



2023 CONSUMER CONFIDENCE WATER QUALITY REPORT

Sampling Schedule January 1 through December 31, 2022

We're pleased to bring you our Annual Drinking Water Quality Report. In 1974, the Safe Drinking Water (SDW) Act was signed into law requiring all public water systems to meet national standards for water quality. These standards set limits on certain contaminants and require public water systems to monitor for contaminants. NBU tests for these constituents in your drinking water according to Federal and State laws. The tables in this report show the monitoring results of the 2022 calendar year (1/1/22-12/31/22) sampling schedule unless otherwise noted. This report informs customers about water quality and services provided daily. NBU is constantly working to improve treatment processes and protect our supply. We are committed to quality water that has been and remains safe to drink. This report provides a brief but accurate picture of the quality of water you get every day from your tap. If you have questions, feel free to contact us at (251) 580-1626.

I. WATER SOURCES

NBU obtains water through nine public water supply wells: 2, 3, 4, 5, 6, 9A, 9B, 10 & 12. Each produces groundwater from sand units of the regional aquifer known as the Pliocene-Miocene Aquifer System. **North Baldwin sands are identified and supply:**
 Bay Minette Middle Aquifer: Wells 2, 3, 4 & 5
 Bay Minette Lower Aquifer: Wells 5 & 6
 Miocene Undifferentiated Aquifer: Wells 9A & 9B
 Stapleton 275-foot Aquifer: Well 12
 Miocene-Pliocene Aquifer: Well 10

The aquifer recharge source is precipitation. Before distribution, the groundwater is treated with aeration, chlorination, fluoridation and corrosion control prior to distribution.

In regulatory compliance with the Alabama Department of Environmental Management (ADEM), NBU implements and maintains a Source Water Assessment Program for each well. The program is a pro-active measure to protect drinking water sources. Documents associated with source water and vulnerability assessments are kept at NBU.

NBU's Board meets on the last Wednesday of each month at NBU. Members include Clint Conner, Hamilton Smith, Trey Dickson, Jamie Jaye & Mayor Bob Wills. Chief Executive Officer is Jason Padgett.

II. CONTAMINANTS & MONITORING

Tap & bottled drinking water sources include rivers, lakes, streams, ponds, reservoirs, springs & wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from the presence of animals or human activities. All sources of drinking water are subject to potential contamination by constituents naturally occurring or man-made. Those constituents can be microbes, organic or inorganic chemicals or radioactive materials. The presence of contaminants doesn't necessarily indicate a health risk. For contaminant and potential health effect details, call the Environmental Protection Agency's SDW Hotline-800-426-4791.

A. LEAD NOTICE

Every report shall contain the following lead-specific info: 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. NBU is responsible for providing high quality drinking water, but can't 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're concerned about lead in your water, you may wish to have your water tested. Info 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>.

B. RESULTS OF RADON MONITORING

Radon is a radioactive gas you can't see, taste or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may increase risk of stomach cancer. If concerned about residential radon, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For more info, call your state radon program or EPA's Radon Hotline (800-SOS-RADON).

C. DIOXIN AND ASBESTOS

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.

SECTION 5 - NON-COMPLIANCE

NBU 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.

NBU incurred a per-and poly-fluoroalkyl substances (PFAS) reporting non-compliance and a synthetic organic chemicals (SOC) reporting non-compliance. Non-compliances resulted from a failure to submit PFAS January-June 2022 and SOC April-June 2022 lab results by July 10, 2022.

During these monitoring periods, NBU monitored for both PFAS and SOC and delivered samples to a contracted third-party certified laboratory in the correct time frame. Due to an equipment-related issue at the lab, samples from several utilities were not tested within ADEM's required time frame. When the lab was able to test samples, NBU's results were within safe parameters.

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

NBU is continuing to monitor for the required contaminants. Should you have any questions concerning this non-compliance or monitoring requirements, contact James Dean at 25 Hand Avenue in Bay Minette or call 251-580-1626.

SECTION 6 - PROCEDURE ASSESSMENT

NBU performed Level 1 (one) and 2 (two) assessment on its monthly bacteriological procedures which were all analyzed and found to meet all required standards.

SECTION 3 - TABLE OF PRIMARY CONTAMINANTS

At high levels some primary contaminants are known to pose a health risks to humans. Below is a quick glance of any primary contaminant detections*. *Previous sampling cycle if not required this cycle: t=trillion; q=quadrillion; Waived = Statewide waiver; ND=Non-detect

CONTAMINANT	MCL	DETECTED*	CONTAMINANT	MCL	DETECTED
Bacteriological			Endrin	2	ND
Total Coliform Bacteria	< 5%	Absent	Glyphosate	700	ND
Turbidity	TT	.10 to .55	Heptachlor (ppt)	400	ND
Radiological			Heptachlor epoxide (ppt)	200	ND
Beta/positron emitters (mrem/yr)	4	Waived	Hexachlorobenzene (HCB)	1	ND
Gross Alpha (pci/l)	15	0.594 to 1.98	Hexachloropentadiene	1	ND
Radium-228 (pci/l)	5	-0.00225 to 1.98	Lindane	200	ND
Inorganic			Methoxychlor	40	ND
Antimony (ppb)	6	ND	Oxamyl [Vydate]	200	ND
Arsenic (ppb)	50	ND	PCBs (ppt)	500	ND
Asbestos (MFL)	7	Waived	Pentachlorophenol	1	ND
Barium (ppm)	2	.012 to .04	Picloram	500	ND
Beryllium (ppb)	4	ND	Simazine	4	ND
Cadmium (ppb)	5	ND	Toxaphene	3	ND
Chromium (ppb)	100	ND	Benzene	5	ND
Copper (ppm)	1.3	.0011 to .0048	Carbon Tetrachloride	5	ND
Cyanide (ppb)	200	ND	Chlorobenzene	100	ND
Fluoride (ppm)	4	.21 to .51	1,2-Dibromo3chloropropane (ppt)	200	ND
Lead (ppb)	15	ND	o-Dichlorobenzene	600	ND
Mercury (ppb)	2	ND	p-Dichlorobenzene	75	ND
Nitrate as N (ppm)	10	0.1 to 0.95	1,2-Dichloroethane	5	ND
Nitrite (ppm)	1	ND	1,1-Dichloroethylene	7	ND
Selenium	50	ND	cis-1,2-Dichloroethylene	70	ND
Thallium	2	ND	trans-1,2-Dichloroethylene	100	ND
Organic Chemicals (ppb unless noted)			Methylene chloride	5	ND
2,4-D	70	ND	1,2-Dichloropropane	5	ND
2,4,5-TP (Silvex)	50	ND	Ethylbenzene	700	ND
Alachlor (Lasso)	2	ND	Ethylene dibromide (EDB) (ppt)	50	ND
Atrazine	3	ND	Styrene	100	ND
Benzo(a)pyrene(PHAs) (ppt)	200	ND	Tetrachloroethylene	5	ND
Carbofuran	40	ND	1,2,4-Trichlorobenzene	70	ND
Chlordane	2	ND	1,1,1-Trichloroethane	200	ND
Dalapon	200	ND	1,1,2-Trichloroethane	5	ND
Di-(2-ethylhexyl)adipate	400	ND	Trichloroethylene	5	ND
Di(2-ethylhexyl)phthalates	6	ND	TTHM	80	ND
Dinoseb	7	ND	Toluene	1	ND
Diquat	20	ND	Vinyl Chloride	2	ND
Dioxin[2,3,7,8-TCDD] (ppq)	30	Waived	Xylenes (ppm)	10	ND
Endothall	100	ND			

SECTION 4A - TABLE OF DETECTED CONTAMINANTS

UR = unregulated; Dist = distribution; PDWS = Primary Drinking Water Standard; SDWS = Secondary Drinking Water Standard; TT = treatment technique /

*Source = TP at #2,3,5,6,9 & 12 unless otherwise noted. / *Dates = Mar, Jun, Nov, Dec 2022 unless otherwise noted.

PARAMETER	MCL	RESULTS	AVERAGE	UNITS	SOURCE	2022 DATES	LIKELY SOURCE OF CONTAMINATION	LISTING
Aluminum	0.2	.013 to .041	0.020	ppm			Naturally occurring	SDWS
Barium	7	.012 to .04	0.020	ppm			Naturally occurring	PDWS
Calcium		.39 to 9.4	7.0	ppm			Naturally occurring	UR
Chloride	250	6.0 to 7.4	6.2	ppm			Naturally occurring	SDWS
Copper	1.3	.0011 to .0048	0.0	ppm	TP at #2, 6 & 9		Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	PDWS
Corrosivity (Langlier Index)		-2.6 to -.02	-1.47	-			Naturally occurring	SDWS
Fluoride	4	.21 to .51	0.43	ppm			Water additive to promote strong teeth; Erosion of natural deposits; Discharge from fertilizers & aluminum factories	PDWS
Gross Alpha	15	0.594 to 1.98	0.82	pCi/l	Well #10	Mar, Jun, Jul, Nov	Naturally occurring	PDWS
Magnesium		.068 to 1.2	0.81	ppm	TP at #2,3,5,6 & 12		Naturally occurring	UCMR-4
Manganese	50	0.014 to .017	0.02	ppm	TP at #3 and 12		Naturally occurring	SDWS
Nitrate as N	10	0.1 to 0.95	0.54	ppm	TP at #2, 3, 5, 6, 9, 10 & 12		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	PDWS
pH (standard units)		7.6 to 9.2	8.3	su			Naturally occurring	SDWS
Radium 228	5	-0.00225 to 1.98	0.49	pCi/l	Well #10	Mar, Jun, Jul, Nov	Naturally occurring	PDWS
Sodium		2.6 to 5.2	3.50	ppm	TP at #2,3,5 & 6		Naturally occurring	UR
Specific Conductance		45.6 to 232	116.33	umhos /cm		Mar, Jun, Jul, Nov	Naturally occurring	SDWS
Sulfate	500	2.6	2.6	ppm	TP at #12	Mar, Jun	Naturally occurring	SDWS
Total Alkalinity		16.2 to 22.1	19.04	ppm			Naturally occurring	SDWS
Total Dissolved Solids	500	34 to 44	40.80	ppm			Naturally occurring	SDWS
Total Hardness		12.9 to 28.4	20.12	ppm			Naturally occurring	UR
Turbidity	5	.10 to .55	0.23	NTU			Soil erosion	PDWS

2022 PFAS* MONITORING RESULTS	Well#2 TP Mar	Well #5 TP Jun	Well #2 TP Sep	Well #12 TP Sept	Well #2 TP Dec
Perfluorohexanesulfonic acid (ppb)	0.0049	0.0076	0.0041	-	0.0044
Perfluorooctanesulfonic acid (ppb)	0.0080	0.0092	0.0078	0.0020	0.0082
Total PFASs	0.0130	0.017	0.0120	0.0020	0.0130

*Group of chemicals used to make fluoropolymer coatings in variety of products to resist heat, oil, stains, grease & water.

III. EDUCATIONAL INFORMATION

Some people may be more vulnerable to drinking water contaminants than the general population. Immune-compromised people undergoing chemotherapy, organ transplants, 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 physicians. Environmental Protection Agency / Center of Disease Control 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). All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember the presence of these constituents does not necessarily pose a health risk.

IV. DEFINITIONS

This report contains many terms and abbreviations you may not be familiar with. The following is provided to help you better understand these terms.

Not Detected (ND): Laboratory analysis indicates that the constituent is not present.

Parts per million (ppm)/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.

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 Contaminant Level (MCL):

Highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): Required process to reduce level of a contaminant in drinking water.

Nephelometric Turbidity Unit (NTU):

A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

V. FREQUENTLY ASKED QUESTIONS

Is my water safe to drink?

Your drinking water meets or exceeds all Federal and State requirements. We've learned through monitoring and testing that some constituents have been detected (Table #4). The EPA has determined that your water IS SAFE at these levels.

Do I need to take special precautions? See "Education Information"

What you can do to protect our water supply?

There are several things you can do to help protect your water system's source of supply. Here are two:

1. Properly dispose of all chemicals in accordance with the procedures outlined on their containers.
2. Be vigilant of our system's wells, water towers and hydrants. Report all suspicious activity at these facilities to the police.