

## Water-Quality Data Table

Contaminant [Units]	Date Tested	MCL	MCLG	Detected Limit	Range	Violation	Major Sources
<b>Microbiological</b>							
Turbidity NTU	every 4hrs	0.3	0	29	0.05- 29	No	Soil Runoff
Turbidity [ % samples meeting standard]		95%	100%	100%	100%	No	Soil runoff
Total Organic Carbon (TOC) mg/l	Monthly	TT	N/A	27	1.5-2.7 RAA= 2.0	No	Naturally present in the environment
<b>Inorganic</b>							
Lead (ppb)	7-24-07	Al=15.5	0	BDL	BDL	No	Corrosion of household plumbing systems
Copper (ppm)	8-21-08	Al=1.3	1.3	BDL	BDL	No	Corrosion of household plumbing systems
Barium ppm	6-5-08	2000ug/l	2000ug/l	15ug/l	15ug/l	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate ppm	Monthly	10	10	2.65	49-2.65	No	Runoff from fertilizer use; leaching from septic tanks; Sewage; Erosion of natural deposits
Fluoride ppm	Daily	4	4	1.32	80-1.32	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>SYNTHETIC ORGANIC CONTAMINANTS (SOC) Including Pesticides and herbicides</b>							
Atrazine	10-9-08	3ug/l	3 ug/l	< 3 ug/l	< 3 ug/l	No	Runoff from herbicide
Simazine	10-9-08	4ug/l	4 ug/l	< 4 ug/l	< 4 ug/l	No	Runoff from herbicide
Alachlor	10-9-08	2ug/l	2 ug/l	< 2 ug/l	< 2 ug/l	No	Runoff from herbicide
<b>DISINFECTION BY-PRODUCTS</b>							
				Range	RAA		
Haloacetic Acids, Five (HAA5) ppb	Quarterly	60	0	22.0-34.8	29.45	No	By-product of drinking water chlorination
Total Trihalomethanes ppb	Quarterly	80	0	42.4-60.03	52.6	No	By-product of drinking water chlorination
<b>Residual Disinfectants</b>							
		MDRL	LEVEL Found	Range		Violation	Major Sources
Total Chlorine	Monthly	4	19	72-19		No	Water additive used to control microbes

### Definitions of some terms contained in this report:

#### Maximum Contaminant Level [MCL]—

The highest level of a contaminant that is allowed in drinking water

#### Maximum Contaminant Level Goal [MCLG]—

The level of a contaminant in drinking water below which there is no known or expected risk of health

#### Treatment Technique [TT]—

A required process intended to reduce the level of a contaminant in drinking water

#### Action Level [AL]—

The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirement that a water system must follow

[ppm]= parts per million or milligrams per liter [mg/l]

[ppb]=parts per billion or micrograms per liter [ug/l]

RAA = Running Annual Average

BDL = Below Detection Limit

MDRL = Maximum Disinfectant Residual Level

**Nitrate** in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

**Turbidity** is a measurement of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples. Water Plant's highest recorded turbidity result for 2008 was 29 NTU. The lowest percentage of samples meeting the turbidity limits was 100.00%.

"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. The Shelby Water Treatment Plant 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.

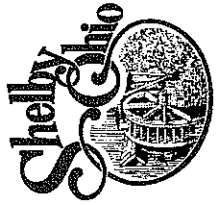
Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>"

# Shelby Municipal Utilities

## Division of Water

### Consumer Confidence Report

For 2008



# SHELBY MUNICIPAL UTILITIES DIVISION OF WATER

## Annual Water-Quality Report For 2008

We are pleased to present this summary of the quality of water provided to you during the year 2008. The Safe Drinking Water Act [SDWA] requires that water utilities issue an annual "Consumer Confidence" report to customers, in addition to other notices required by law. This report will detail where our water comes from, what it contains, and the risks that our water testing and treatment are designed to prevent. Shelby Municipal Utilities-Division of Water is totally committed to providing you, our customer-owners, with the safest and most reliable water supply possible. Informed customers are our best allies in maintaining safe drinking water.

### Water Sources

The City of Shelby obtains its water from two different sources. Reservoir #2 is located at the end of Mack Ave. and is filled with water from the Black Fork River.

Reservoir #3 is located on London West Road at the end of Broadway and is filled with water from Marsh Run Creek.

Reservoir #2 holds about 250 million gallons of water. In addition to the 338 million gallons that Reservoir #3 holds, this gives us 588 million gallons of water storage. The Shelby Water Plant pumps on average 1.72 MGD. With the two reservoirs we have enough water stored for about a one year supply. The City of Shelby also has two wells that are located behind the Water Treatment Plant. During 2008 we had enough water in the reservoirs, that there was no need to use either of the wells.

### What are sources of contamination to drinking water?

The sources of drinking water, for both tap 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, in some cases, radioactive material and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include these: [A] microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; [B] inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; [C] pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; [D] 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; [E] 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. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. 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 [1-800-426-4791].

### Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer who are 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 infection. 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 microbial contaminants are available from the Safe Drinking Water Hotline [1-800-426-4791].

### About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The Shelby Water Plant conducted sampling for contaminants [bacteria; inorganic; radiological; synthetic organic; volatile organic] during 2008. Samples were collected for over 40 different contaminants, most of which were not detected in the City of Shelby's water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

### Disinfection By-Products

The Running Annual Average (RAA) for Total Trihalomethanes in our system was 52.6 ug/l for 2008. The Maximum Contaminant Level (MCL) is 80 ug/l.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems and may have an increased risk of getting cancer.

The Water Capital Improvement charge on your monthly bill is used to fund the upgrades at the Water Treatment Plant. The new water plant is yielding good results for the treatment of THM's. All of our quarterly tests have been below the EPA's limit of 80 ug/l.

Additional information is available from the Safe Drinking Water Hotline [1-800-426-4791].

### Public Participation

Concerns and comments about your water are encouraged at regular meetings of Shelby City Council, which meets the first and third Mondays at 7:00 PM in the rear of City Hall.

### Susceptibility Analysis

The City of Shelby public water system uses surface water drawn from Black Fork River and Marsh Run Creek as well as ground water pumped from two water supply wells. Surface waters are by their nature susceptible to contamination, and numerous potential contaminant sources along their banks make them more so. The protection areas around Black Fork River and Marsh Run Creek as well as the well field include a moderate number of potential contaminant sources, including agricultural runoff, pesticide/fertilizer, petroleum storage, silage, confined animal feedlot, above ground storage tanks, farm machinery repair, pasture, other commercial sources, industrial storm water, landfill runoff, electrical substations, junk yards, lagoons, home construction and auto repair. As a result, the drinking water supplied to the City of Shelby's public water system is considered to have a high susceptibility to contamination.

The City of Shelby's public water system treats this source water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. Implementing measures to protect Black Fork River, Marsh Run Creek, and the local aquifer can further decrease the potential for water quality impacts.

If you have any questions about this consumer confidence report, or would like further information about Shelby's Source Water Assessment Report you can contact:

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