<u>City of East Brewton</u> Water Works and Sewer Board

Annual Drinking Water Quality Report

East Brewton Water Works and Sewer Board is very pleased to provide you with this year's Annual Water Quality 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 to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to maintain and continually improve the water you receive and to protect our water supply.

East Brewton's water is groundwater drawn from two (2) wells. These wells draw from the Lisbon 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 Water Works and Sewer Board has completed each required component of the source water assessment and a copy is available for review in the Water Works and Sewer Board office in City Hall. To provide safe drinking water chlorine is used as a disinfectant at each well.

East Brewton Water Works and Sewer 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 Superintendent Max "Eddie" Frazier at 867-6092. 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 first and third Monday at 10:30 a.m. in East Brewton City Hall located at 615 Forrest Avenue.

This table shows the results of our monitoring for the period of January 1st to December 31st, 2012. It's important to remember that the presence of these constituents 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've provided the following 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 ug/l micrograms per liter one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Picocuries per liter (pCi/l) picocuries per liter is a measure of radioactivity in water.
- Millirems per years (mrem/yr) measure of radiation absorbed by the body.
- Nephelometric Turbidity Units (NTU) a measure of the clarity of water. Turbidity in excess of 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.
- 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.
- 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.

Table of Detected Contaminants

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination		
Microbiological Contaminants								
Turbidity No .26 NTU			NTU	n/a	TT	Soil runoff		

			Radio	oactive Cont	aminants			
Alpha emitters	No	1.6+/6	pCi/l	0	15	Erosion of natural deposits		
Combined radium	No	.7+/8	pCi/l	0	5	Erosion of natural deposits		
Inorganic Contaminants								
Copper	No	.471	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Fluoride	No	.31	ppm	4	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilize and aluminum factories		
Lead	No	.0043	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits		
Volatile Organic Contaminants								
TTHM [Total trihalomethanes]	No	1.04	ppb	0	100	By-product of drinking water chlorination		

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	East Brewton Water	Contaminant	MCL	East Brewton Water
Bacteriological			Endrin	2	ND
Total Coliform Bacteria	<5%	ND	Epichlorohydrin	TT	ND
Turbidity	5	.26	Glyphosate	700	ND
Radiological			Heptachlor	400	ND
Beta/Photon Emitters	4	ND	Heptachlor epoxide	200	ND
Alpha Emitters	15	1.6+/6	Hexachlorobenzene	2	ND
Combined Radium	5	.7+/8	Hexachloropentadiene	1	ND
Inorganic			Lindane	200	ND
Antimony	6	ND	Methoxychlor	40	ND
Arsenic	50	ND	Oxamyl [Vydate]	200	ND
Asbestos	7	ND	PCBs	500	ND
Barium	2	ND	Pentachlorophenol	1	ND
Beryllium	4	ND	Picloram	500	ND
Cadmium	5	ND	Simazine	4	ND
Chromium	100	ND	Toxaphene	3	ND
Copper	AL=1.3	<u>.471</u>	Benzene	5	ND
Cyanide	200	ND	Carbon Tetrachloride	5	ND
Fluoride	4	.31	Chlorobenzene	100	ND
Lead	AL=15	.0043	Dibromochloropropane	200	ND
Mercury	2	ND	0-Dichlorobenzene	600	ND
Nitrate	10	ND	p-Dichlorobenzene	75	ND
Nitrite	1	ND	1,2-Dichloroethane	5	ND
Selenium	50	ND	1,1-Dichloroethylene	7	ND
Thallium	2	ND	Cis-1,2-Dichloroethylene	70	ND
Organic Chemicals			trans-1,2-Dichlorethylene	100	ND
2,4-D	70	ND	Dichloromethane	5	ND
2,4,5-TB (Silvex)	50	ND	1,2-Dichloropropane	5	ND
Acrylamide	TT	ND	Ethylbenzene	700	ND
Alachlor	2	ND	Ethylene dibromide	50	ND
Atrazine	3	ND	Styrene	100	ND
Benzo(a)pyrene [PHAs]	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)phthlates	6	ND	ТТНМ	80	1.04
Dinoseb	7	ND	Haloacetic Acids (HAA5)	60	ND
Diquat	20	ND	Toluene	1	ND
Dioxin [2,3,7,8-TCDD]	30	ND	Vinyl Chloride	2	ND
Endothall	100	ND	Xylenes	100	ND

Unregulated contaminants have no MCL set 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 ppm								
CONTAMINANT	Low Result	High Result	CONTAMINANT	Low Result	High Result			
1,1 – Dichloropropene	ND	ND	Chloroform	1.03	1.04			
1,1,1,2-Tetrachloroethane	ND	ND	Chlorodibormomethane	ND	ND			
1,1,2,2-Tetrachloroethane	ND	ND	Dibromochloromethane	ND	ND			
1,1-Dichloroethane	ND	ND	Dibromomethane	ND	ND			
1,2,3 – Trichlorobenzene	ND	ND	Dicamba	ND	ND			
1,2,3 – Trichloropropane	ND	ND	Dichlorodifluoromethane	ND	ND			
1,2,4 – Trimethylbenzene	ND	ND	Dieldrin	ND	ND			
1,3 – Dichloropropane	ND	ND	Hexachlorobutadiene	ND	ND			
1,3 – Dichloropropene	ND	ND	Isoprpylbenzene	ND	ND			
1,3,5 – Trimethylbenzene	ND	ND	M-Dichlorobenzene	ND	ND			
2,2 – Dichloropropane	ND	ND	Methomyl	ND	ND			
3-Hydroxycarbofuran	ND	ND	MTBE	ND	ND			
Aldicarb	ND	ND	Metolachlor	ND	ND			
Aldicarb Sulfone	ND	ND	Metribuzin	ND	ND			
Aldicarb Sulfoxide	ND	ND	N - Butylbenzene	ND	ND			
Aldrin	ND	ND	Naphthalene	ND	ND			
Bromobenzene	ND	ND	N-Propylbenzene	ND	ND			
Bromochloromethane	ND	ND	O-Chlorotoluene	ND	ND			
Bromodichloromethane	ND	ND	P-Chlorotoluene	ND	ND			
Bromoform	ND	ND	P-Isopropyltoluene	ND	ND			
Bromomethane	ND	ND	Propachlor	ND	ND			
Butachlor	ND	ND	Sec - Butylbenzene	ND	ND			
Carbaryl	ND	ND	Tert - Butylbenzene	ND	ND			
Chloroethane	ND	ND	Trichlorfluoromethane	ND	ND			

As you can see by the table, our system had no violations of allowable limits of contaminants in your drinking water. We're 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.

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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.

East Brewton Water Works and Sewer 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. East Brewton Water Works and Sewer 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.

MCL's 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.

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).

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.

East Brewton Water Works and Sewer Board 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.

East Brewton Water Works and Sewer Board and The City of East Brewton strive 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, water works 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.

East Brewton Water Works and Sewer Board of Directors

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