

Annual Water Quality Report
January - December 2006
UTILITIES BOARD OF THE TOWN OF GILBERTOWN
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Annual Water Quality Report (cont'd)

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Number of Customers: Approximately 2400

Water Sources: Four groundwater wells producing from the Lisbon and Nanafala aquifers and Purchased water from Frankville WFPA and from Town of Butler Utility Board

Well Locations: Well 1: Paragon Road in Gilbertown
 Well 2: Plantation Road in Melvin
 Well 3: Land Road off Highway 17
 Well 4: Highway 17 South

Water Treatment: Chlorination and corrosion control

Storage Capacity: 6 tanks with a total capacity of 925,000 gallons

Distribution System: Approximately 154 miles of water mains

Directors and Employees:
 Robert H. Graham, *Chairman*
 Mark Bush, *Vice Chairman*
 Harold Devane, *Director*
 Mike Thorne, *Director*
 John M. Bonner, *Director*
 Scott Nordan, *Director*
 Larry Taylor, *Director*
 Scott Downey, *Certified Operator*
 Kay Lee Weiss, *Office Manager*
 Sheila Johnson, *Office Clerk*
 Jonathan Fell, *Operator Trainee*
 Eddie Abston, *Operator Trainee*

Source Water Assessment

In compliance with the Alabama Department of Environmental Management (ADEM), **Utilities Board of the Town of Gilbertown** 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 to contaminating the water source. The assessment has been performed, public notification has been completed, and the plan has been approved by ADEM. Of the 10 potential contaminants sited in our study area, five were considered highly-susceptible, and the remaining five were ranked low. A copy of the report is available in our office for review during regular 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 contact **Scott Downey** or **Kay Lee Weiss**. 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 **second Tuesday of each month at 6:00 p.m. Central Standard Time and at 7:00 p.m. during Daylight Saving Time at the utilities board office**. 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).

As you can see by the table below, our system had no violations. 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. We are pleased to report that our drinking water is safe and meets federal and state requirements. This report shows our water quality and what it means.

TABLE OF DETECTED DRINKING WATER CONTAMINANTS						
Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Alpha emitters	NO	2.8 ± 0.6 Frankville	pCi/l	0	15	
Copper	NO	0.316 * 0 above action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	NO	3.36 Range ND - 3.36 Butler	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	NO	2.34 Range 0.15 - 2.34 Frankville	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Xylenes	NO	2.19 Range ND-2.19	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories
TTHM [Total trihalomethanes]	NO	Avg. 41.1 Range ND-76.1	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	Avg. 9.60 Range ND-35.5	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants						
Chloroform	NO	Avg. 4.47 Range 0.51-9.20	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Bromodichloromethane	NO	Avg. 2.58 Range 1.24-3.91	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Chlorodibromomethane	NO	Avg. 3.36 Range 0.94-8.81	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Bromoform	NO	Avg. 2.26 Range ND-7.17	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Chloromethane	NO	Avg. 0.47 Range ND-1.66	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Bromomethane	NO	Avg. 0.41 Range ND-2.06	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Secondary Contaminants						
Chloride	NO	Avg. 62.8 Range 56.6-91.2	ppm	n/a	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Total Dissolved Solids	NO	Avg. 428 Range 400-466	ppm	n/a	500	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff

* 90th percentile = 0.316 ppm and # of sites above action level (1.3 ppm) = 0

At the end of this report is a *Standard List of Primary Drinking Water Contaminants* for which our water system routinely monitors. These contaminants were not detected in your drinking water unless they are listed in the *Table of Detected Drinking Water Contaminants*.

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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. MCL's, 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.

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 amount 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. People at risk 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 (800-426-4791).

Monitoring Schedule

Utilities Board of the Town of Gilbertown routinely monitors for constituents in your drinking water according to Federal and State laws. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

Constituents Monitored	Gilbertown	Frankville	Butler
Inorganic Contaminants	2001	2004	2004
Lead/Copper	2005	2003	2006
Microbiological Contaminants	2006	2006	2006
Nitrates	2006	2006	2006
Radioactive Contaminants	2003	2003	2003
Synthetic Organic Contaminants (including herbicides and pesticides)	2006	2005	2006
Volatile Organic Contaminants	2006	2005	2006
Disinfection By-products	2006	2004	2006

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DEFINITIONS

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

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Not Required (NR) - laboratory analysis not required due to waiver granted by the Environmental Protection Agency for the State of Alabama.

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 - 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 (nanograms/l) - one part per trillion 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 (picograms/l) - one part per quadrillion 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.

Millirems per year (mrem/yr) - 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.

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

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

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - (mandatory language) 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 - (mandatory language) 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.

Coliform Absent (ca) - Laboratory analysis indicates that the contaminant is not present.

Disinfection byproducts - 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. Different disinfectants produce different types or amounts of disinfection byproducts. Disinfection byproducts for which regulations have been established include trihalomethanes (TTHM), haloacetic acids (HAA5), bromate, and chlorite.

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STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS					
Contaminant	MCL	Unit of Msmt.	Contaminant	MCL	Unit of Msmt.
Bacteriological Contaminants					
Total Coliform Bacteria	< 5 %	present or absent	Endrin	2	ppb
Fecal Coliform Bacteria		present or absent	Epichlorohydrin	Not required	
Turbidity	TT	NTU	Glyphosate	700	ppb
Radiological Contaminants					
Beta/photon emitters	4	mrem/yr	Heptachlor	400	Nanograms/l
Alpha emitters	15	pCi/l	Heptachlor epoxide	200	Nanograms/l
Combined radium	5	pCi/l	Hexachlorobenzene	1	ppb
Inorganic Chemicals					
Antimony	6	ppb	Hexachlorocyclopentadiene	50	ppb
Arsenic	50	ppb	Lindane	200	Nanograms/l
Asbestos	7	MFL	Methoxychlor	40	ppb
Barium	2	ppm	Chamyx [Vysate]	200	ppb
Beryllium	4	ppb	PCBs	500	Nanograms/l
Cadmium	5	ppb	Pentachlorophenol	1	ppb
Chromium	100	ppb	Picloram	500	ppb
Copper	AL=1.3	ppm	Simazine	4	ppb
Cyanide	200	ppb	Toxaphene	3	ppb
Fluoride	4	ppm	Volatile Organic Contaminants		
Lead	AL=15.0	ppb	Benzene (ppb)	5	ppb
Mercury	2	ppb	Carbon tetrachloride (ppb)	5	ppb
Nitrate	10	ppm	Chlorobenzene (ppb)	100	ppb
Nitrite	1	ppm	Dibromochloropropane (ppt)	200	ppt
Selenium	50	ppb	o-Dichlorobenzene (ppb)	600	ppb
Thallium	2	ppb	p-Dichlorobenzene (ppb)	75	ppb
Synthetic Organic Contaminants					
2,4-D (ppb)	70	ppb	1,2-Dichloroethane (ppb)	5	ppb
2,4,5-TP(Silvex) (ppb)	50	ppb	trans-1,2-Dichloroethyle (ppb)	100	ppb
Acrylamide	Not required		Dichloromethane (ppb)	5	ppb
Alachlor (ppb)	2	ppb	1,2-Dichloropropane (ppb)	5	ppb
Atrazine (ppb)	3	ppb	Ethylbenzene (ppb)	700	ppb
Benzo(a)pyrene [PAHs]	200	Nanograms/l	Ethylene dibromide (ppt)	50	ppb
Carbofuran	40	ppb	Styrene (ppb)	100	ppb
Chlordane	2	ppb	Tetrachloroethylene (ppb)	5	ppb
Dalapon	200	ppb	1,1,1-Trichloroethane (ppb)	200	ppb
Di (2-ethylhexyl) phthalate	400	ppb	1,1,2-Trichloroethane (ppb)	5	ppb
Di (2-ethylhexyl) phthalate ()	6	ppb	Trichloroethylene (ppb)	5	ppb
Dinoseb	7	ppb	Toluene(ppm)	1	ppm
Diquat	20	ppb	Vinyl Chloride (ppb)	2	ppb
Dioxin [2,3,7,8-TCDD]	30	Picograms/l	Xylenes (ppm)	10	ppm
Endothal (ppb)	100	ppb	TTHM [Total trihalomethanes] (ppb)	80	ppb
			HAA5 [Total haloacetic acids] (ppb)	60	ppb