA/Centers for Disease Control (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.

Surface water sources are tested for pathogens such as *Cryptosporidium* at certain intervals determined by the EPA and the ADEM. These pathogens can enter the water from animal or human waste. All of AWB's test results for *Cryptosporidium* were within federal and state standards. For people who may be immuno-compromised, a guidance document developed by the Center for Disease Control is available online at <https://www.cdc.gov/parasites/crypto/illness.html> or from the EPA's Safe Drinking Water Hotline at 1-800-426-4791. This language does not indicate the presence of *Cryptosporidium* in the drinking 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

Elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. However, *lead is rarely found in source water*. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. AWB 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.

Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Lead in household water usually comes from the plumbing in your house, not from the local water supply, and hot water is more likely to cause lead to leach from 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 online at <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water> or by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

AWB completed lead and copper testing at 30 sites in 2023. All lead and copper test results were below the MCL. AWB will complete additional lead and copper testing in 2026.

Questions?

If you have any questions about this report or concerning AWB, please contact Laura A. Koon, P.E., General Manager, at 205-663-6155. If you would like to learn more, please attend a regularly scheduled monthly water board meetings. Board meetings are held on the third Tuesday of each month at 6:00 p.m. at the AWB office located at 200 Kent Stone Blvd, Alabaster, Alabama. The AWB Board members are Bobby Harris, Chairman, Mike Allen, Vice Chairman, Rick Ellis, Director, Greg Farrell, Director, and Stacy Rakestraw, Director.

Monitoring Results – Primary and Secondary Contaminants

This report contains results from the most recent monitoring of primary, secondary, and unregulated contaminants. The monitoring was performed in accordance with the sampling requirements established by EPA and ADEM. We have learned through our monitoring and testing that some constituents have been detected. AWB is pleased to report that our drinking water meets or exceeds federal and state drinking water requirements. AWB had one sampling location violation during this reporting period for a Disinfection By-Product sample, although no samples taken exceeded federal or state requirements. This is further explained in the Monitoring Non-Compliance Notice section below.

DETECTED DRINKING WATER CONTAMINANTS									
Regulated Primary Contaminants	Violation Y/N	Detected AWB	Detected Shelby Co. WTP	Detected Talladega Shelby WTP	Detected Bessemer (GUSC) WTP	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Chlorine	NO	High: 2.14 Range: 0.5-2.14	2.22	2.47	2	ppm	MRDL G=4	MRDL=4	Water additive used to control microbes
Turbidity	NO	0.05 100%<0.5	0.26	0.27	0.10	NTU	none	TT	Soil runoff
Total Coliform Bacteria	NO	ND	ND	ND	0	Presence/ Absence	NA	<5%	Naturally present in the environment
Total Organic Carbon (TOC)	NO	0.391	2.00	2.1	NR	ppm	none	TT	Soil runoff
Alpha emitters	NO	2.4 +/- 0.6	-0.079 +/- 0.569	0.800 +/- 0.600	ND	pCi/l	0	15	Erosion of natural deposits
Radium-228	NO	0.6 +/-0.5	0.199 +/- 0.37	0.5 +/- 0.4	ND	pCi/L	0	5	Erosion of natural deposits
Barium	NO	0.073	0.093	0.053	ND	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	NO	0.024 * 0 > AL	0.005	0.007	0.094 highest	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	NO	1.18	1.2	0.8	1.04	ppm	4	4	Erosion of natural deposits; water additive; discharge from factories
Lead	NO	ND	ND	ND	0.0017	ppm	0	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	NO	1.4	0.10	0.12	0.66	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of deposits
Chlorine Dioxide	NO	NA	NA	0.75	0.27	ppm	0.80	0.80	Water additive used to control microbes
Chlorite	NO	NA	NA	0.45	1.01	ppm	0.80	1.0	By-product of drinking water chlorination
2,4-D	NO	ND	ND	0.17	ND	ppb	70	70	Runoff from herbicide used on row crops
Regulated Disinfection By-products									
TTHM [Total trihalomethanes]	YES**	LRAA 44.5-70.3	LRAA 54.00	LRAA 22.5	LRAA 45.7	ppb	NA	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	YES**	LRAA 21-41	LRAA 36.0	LRAA 10.7	LRAA 18	ppb	NA	60	By-product of drinking water chlorination

Unregulated Contaminants									
11CI-PF3OUdS	ND	ND	ND	NR	ppb	NA	NA	Manufactured chemicals and associated products	
9CI-PF3ONS	ND	ND	ND	NR	ppb	NA	NA	Manufactured chemicals and associated products	
ADONA	ND	ND	ND	NR	ppb	NA	NA	Manufactured chemicals and associated products	
HFPO-DA	ND	ND	ND	NR	ppb	NA	NA	Manufactured chemicals and associated products	
N-EtFOSAA	ND	ND	0.00049	NR	ppb	NA	NA	Manufactured chemicals and associated products	
N-MeFOSAA	ND	ND	ND	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorobutanesulfonic acid	0.0056	0.11	0.087	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorodecanoic acid	ND	0.003	0.0023	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorohexanoic acid	ND	0.026	0.025	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorododecanoic acid	ND	ND	ND	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluoroheptanoic acid	ND	0.0099	0.009	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorohexanesulfonic acid	0.0029	0.0044	0.0032	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorononanoic acid	ND	.0027	.0022	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorooctanesulfonic acid	High: 0.0063 0.0021 – 0.0063	0.039	0.032	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorooctanoic acid	0.0025	0.028	0.024	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorotetradecanoic acid	ND	ND	ND	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluorotridecanoic acid	ND	ND	ND	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Perfluoroundecanoic acid	ND	ND	ND	NR	ppb	NA	NA	Manufactured chemicals and associated products	
Secondary Contaminants									
Chloride	NO	5.9	12	13.4	NR	ppm	none	250	Naturally occurring or from runoff
Hardness	NO	195	86	95	NR	ppm	none	none	Naturally occurring or from water additives
pH	NO	7.0-7.6	6.8-7.3	6.9-7.5	NR	S.U.	none	6.50-8.50	Naturally occurring or from water additives
Sodium	NO	3.5	9.1	6.6	NR	ppm	none	none	Naturally occurring
Sulfate	NO	13.9	28.2	29.5	NR	ppm	none	250	Naturally occurring or from erosion of natural deposits
Total Dissolved Solids	NO	163	88	100	NR	ppm	none	500	Naturally occurring or from industrial discharge or agricultural runoff

*Figure shown is 90th percentile of distribution sites sampled and number of sites exceeding the Action Level (AL) = 0

** Please see explanation in Monitoring Non-Compliance Notice below

Monitoring Non-Compliance Notice

AWB 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. During January 2019 - June 2022, AWB did not monitor for Disinfection By-Products (DBPs) at the proper location, and therefore cannot be sure of the quality of your drinking water during that time.

Because DBPs from these quarters will be used in determining compliance with DBP MCLs in the quarters of July - September 2022, October - December 2022, and January - March 2023 AWB will incur monitoring violations for those quarters.

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.

The sample location in question was a new location that is located approximately 1.5 miles south on the same water main as the sample location mistakenly used. The sample site used was a prior sample location for DBPs. In the time since AWB discovered this mistake, steps have been taken to ensure the correct location is used, such as having all DBP sample sites located in the Geographic Information System (GIS) mapping system for easy reference and have reviewed all procedures with AWB personnel assigned to collecting samples.

Should you have any questions concerning this non-compliance or monitoring requirements, please contact: Laura A. Koon, P.E., General Manager of AWB at 200 Kent Stone Blvd, Alabaster, AL 35007 or at 205-663-6155.

Reporting Non-Compliance Notice

During the calendar year of 2023, AWB incurred the following non-compliance violations that resulted from a failure of Pace Analytical to submit results by the prescribed dates set by the Alabama Department of Environmental Management (ADEM).

- PFAS Reporting: January – March 2023 (Quarterly Sampling Results)

All samples were taken and tested in a timely manner as required by ADEM and the EPA. AWB uses a third party laboratory, Pace Analytical, to analyze these samples and report them to ADEM. Additional internal monitoring procedures have been established by AWB to monitor for the submission of all results in a timely manner that meets the rules established by ADEM.

Definitions

Action Level (AL) - 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 by-products (DBPs) - are formed when disinfectants used in water treatment plants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water.

Locational Running Annual Average (LRAA) - yearly average of all the DPB results at each specific sampling site in the distribution system. The range of lowest to highest distribution site LRAA is reported in the Table of Detected Contaminants.

Maximum Contaminant Level (MCL) - the 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 (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) - the highest level of a disinfectant allowed in drinking water

Maximum Residual Disinfectant Level Goal (MRDLG) – the highest 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.

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.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

Not Applicable (NA) – the requirement for performing referenced monitoring was not required.

Not Reported (NR) - laboratory analysis, usually Secondary Contaminants, not reported by water system. EPA recommends secondary standards to water systems but does not require systems to comply.

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 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 trillion (ppt) or Nanograms per liter (ng/l) - 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 (pg/l) - corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Running Annual Average (RAA) – level reported is the highest running annual average

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. Water with less than 6.5 could be acidic, soft, and corrosive. A pH greater than 8.5 could indicate that the water is hard.

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

Variations & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

National Focus on Drinking Water

There has been a national focus put on a group of man-made chemicals in drinking water called PFAS (per- and polyfluoroalkyl substances). Many of these substances can also now be found in the environment, including source waters for many communities. The U.S. Environmental Protection Agency (EPA), which is the federal agency with responsibility to put forth regulations to protect human health and the environment, formally announced its final National Primary Drinking Water Regulation (NPDWR) for six PFAS on April 10, 2024. The six PFAS covered by these new regulations are perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorononanoic acid (PFNA), hexafluoropropylene oxide dimer acid (HFPO-DA, also known as Gen-X), perfluorohexane sulfonic acid (PFHxS), and perfluorobutane sulfonic acid (PFBS).

The NPDWR established legally enforceable limits, called Maximum Contaminant Levels (MCLs), for six PFAS in drinking water. PFOA, PFOS, PFHxS, PFNA, and HFPO-DA (Gen-X) will be regulated as individual contaminants. PFHxS, PFNA, PFBS, and HFPO-DA will also be regulated as a PFAS mixture. The NPDWR also established health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these six PFAS.

Compound	MCLG (health-based goal)	MCL (enforceable levels)
PFOA	Zero	4.0 parts per trillion (ppt) (also expressed as ng/L)
PFOS	Zero	4.0 ppt
PFHxS	10.0 ppt	10.0 ppt
PFNA	10.0 ppt	10.0 ppt
HFPO-DA (commonly known as Gen-X Chemicals)	10.0 ppt	10.0 ppt
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1.0 (unitless) Hazard Index	1.0 (unitless) Hazard Index

An MCL is an enforceable water quality standard that protects public health by setting the maximum level that a contaminant may be present in drinking water delivered to users of a public water system. An MCLG, although not enforceable, is the maximum level of a contaminant in drinking water where there is no known or anticipated negative effect on an individual's health, allowing for a margin of safety.

The EPA's finalized NPDWR for PFAS will require public water systems, like AWB, to:

- Monitor for these PFAS;
- Notify the public of the levels of these PFAS in drinking water; and
- Reduce the levels of these PFAS in drinking water if they exceed the MCL or Hazard Index.

Public water systems with PFAS levels exceeding the MCL or Hazard Index will have up to five years to reduce the levels to below the required limit.

Since 1955, AWB has been in the business of providing drinking water that is high quality and meets all regulatory standards as part of our role in public health for the citizens of Alabaster. AWB will be required to comply with these new regulations for PFAS that are being put forward by the EPA. AWB wants to take this opportunity to explain more about PFAS compounds, EPA's actions and describe AWB's initial plan moving forward.

What are PFAS compounds?

Since the 1940s, PFAS compounds have been widely used in the manufacturing of carpets, clothing, fabrics for furniture, paper packaging for food and other materials. They are also used in firefighting foam and in industrial processes. The EPA says most people are exposed to these chemicals through consumer products. However, drinking water can be an additional source of exposure in communities where these chemicals have entered the water supplies. Per- and poly-fluoroalkyl substances (PFAS) are a large and diverse group of chemicals used in many commercial applications due to their unique properties, such as resistance to high and low temperatures, resistance to degradation, and nonstick characteristics. The EPA says most uses of PFOA and PFOS were voluntarily phased out by U.S. manufacturers in the mid-2000s. There are a limited number of ongoing uses, and these chemicals remain in the environment due to their persistence and the inability to degrade.

What are the levels in AWB's drinking water?

AWB has sampled the drinking water for PFAS on a quarterly basis as required by the Alabama Department of Environmental Management (ADEM) and the EPA. Listed below are the highest test results for 2023 for the PFAS substances included in EPA's latest actions. Also listed are the highest test results from the 2 water treatments plants that supply water from Shelby County. Bessemer Utilities was not required to perform this testing.

PFAS Name	2017 Health Advisory Limits	June 15, 2022 Health Advisory Limits	April 10, 2024 Final MCLs	2023 AWB Results	2023 Shelby County SWTP	2023 Shelby County TSWTP
PFOA	70 ppt	0.004 ppt (interim)	4 ppt	ND	28 ppt	24 ppt
PFOS	70 ppt	0.02 ppt (interim)	4 ppt	6.3 ppt (Highest Result)	39 ppt	32 ppt
Hazard Index Chemicals	N/A	N/A	1	0.38	NR	NR
PFBS	N/A	2,000 ppt (final)	In Hazard Index	5.6 ppt	110 ppt	87 ppt
HFPO-DA (GenX Chemicals)	N/A	10 ppt (final)	10.0 ppt & Included In Hazard Index	ND	ND	ND
PFHxS	N/A	N/A	10.0 ppt & Included In Hazard Index	3.4 ppt	4.4 ppt	3.2 ppt
PFNA	N/A	N/A	10.0 ppt & Included In Hazard Index	ND	2.7 ppt	2.2 ppt

What is AWB doing about PFAS?

Protection of public health and the environment and the quality of your drinking water are our top priorities at AWB. The EPA recommends public water systems that find PFOA or PFOS in the drinking water supply take steps to inform customers, undertake additional sampling to assess the level, scope, and source of contamination, and examine steps to limit exposure. That is what AWB will do.

Although the EPA's new regulation provides a window of up to five years for public water systems to reach full compliance, AWB has already taken action to begin testing for the presence of these PFAS in the water supply and is working to determine the best method for removing PFAS from the water. AWB has been monitoring for PFAS, notifying the public of the levels of these PFAS via reporting to the Alabama Department of Environmental Management and undertaking efforts to evaluate how best to reduce the levels of these PFAS in drinking water. In addition, AWB will also soon join with thousands of other water providers across the country to test for PFOA, PFOS, and 27 other PFAS compounds under the EPA's Fifth Unregulated Contaminant Monitoring Rule, also known as UCMR 5. UCMR 5 testing is intended to give the EPA and water providers a greater understanding of how pervasive PFAS are in our nation's drinking water. As directed under UCMR 5, AWB will make the results publicly available and publish the results in the annual Consumer Confidence Report (CCR).

Due to the unique chemical properties of PFAS, conventional water treatment plants and traditional treatment methods are incapable of fully removing PFAS from drinking water. As a result, AWB will begin evaluating state-of-the-art water filtration systems to reduce PFAS to non-detectable levels. AWB will begin the process of completing a pilot program study of various PFAS treatment technologies and will work with engineers to select the best method of removing PFAS from the water supply. The engineers assisting AWB in these efforts are experienced in addressing PFAS removal from drinking water and developing engineering solutions best suited to remove PFAS from the drinking water supply.

For more information about how the EPA determines their proposed and final PFOA and PFOS MCLs, visit the EPA's website at: <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>.

Below is a list of *Primary Drinking Water Contaminants* for which AWB routinely monitors. These contaminants are monitored in accordance with sampling requirements established by the EPA and the ADEM; however, not all were detected in your drinking water. The contaminants that had some level of detection are listed in the table of *Detected Drinking Water Contaminants* located on page 3.

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS							
Contaminant	Highest Detected	MCL	Unit of Msmt	Contaminant	Highest Detected	MCL	Unit of Msmt
Bacteriological Contaminants				Benzo(a)pyrene [PAHs]	ND	200	ppt
Total Coliform Bacteria	ND	<5%	present or absent	Dichloromethane	ND	5	ppb
Fecal Coliform and E. coli	ND	0	present or absent	1,2-Dichloropropane	ND	5	ppb
Turbidity	0.05	TT	NTU	Di (2-ethylhexyl)adipate	ND	400	ppb
Radiological Contaminants				Di (2-ethylhexyl)phthalate	ND	6	ppb
Beta/photon emitters	NA	4	mrem/yr	Dinoseb	ND	7	ppb
Alpha emitters	2.4 +/- 0.6	15	pCi/l	Dioxin [2,3,7,8-TCDD]	ND	30	pg/l
Combined radium	0.6 +/-0.5	5	pCi/l	Diquat	ND	20	ppb
Uranium	NA	30	pCi/l	Endothall	ND	100	ppb
Inorganic Chemicals				Endrin	ND	2	ppb
Antimony	ND	6	ppb	Epichlorohydrin	ND	TT	TT
Arsenic	ND	10	ppb	Ethylbenzene	ND	700	ppb
Asbestos	ND	7	MFL	Ethylene dibromide	ND	50	ppt
Barium	0.073	2	ppm	Glyphosate	ND	700	ppb
Beryllium	ND	4	ppb	Heptachlor	ND	400	ng/l
Cadmium	ND	5	ppb	Heptachlor epoxide	ND	200	ng/l
Chromium	ND	100	ppb	Hexachlorobenzene	ND	1	ppb
Copper	0.024	AL=1.3	ppm	Hexachlorocyclopentadiene	ND	50	ppb
Cyanide	ND	200	ppb	Lindane	ND	200	ng/l
Fluoride	1.18	4	ppm	Methoxychlor	ND	40	ppb
Lead	ND	AL=15	ppb	Oxamyl [Vydate]	ND	200	ppb
Mercury	ND	2	ppb	Polychlorinated biphenyls (PCBS)	ND	0.5	ppb
Nickel	ND	0.1	ppm	Pentachlorophenol	ND	1	ppb
Nitrate	1.4	10	ppm	Picloram	ND	500	ppb
Nitrite	ND	1	ppm	Simazine	ND	4	ppb
Selenium	ND	0.05	ppm	Styrene	ND	100	ppb
Thallium	ND	0.002	ppm	Tetrachloroethylene	ND	5	ppb
Organic Contaminants				Toluene	ND	1	ppm
2,4-D	ND	70	ppb	Toxaphene	ND	3	ppb
Acrylamide	ND	TT	TT	2,4,5-TP(Silvex)	ND	50	ppb
Alachlor	ND	2	ppb	1,2,4-Trichlorobenzene	ND	.07	ppm
Atrazine	ND	3	ppb	1,1,1-Trichloroethane	ND	200	ppb
Benzene	ND	5	ppb	1,1,2-Trichloroethane	ND	5	ppb
trans-1,2-Dichloroethylene	ND	100	ppb	Vinyl Chloride	ND	2	ppb
Carbofuran	ND	40	ppb	Xylenes	ND	10	ppm
Carbon tetrachloride	ND	5	ppb	Disinfectants & Disinfection By-products			
Chlordane	ND	2	ppb	Chlorine	2.14	4	ppm
Chlorobenzene	ND	100	ppb	Chlorine Dioxide	NA	0.80	ppm
Dalapon	ND	200	ppb	Chloramines	NA	4	ppm
Dibromochloropropane	ND	200	ppt	Bromate	NA	10	ppb
o-Dichlorobenzene	ND	600	ppb	Chlorite	NA	1.0	ppm
p-Dichlorobenzene	ND	75	ppb	HAA5 [Total haloacetic acids]	41	60	ppb
1,2-Dichloroethane	ND	5	ppb	TTHM [Total trihalomethanes]	70.3	80	ppb
1,1-Dichloroethylene	ND	7	ppb	Total Organic Carbon (TOC)	0.391	TT	ppm
cis-1,2-Dichloroethylene	ND	70	ppb				
Trichloroethylene	ND	5	ppb				