2019 Drinking Water QUALITY REPORT

Introduction

We are pleased to bring you this year's Annual Drinking Water Quality Report. This report is designed to keep you informed about the quality of water and services we deliver to you every day. We are committed to the quality of your drinking water. Your drinking water has been and remains safe to drink in 2019. We have tried to assemble a report that paints a brief but accurate picture of the quality of water you get every day from your tap. If you have any questions regarding this report, feel free to contact us at (251)937-2430.

History

In 1974, the Safe Driving Water Act (SDWA) was signed into law requiring all water systems that serve the public to meet national standards for water quality. These standards set the limits for certain contaminants and require all public water systems to monitor for these contaminants. NBU routinely test for these constituents in your drinking water according to Federal and State laws. The tables in this report show the monitoring results of the Calendar Year 2019 Sampling Schedule beginning Jan 1 through Dec 31 of 2019 unless otherwise noted.

Section 1 - Sources of Water

White House Water System (WHWS) has one well with a capacity of 200 Gallons per minute. Chlorine is added to maintain safe water supply. In addition, WHWS purchases water from NBU. North Baldwin Utilities (NBU) obtains its drinking water using ten public water supply wells. Each well produces groundwater from sand units of the regional aquifer known as the Pliocene-Miocene Aquifer System.

In the Bay Minette area, the sands are identified as the Bay Minette Middle Aquifer supplying groundwater to Wells #2, #3, #4 and #5, the Bay Minette Lower Aquifer supplying groundwater to Wells #5 and #6. Well #8 is supplied by a deep Miocene sand aquifer identified as the North Baldwin Rabun Aquifer. Well #9A and #9B is supplied by a Miocene Undifferentiated Aquifer. Well #11 is supplied by a deep Miocene sand aquifer identified as the Tensaw Aquifer. Well #12 is supplied by the Stapleton 275-foot Aquifer.

The source of recharge to the aquifers is precipitation. The produced groundwater is treated with aeration, chlorination, fluoridation and corrosion control prior to distribution. NBU implements and maintains a Source Water Assessment Program in compliance with the Alabama Department of Environmental Management. The Program is a pro-active measure taken by the system to protect its sources of drinking water.

Section 2 – Definitions

In this report you will find many terms and abbreviations you may not be familiar with. To help you better understand these terms, we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/1} - one part per million corresponds to one minute in two years or a single penny in S I0,000.

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 "Goal" 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 Contaminant Level (MCL) - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is al- lowed 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)- A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

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.

Results of Radon Monitoring:

Radon is a radioactive gas that you can't see, taste or smell. 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 home. 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 also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pC/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

Dioxin and Asbestos:

Based on a study conducted by the 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.

Sections 3 and 4

Refer to Tables on following Page.

Section 5 – Additional Info

Subsection A: Contaminants in Drinking Water:

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 occur- ring minerals and radioactive material. and it can pick up substances resulting from the presence of animals or from human activities All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. The presence of contaminants 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).

Subsection B: Water System Contacts:

White House Water System meets in the Board Room at 11120 White House Fork Rd. Ext on the last Monday of each month at 6:00 p.m.

Board Members and Contact Personnel are:

- **Tony Smith - President**
- **Kerry Wallace**
- **Redina Pimperl**
- **Ricky Gunter**
- **Mercia Kelly**

Subsection C: Source Water Assessment and Vulnerability Assessment:

North Baldwin Utilities is in regulatory compliance with respect to source water and vulnerability assessments for each well. Documents associated with the source water and vulnerability assessments are housed at the system's office.

Subsection D: Unregulated Contaminant Monitoring

As part of NBU's UCMR2 Assessment Monitoring, Wells #2, 3, 5, 6,8 (Rabun), 9A,9B and 10 were sampled for the presence of 1,3-dinitrobenzene, ROX (Hexa- hydro; 1,3,5-trinitro;1,3,5-triazine), TNT (2,4,6·trini-trotoluene),HBB (2,2',4,4',5,5'-Hexabromobiphenyl), BDE-100 (2,2',4.4',6-Pentabromodiphenyl ether), BDE-153 (2.2',4,4',5.5'-Hexabromodiphenyl ether), BDE-47 (2,2',4,4'·Tetrabromodiphenyl ether), BDE-99 (2,2',4,4',5-Pentabromodiphenyl ether), Dimethoate and Terbufos-sulfone with all samples reported as being non detected for these compounds.

Section 6 - Educational Information

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 (Environmental Protection Agency) *f* CDC (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 that the presence of these constituents does not necessarily pose a health risk.

Section 7 - Lead Notice

Every report shall contain the following lead-specific information: 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. WHWS 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're 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.

Frequently Asked Questions

Is my water safe?

We are proud 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, Section 4, Table of Detected Contaminants. The EPA has determined that your water IS SAFE at these levels.

What customers 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:

Properly dispose of all chemicals in accordance with the procedures outlined on their containers.

Be vigilant of our system's wells, water towers and hydrants. Report all suspicious activity at these facilities to the police.

Notice of Violation

"The water system incurred an August 2018 disinfection byproduct monitoring non-compliance. Although we met the deadline to provide our customers notification for this non-compliance, we failed to meet the deadline to submit proof to ADEM

WHWS
White House Water System, Inc.

White House Water System, Inc.
11120 White House Fork Rd. Ext.
Bay Minette, AL 36507
Phone: (251) 937-2430
Email: whitehousewater1@att.net

White House Water System, Inc.

Table of Primary Contaminants

At high levels some primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	White House	NBU	CONTAMINANT	MCL	White House	NBU	CONTAMINANT	MCL	White House	NBU
Bacteriological				Selenium(ppb)	50	ND	ND	Epichlorohydrin	TT	D	ND
Total Coliform Bacteria	< 5%	ND	ND	Thallium(ppb)	2	ND	ND	Ethylbenzene(ppb)	700	ND	ND
Turbidity	TT	ND	7.20	**Organic Chemicals**				Ethylene dibromide(ppt)	50	ND	ND
Fecal Coliform & E. coli	0	ND	ND	Acrylamide	TT	ND	ND	Glyphosate(ppb)	700	ND	ND
Radiological				Alachlor(ppb)	2	ND	ND	Haloacetic Acids(ppb)	60	ND	ND
Beta/photon emitters (mrem/yr)	4	ND	.6 - 2.31	Atrazine(ppb)	3	ND	ND	Heptachlor(ppt)	400	ND	ND
Alpha emitters (pci/l)	15	.606+/-.734	2.67 - 9.7	Benzene(ppb)	5	ND	ND	Heptachlor epoxide(ppt)	200	ND	ND
Combined radium (pci/l)	5	.400+/-.331	.2 - 1.56	Benzo(a)pyrene[PHAs](ppt)	200	ND	ND	Hexachlorobenzene(ppb)	1	ND	ND
Uranium(pci/l)	30	ND	ND	Carbofuran(ppb)	40	ND	ND	Hexachlorocyclopentadiene(ppb)	50	ND	ND
Inorganic				Carbon Tetrachloride(ppb)	5	ND	ND	Lindane(ppt)	200	ND	ND
Antimony (ppb)	6	ND	ND	Chlordane(ppb)	2	ND	ND	Methoxychlor(ppb)	40	ND	ND
Arsenic (ppb)	10	ND	ND	Chlorobenzene(ppb)	100	ND	ND	Oxamyl [Vydate](ppb)	200	ND	ND
Asbestos (MFL)	7	ND	ND	2,4-D	70	ND	ND	Pentachlorophenol(ppb)	1	ND	ND
Barium (ppm)	2	0.016	ND	Dalapon(ppb)	200	ND	ND	Picloram(ppb)	500	ND	ND
Beryllium(ppb)	4	0.00011	ND	Dibromochloropropane(ppt)	200	ND	ND	PCBs(ppt)	500	ND	ND
Bromate(ppb)	10	ND	ND	0-Dichlorobenzene(ppb)	600	ND	ND	Simazine(ppb)	4	ND	ND
Cadmium(ppb)	5	ND	ND	p-Dichlorobenzene(ppb)	75	ND	ND	Styrene(ppb)	100	ND	ND
Chloramines(ppm)	4	ND	ND	1,2-Dichloroethane(ppb)	5	ND	ND	Tetrachloroethylene(ppb)	5	ND	ND
Chlorine(ppm)	4	1.40	ND	1,1-Dichloroethylene(ppb)	7	ND	ND	Toluene(ppm)	1	ND	ND
Chlorine dioxide(ppb)	800	ND	ND	Cis-1,2-Dichloroethylene(ppb)	70	ND	ND	TOC	TT	ND	ND
Chlorite(ppm)	1	ND	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	ND	TTHM(ppb)	80	1.4	4.80
Chromium(ppb)	100	ND	0.40	Dichloromethane(ppb)	5	ND	ND	Toxaphene(ppb)	3	ND	ND
Copper (ppm)	AL=1.3	0.510	0.006	1,2-Dichloropropane(ppb)	5	ND	ND	2,4,5-TP (Silvex)(ppb)	50	ND	ND
Cyanide (ppb)	200	ND	ND	Di-(2-ethylhexyl)adipate(ppb)	400	ND	ND	1,2,4-Trichlorobenzene(ppb)	70	ND	ND
Fluoride (ppm)	4	ND	0.60	Di(2-ethylhexyl)phthlates(ppb)	6	ND	ND	1,1,1-Trichloroethane(ppb)	200	ND	ND
Lead (ppb)	AL=15	ND	0.0014	Dinoseb(ppb)	7	ND	ND	1,1,2-Trichloroethane(ppb)	5	ND	ND
Mercury (ppb)	2	ND	ND	Dioxin[2,3,7,8-TCDD](ppq)	30	ND	ND	Trichloroethylene(ppb)	5	ND	ND
Nitrate (ppm)	10	0.19	0.51	Diquat(ppb)	20	ND	ND	Vinyl Chloride(ppb)	2	ND	ND
Nitrite (ppm)	1	ND	ND	Endothall(ppb)	100	ND	ND	Xylenes(ppm)	10	ND	7.20
Total Nitrate & Nitrite	10	0.19	0.51	Endrin(ppb)	2	ND	ND				

Table of Secondary and Unregulated Contaminants

Secondary Drinking Water Standards are guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. ADEM has Secondary Drinking Water Standards established in state regulations applicable to water systems required to monitor for the various components. **Unregulated contaminants** are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurance of unregulated contaminants in drinking water and whether future regulation is warranted.

CONTAMINANT	MCL	White House	NBU	CONTAMINANT	MCL	White House	NBU	CONTAMINANT	MCL	White House	NBU
Secondary				**Secondary**				**Secondary**			
Aluminum	0.2	0.011	ND	Foaming Agents	0.5	ND	ND	Silver	7	ND	ND
Chloride	250	ND	149.00	Iron	0.3	ND	0.38	Sulfate	70	ND	4.35
Color (PCU)	15	ND	ND	Magnesium	75	ND	0.01	Total Dissolved Solids	500	9.00	274.00
Copper	1	0.0060	ND	Odor (T.O.N.)	5	ND	ND	Zinc	5	ND	0.29
Special				**Special**				**Special**			
Calcium	N/A	ND	4.01	pH (SU)	N/A	5.20	8.01	Temperature (*C)	N/A	ND	ND
Carbon Dioxide	N/A	30.50	3.15	Sodium	N/A	ND	119.00	Total Alkalinity	N/A	ND	125.00
Manganese	0.05	0.0084	0.01	Specific Conductance (umhos)	<500	14.40	506.00	Total Hardness (as CaCO3)	N/A	22.00	22.5
Unregulated				**Unregulated**				**Unregulated**			
1,1 - Dichloropropene	N/A	ND	ND	Bromobenzene	N/A	ND	ND	Hexachlorobutadiene	N/A	ND	ND
1,1,2,2-Tetrachloroethane	N/A	ND	ND	Bromochloromethane	N/A	ND	ND	Isopropylbenzene	N/A	ND	ND
1,1-Dichloroethane	N/A	ND	ND	Bromodichloromethane	N/A	ND	ND	M-Dichlorobenzene	N/A	ND	ND
1,2,3 - Trichlorobenzene	N/A	ND	ND	Bromoform	N/A	ND	13.60	Methomyl	N/A	ND	ND
1,2,3 - Trichloropropane	N/A	ND	ND	Bromomethane	N/A	ND	ND	Metolachlor	N/A	ND	ND
1,2,4 - Trimethylbenzene	N/A	ND	ND	Butachlor	N/A	ND	ND	Metribuzin	N/A	ND	ND
1,2,4-Trichlorobenzene	N/A	ND	ND	Carbaryl	N/A	ND	ND	MTBE	N/A	ND	ND
1,3 - Dichloropropane	N/A	ND	ND	Chloroethane	N/A	ND	ND	N - Butylbenzene	N/A	ND	ND
1,3 - Dichloropropene	N/A	ND	ND	Chlorodibromomethane	N/A	ND	ND	Naphthalene	N/A	ND	ND
1,3,5 - Trimethylbenzene	N/A	ND	ND	Chloroform	N/A	ND	1.30	N-Propylbenzene	N/A	ND	ND
2,2 - Dichloropropane	N/A	ND	ND	Chloromethane	N/A	ND	ND	O-Chlorotoluene	N/A	ND	ND
3-Hydroxycarbofuran	N/A	ND	ND	Dibromochloromethane	N/A	ND	1.90	P-Chlorotoluene	N/A	ND	ND
Aldicarb	N/A	ND	ND	Dibromomethane	N/A	ND	5.30	P-Isopropyltoluene	N/A	ND	ND
Aldicarb Sulfone	N/A	ND	ND	Dichlorodifluoromethane	N/A	ND	ND	Propachlor	N/A	ND	ND
Aldicarb Sulfoxide	N/A	ND	ND	Dieldrin	N/A	ND	ND	Sec - Butylbenzene	N/A	ND	ND
Aldrin	N/A	ND	ND	Fluorotrichloromethan	N/A	ND	ND	Tert - Butylbenzene	N/A	ND	ND

Table of Detected Drinking Water Contaminants

CONTAMINANT	MCLG	MCL	Range			WHITE HOUSE	NBU	Amount Detected	Likely Source of Contamination
Bacteriological Contaminants						**January - December 2019**			
Total Coliform Bacteria	0	< 5%				ND	Absent - 17.1	Present or Absent	Naturally present in the environment
Turbidity	0	TT				ND	7.20	NTU	Soil runoff
Fecal Coliform & E. coli	0	0				ND	ND	Present or Absent	Human and animal fecal waste
Radiological Contaminants									
Beta particle and photon	0	4				ND	.6 - 2.13	mrem/yr	Decay of natural and man-made deposits
Alpha emitters	0	15				.606+/-.734	.267-9.7	pCi/L	Erosion of natural deposits
Combined Radium 226 & 228	0	5				.400+/-.331	.2-1.56	pCi/L	Erosion of natural deposits
Inorganic Contaminants						**January - December 2017 - 2019**			
Barium	2	2	ND	-	0.016	0.016	ND	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	4	4	ND	-	0.00011	0.00011	ND	ppb	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Chlorine	MRDLG 4	MRDL 4	0.72	-	1.40	1.40	ND	ppm	Water additive used to control microbes
Chromium	100	100	ND	-	ND	ND	0.40	ppb	Discharge from steel and pulp mills; erosion of natural deposits
Copper	1.3	AL=1.3	No. of Sites above action level			0.510	0.006	ppm	natural deposits; leaching from wood preservatives
Fluoride	4	4	ND	-	ND	ND	0.60	ppm	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	0	10 Sites AL=15	No. of Sites above action level 0			ND	0.0014	ppb	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as N)	10	10	ND	-	ND	0.19	0.95	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate & Nitrite	10	10	ND	-	ND	0.19	0.95	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Organic Contaminants						**January - December 2019**			
Haloacetic Acids (HAA5)	0	60	ND	-	ND	ND	ND	ppb	By-product of drinking water chlorination
Total trihalomethanes (TTHM)	0	80	ND	-	1.40	1.40	4.80	ppb	By-product of drinking water chlorination
Xylene (total)	10	10	ND	-	ND	ND	7.20	ppm	Discharge from petroleum factories; discharge from chemical factories
Secondary Contaminants						**January - December 2019**			
Aluminum	N/A	0.2	ND	-	0.011	0.011	ND	ppm	Erosion of natural deposits or as a result of treatment with water additives
Chloride	N/A	250	ND	-	ND	ND	149.00	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Color	N/A	15	ND	-	ND	ND	ND	PCU	Naturally occurring in the environment or as a result of treatment with water additives
Copper	N/A	1	ND	-	0.0060	0.0060	ND	ppm	Erosion of natural deposits; leaching from pipes
Iron	N/A	0.3	ND	-	ND	ND	0.38	ppm	Erosion of natural deposits
Magnesium	N/A	0.05	ND	-	ND	ND	0.007	ppm	Erosion of natural deposits
Sulfate	N/A	250	ND	-	ND	ND	4.35	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	ND	-	9.00	9.00	274.00	ppm	Erosion of natural deposits
Zinc	N/A	5	ND	-	ND	ND	0.29	ppm	Erosion of natural deposits
Special Contaminants						**January - December 2019**			
Calcium	N/A	N/A	ND	-	ND	ND	4.01	ppm	Erosion of natural deposits
Carbon Dioxide	N/A	N/A	ND	-	30.50	30.50	3.15	ppm	Erosion of natural deposits
Manganese	N/A	N/A	ND	-	0.0084	0.0084	0.0135	ppm	Erosion of natural deposits
pH	N/A	N/A	ND	-	5.20	5.20	8.01	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	ND	-	ND	ND	119.00	ppm	Naturally occurring in the environment
Specific Conductance	N/A	<500	ND	-	14.40	14.40	506.00	umhos	Naturally occurring in the environment or as a result of treatment with water additives
Total Alkalinity	N/A	N/A	ND	-	ND	ND	125.00	ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	ND	-	22.00	22.00	22.50	ppm	Naturally occurring in the environment or as a result of treatment with water additives
Unregulated Contaminants						**January - December 2019**			
Bromochloromethane	N/A	N/A	ND	-	ND	ND	ND	ppm	Residual of banned fire extinguisher additive
Bromodichloromethane	N/A	N/A	ND	-	ND	ND	ND	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Bromoform	N/A	N/A	ND	-	ND	ND	ND	ppm	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Chlorodibromomethane	N/A	N/A	ND	-	ND	ND	ND	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Chloroform	N/A	N/A	ND	-	ND	ND	ND	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination