

K.L.S.W.A. WATER QUALITY REPORT: 2006

Since its creation in 1977 water quality has been one of the Kalamazoo Lake Sewer and Water Authority's primary commitments. We currently supply the City of Saugatuck, The City of the Village of Douglas, Saugatuck Township, and the Goshorn Lake area of Laketown Township with their drinking water. The KLSWA believes that the best way to assure you that your drinking water is safe and reliable is to provide you with accurate facts.

The current source of your water is from wells located either within the City of the Village of Douglas off Bayou Dr., the City of Saugatuck off Maple St., or the cemetery wells within Saugatuck Township. A copy of the Source Water Assessment, performed by the MDEQ, is available from the Authority upon request. The SWAP identified potential sources of groundwater contamination including a number of Underground Storage Tanks ten of which have been removed. The SWAP defines the Douglas well field as having a "high" susceptibility to groundwater pollution while those in Saugatuck have a "moderate" susceptibility. The KLSWA has an active Well Head Protection Program that supports management of existing and potential sources of contamination. The determination of well susceptibility to contamination is based on geologic sensitivity analysis, listed potential contaminant sources within the WHPA, and on the following:

- No Maximum Contaminate Level (MCL) violations have occurred.
- Well construction meets all applicable standards
- There are no potential sources of contamination within the standard isolation area
- Known sources of contamination within the WHPA are being remediated to prevent movement of contamination to municipal wells

The KLSWA currently adds Chlorine to the water supplied from each of our wells. We also add polyphosphate to control corrosion in both our Distribution system and in your household plumbing. In addition the Douglas wells are served by an aerated Iron Removal Plant which removes most of the iron which occurs naturally in groundwater. 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 the water poses a health threat. More information about contaminants and potential health effects can be obtained by calling the EPA safe drinking water hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno compromised persons such as persons undergoing chemotherapy for cancer, people 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 provider. EPA/CDC guidelines on appropriate means to lessen risk of infection by *Cryptosporidium* or other Microbial contaminants are available from the Safe Drinking Water Hotline. Sources of drinking water include rivers, streams, ponds, reservoirs, springs, and wells. Contaminants which may be present in source water include:

- **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage 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 runoff, 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, urban storm water runoff, or residential areas
- **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals which are by products of industrial processes and petroleum production, and can come from gas stations, urban runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

The EPA prescribes regulations which limit the amount of contaminants in Public Water Supplies. The FDA prescribes regulations which limit the amount of contaminants in Bottled water. Additional information is available from the Safe Drinking Water Hotline and the EPA's drinking water website ([www. Epa.gov/safe water](http://www.Epa.gov/safe%20water)).

The following tables list all the contaminants the KLSWA detected during the 2006 calendar year.

WATER QUALITY DATA

The EPA requires monitoring for over 80 drinking water contaminants. Those listed below are the contaminants detected in your drinking water during the 2006 calendar year, unless otherwise noted. The presence of those contaminants does not necessarily indicate the water poses a health risk. Regulations require the monitoring of certain contaminants less than once a year because the concentrations are not expected to vary significantly from year to year.

WELL DATA

Regulated contaminant	mcl	mclg	Klswa water	Range of detections	violation	Typical source of contaminant
Arsenic ppm	.010	0.0	0.00275	0.005-ND	No	Erosion of natural deposits
Barium ppm	2.0	2.0	0.125	0.06-0.22	No	Erosion of natural deposits
Flouride ppm	4.0	4.0	0.36	0.28-0.61	No	Erosion of natural deposits
Nitrate ppm	10.0	10.0	0.175	0.70-ND	No	Erosion of natural deposits
Unregulated contaminant						
Sodium ppm	NA	NA	36.0	13-65	No	Erosion of natural deposits
Sulfate ppm	NA	NA	10.0	5-23	No	Erosion of natural deposits

DISTRIBUTION SYSTEM DATA

Regulated contaminant	mcl	mclg	Klswa water	Range of detections	Violation	Typical source of contaminant
TTHMppm2004	0.08	NA	0.0007	0.0007	No	By product of disinfection
HAA5ppm2004	0.06	NA	ND	ND	No	By product of disinfection

	Action level	mclg	Klswa water 90 th percentile detected	Sites exceeding action level	Violation	Typical source of contaminant
Copper ppm 2005	1.3	1.3	0.76	0	No	Corrosion of household plumbing
Lead ppb 2005	15	0	4.0	0	No	Corrosion of household plumbing

DISTRIBUTION SYSTEM CHLORINE DATA: RAA 0.35

Chlorine	J	F	M	A	M	J	J	A	S	O	N	D
Monthly Residual average	0.42	0.32	0.33	0.35	0.42	0.37	0.38	0.43	0.25	0.25	0.28	0.37/

DEFINITIONS:

MCL Maximum contaminant level –the highest level of contaminant allowed in drinking water

MCLG Maximum contaminant level goal- the level of a contaminant in drinking water below which there is no known or expected risk to health.

PPM parts per million, parts of contaminant per million parts of water

PPB parts per billion, parts of contaminant per billion parts of water

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

90th percentile 90 % of the samples taken were below the number listed

MRDL Maximum residual disinfectant level-the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants

MRDLG Maximum residual disinfectant level goal-means the level of a drinking water disinfectant below which there is no known or expected risk to health.

ND Not detected- the substance was not detected within the limits of the test protocol

NA Not applicable

RAA Running annual average