



# Annual Water Quality Report

## City of Lee's Summit



The City of Lee's Summit is pleased to supply clean, safe, and reliable drinking water for all of our customers. This report contains important information about the water that you drink. The City of Lee's Summit obtains its water from the cities of Kansas City and Independence. Your water utility takes pride in the high quality product delivered to our customers ensuring that it meets or exceeds all Federal and State standards. For questions about the quality of your drinking water or how you can become actively involved call 969-1900. Listed on the inside of this publication are the test results for the City of Lee's Summit's water supply as required by the Safe Drinking Water Act of 1996.

### WHAT'S INSIDE

**Water Utility Infrastructure**

**Additional Information  
About Your Drinking Water**

**Monitoring Results  
for 2005**

**Reliability Levels**

**If You Have Special Health  
Concerns**

**State Monitoring  
Requirements**

**MDNR Regulations**

**What Can You Do To Protect  
Your Water Quality?**

**How Can You Conserve  
Water?**

*Este informe contiene información importante sobre su agua de beber. Si no lo puede leer, por favor busque la ayuda de alguien que lo puede traducir.*

### Water Utility Infrastructure

The City of Lee's Summit has over 550 miles of water mains, 4,000 fire hydrants, 10,000 water valves, four (4) pumping stations and eight (8) storage facilities. The system has storage capacity of 32 million gallons, which will be increased this summer to 35 million gallons with the addition of the Hook Road Tower.

The City does not operate a water treatment or purification facility. Instead, the City purchases water from Kansas City and the City of Independence. The City of Independence supplies Lee's Summit up to 7.5 million gallons of water a day from wells located near the Missouri River. Kansas City's water source is the Missouri River. Lee's Summit receives up to 14 million gallons of water a day from Kansas City.

Future water supply projects have been planned to meet the demands of Lee's Summit's growth. Next year, one of those projects will be completed which will increase the water supply by 6 million gallons a day from Kansas City. The Water Utilities department is currently updating the Water Master Plan to provide direction for long-term system improvements. Additional projects that have been planned include transmission mains and improvements that will allow Lee's Summit to increase the water supply. Our goal is to ensure that our customers have adequate water supply for their use and reliable fire protection services.

#### **We want our customers to be informed about their water**

For additional information, here is a list of drinking water related websites:

Drinking water standards: [www.epa.gov/safewater/mcl.html](http://www.epa.gov/safewater/mcl.html)

Missouri public drinking water: [www.dnr.mo.gov/env/wpp/dw-index.htm](http://www.dnr.mo.gov/env/wpp/dw-index.htm)

American Water Works Association: [www.awwa.org/advocacy/learn/](http://www.awwa.org/advocacy/learn/)

Independence Water Department: [www.indepmo.org/water/](http://www.indepmo.org/water/)

Kansas City Water Services: [www.kcmo.org/water/](http://www.kcmo.org/water/)

Or you can call:

EPA - Safe Drinking Water Hotline: 1- 800-426-4791

Missouri Department of Natural Resources: 1-800-361-4827

## Water Quality Monitoring Results for 2005

The City monitors our drinking water for hundreds of parameters each year. This table lists all the substances found in Lee's Summit's drinking water during 2005. To better understand the terms and abbreviations in the table, we have provided a list of definitions.

### Detected Regulated Substances

Parameter	Action Level	Sites exceeding AL	90th Percentile	Sample Date	Violation? Y/N	Potential Source
Copper, ppm	AL=1.3	0.011	0	2004	N	Corrosion of plumbing systems
Lead, ppb	AL=15	1.350	0	2004	N	Corrosion of plumbing systems

Parameter	# of Positive Samples	% of Positive Samples	Month	Sample Date	Violation? Y/N	Potential Source
Coliform	1	1.15	2	2005	N	Naturally present in the environment
The MCL for total coliform is determined by the number of samples taken per month. Systems that collect less than 40 samples per month are in violation if more than one sample tests positive. Systems that collect more than 40 samples per month are in violation if 5% or more of the samples test positive.						

### Detected Inorganic Substances

Parameter	Detected Level	Range	MCL	MCLG	Sample Date	Violation? Y/N	Potential Source	
<b>Kansas City Supply</b> Fluoride, ppm	0.93	0.9-0.96	4	4	2005	N	Erosion of natural deposits	
<b>Independence Supply</b>	Antimony, ppm	0.13	nd-1.3	6	6	2004	N	Discharge from refineries
	Arsenic, ppm	0.909	nd-3.01	50	n/a	2004	N	Erosion of natural deposits
	Barium, ppm	0.2619	0.094-0.624	2	2	2004	N	Erosion of natural deposits
	Fluoride, ppm	0.378	0.33-0.49	4	4	2004	N	Erosion of natural deposits
	Nitrate+Nitrite (as N), ppm	0.14	0.14	10	10	2005	N	Fertilizer run-off

#### Definitions:

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

**MCL** — Maximum Contaminant Level, or 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.

**MCLG** — Maximum Contaminant Level Goal, or 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.

**TT** — Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

**Level Found** — The average of all test results for a particular contaminant.

**Range of Detections** — Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Level Found.

**90th Percentile** — For lead and copper testing. 10% of test results are above this level and 90% are below this level.

#### Abbreviations:

**ppb** — parts per billion or micrograms per liter ·

**ppm** — parts per million or milligrams per liter ·

**n/a** — not applicable ·

**nd** — not detectable at testing limits.

## Reliability Levels

As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and radioactive material and can pick up substances resulting from the presence of animal or human activity. Source waters may contain microbes, organic or inorganic chemicals, pesticides, herbicides or radioactive materials. Tap water comes from surface waters (rivers, lakes, streams, ponds or reservoirs) and groundwater (springs, wells). Bottled waters generally are from springs, wells and public water systems. Bottled water is regulated by the U.S. Food and Drug Administration while tap water is regulated by the Environmental Protection Agency (EPA). To ensure tap water is safe to drink, the EPA prescribes limits for the amount of certain contaminants in tap water. In cases where contaminants cannot be readily measured, EPA set treatment techniques to reduce the amount of contaminants to acceptable levels. For more information about contaminants and potential health effects, please call the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

### *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 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 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.

## If You Have Special Health Concerns:

*Because not all contaminants can be completely eliminated, all 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.*

*Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as persons undergoing chemotherapy, persons who have undergone organ transplants, those with HIV/AIDS or other immune system disorders and some elderly and infants can be particularly at risk for infection. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants, contact the EPA Safe Drinking Water Hotline toll free at **1-800-426-4791**.*

*In order to ensure that tap water is safe to drink, the Missouri Department of Natural Resources prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. MDNR requires us to test our water on a regular basis to ensure its safety. For the purpose of tracking our results we have been assigned an identification number MO 1010459. The detectable results of these tests can be found within this report..*

*There are no violations to report.*

**The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.**

a publication on  
quality water and  
quality service

POSTAL CUSTOMER  
City of Lee's Summit, MO

PRESORTED  
STANDARD  
U.S. POSTAGE  
PAID  
LEE'S SUMMIT, MO  
PERMIT #79

City of Lee's Summit  
220 SE Green Street  
Lee's Summit, MO 64063



# Annual Water Quality Report

## City of Lee's Summit



### What can you do to Protect your water quality?

- ◆ Report illegal dumping
- ◆ Use the least toxic alternatives for managing pests and diseases in landscapes
- ◆ Follow package directions when applying pesticides, herbicides and fertilizers
- ◆ Do not apply pesticides or fertilizers when rain is expected
- ◆ Recycle or properly dispose of toxic chemicals from your home
- ◆ For more information on using nontoxic alternatives and on disposing Household Hazardous Waste, call 969-1805.

### How can you conserve water?

On average, 50 to 70 percent of home water is used outdoors for watering lawns and gardens. Here are some tips to help conserve your outdoor water usage:

- ✓ Convert turf areas to low-water use plantings (Xeriscape).
- ✓ Improve the quality of your soil through proper fertilization and aeration practices.
- ✓ Mulch when you mow and leave the clippings on your lawn.
- ✓ Improve your irrigation efficiency by not watering on windy days, adjusting sprinkler heads frequently for proper direction and water in the morning to minimize evaporation.
- ✓ Upgrade your sprinkler clock.
- ✓ Reschedule your sprinkler timer at least monthly and when weather changes.
- ✓ Use hose timers for manual irrigation. Install a rain shutoff device on your automatic sprinkler system.
- ✓ Don't over water your lawn. Only water every three to five days in the summer and every 10 to 14 days in the winter.
- ✓ Wash your car with a bucket of soapy water and use a nozzle to stop the flow of water from the hose between rinsings.
- ✓ Clean driveways and sidewalks with a broom instead of a hose.
- ✓ Check for leaks in outdoor faucets, pipes and hoses.
- ✓ Prevent the creation of leaks by shutting off and draining water lines to outside spigots in the winter.
- ✓ Cover your spa or pool to reduce evaporation. An average sized pool left uncovered can lose as much as 1,000 gallons (3,785 liters) of water per month.