



2013

# water

## Quality Report

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We know that water is the most essential element for life. That's why we're committed to ensuring the water you use is safe and reliable today and for future generations. The folks in Lee's Summit should never have to worry about our greatest life-giving resource, that's our job.

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**WATER UTILITIES**  
**LEE'S SUMMIT**

*LSwater.net | 969.1900*

# safe and reliable

*now and for future generations*

Lee's Summit Water Utilities is proud to provide clean, safe drinking water to more than 35,000 customers. Because of its location, Lee's Summit purchases treated water from the cities of Kansas City and Independence. The suppliers draw from the Missouri River and water wells located near the river. It's our job to make sure water is delivered to you each and every day by keeping our infrastructure maintained.

Each year, water utilities across the country are required to provide customers a water quality report. This report contains important information about your drinking water. Lee's Summit Water Utilities takes pride in the high quality product it delivers to your homes and businesses and ensures that it meets and exceeds all federal and state standards. Listed in this report are test results for our water supply as required by the Safe Drinking Water Act of 1996, and as you will see, there were no water quality violations. **See page 4 for the monitoring results.**



## *special information for the immuno-compromised*

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 *Cyptosporidium* and other microbiological contaminants, contact the EPA Safe Drinking Water Hotline toll-free at 1-800-426-4791.

## substances that may be found in drinking water

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, the EPA sets 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:

#### MICROBIAL CONTAMINANTS |

Viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

#### INORGANIC CONTAMINANTS |

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 |

May come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

#### ORGANIC CHEMICAL CONTAMINANTS |

Includes synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

#### RADIOACTIVE CONTAMINANTS |

Can be naturally occurring or be the result of oil and gas production and mining activities.



### more information on drinking water safety can be found here:

[www.epa.gov/safewater/mcl.html](http://www.epa.gov/safewater/mcl.html) | [www.dnr.mo.gov/env/wpp/dw-index.htm](http://www.dnr.mo.gov/env/wpp/dw-index.htm)  
[www.awwa.org/advocacy/learn](http://www.awwa.org/advocacy/learn) | [www.indepmo.org/water](http://www.indepmo.org/water) | [www.kcmo.org/water](http://www.kcmo.org/water)

# keeping our promises

## making progress on the water utilities strategic plan

Lee's Summit Water Utilities is committed to keeping our promises. That's why, with the help of customers like you, we created the Water Utilities Strategic Plan. It's our promise to provide you with safe, reliable water and sanitary sewer services.

**A FOCUS ON THE CUSTOMER** | We're here to provide you, our customer, water and sewer services. With that in mind, we've made sure to focus on customer education, be more responsive to customer needs and increase community engagement. We've redesigned your bills in hopes of giving you more information about your account, implemented a new online bill pay system and enhanced our customer-focused communications.

**A FOCUS ON OUR FINANCES** | We know how hard you work. That's why we want to maximize your hard-earned rate dollars by preparing for our future. With the help of the Water Utility Advisory Board, comprised of customers just like you, we've adopted policies to ensure the continued financial viability of the Utility.

**A FOCUS ON INFRASTRUCTURE** | We know you rely on our water and sewer services. And when that service is interrupted, even for just a few hours, it could ruin your entire schedule. Last year, we began a major initiative to replace several miles of water mains most prone to breaks and have begun the process of rehabilitating our City's sewer lines. We've made it a priority to invest and reinvest in our infrastructure so that you never have to worry about our system.

**A FOCUS ON THE FUTURE** | Those are just a few of the Strategic Plan goals we've completed since its adoption in December 2011. Each day we are continuing to implement more. You can expect a continued focus on our customers, our finances and our infrastructure.

*Yours Truly*

**LS WATER UTILITIES  
LEE'S SUMMIT**

**6** million gallons of water a day has been added to our system this year with the opening of the Jackson-Cass Transmission line. Lee's Summit can now deliver up to 27 million gallons a day to customers.

## watersmart

conserving our greatest resource

Summer can be a time for high water usage, and Lee's Summit Water Utilities is committed to meeting your everyday water needs while encouraging the conservation of one of our greatest resources. To assist us in this endeavor, Water Utilities is asking customers to "Water Smart" this summer by:



- Adjusting your lawnmower height and leaving your grass a little taller. This helps protect the roots from heat and reduces the loss of moisture due to evaporation.
- Making sure the ground is moist 4-6 inches below the surface after watering your lawn and watering less frequently promotes root growth. A lawn with deep roots requires less water and is more resistant to drought and disease.
- Adding two to three inches of mulch around landscaping to help the soil retain moisture.
- Adjusting your sprinkler systems so only your lawn is watered and not the sidewalks, house, driveway or street.
- Using a hand-held watering can or a hose with a trigger nozzle to better control your irrigation water usage.
- Installing a rainfall or soil moisture sensor for your automatic sprinkler system to prevent over-watering your lawn.
- Using a broom instead of a hose to clean your driveway.
- Selecting plants native to Missouri so your landscaping thrives with little or no additional watering.

Using these water conservation tips, and others found on our website, LSwater.net, can help ensure there is enough water for everyone, and perhaps even save your money along the way. For more information, call Lee's Summit Water Utilities at 816.969.1900.

## preventing backflow

*how you can help protect our water supply*

Lee's Summit Water Utilities is committed to providing you with easy access to safe and reliable drinking water. We don't want you to worry about the quality of the water we provide. But you should be aware of what you can do to protect our water system. That's where the Backflow Prevention Program comes in.

Backflow is when water flows backward through the water supply system. This can be caused by a pressure drop in the water supply to the point that water pressure inside your home or business is higher than the supply and pushes it back into the water system. Backflow can also be caused when something inside your home or business – such as a pump – increases the water pressure so that the pressure inside is greater than supply and it pushes back into the water system. A good example is when a water hose is submerged in a bucket to mix up fertilizer or pesticide. If a water main were to break down the street and there was a sudden drop in supply pressure, water from nearby homes and businesses could be siphoned into the drinking water system, including the fertilizer or pesticide in the bucket. After the break is fixed, someone could go to fill up their glass at the tap and unknowingly drink water contaminated with fertilizer or pesticide.

To prevent that from happening, federal, state and city laws require all water customers with cross connections that are directly connected to the water supply, such as lawn irrigation systems, to install a backflow prevention assembly and test it annually.

For more information on the Backflow Prevention Program, call 816-969-1930, email [backflow@cityofls.net](mailto:backflow@cityofls.net) or visit [LSwater.net](http://LSwater.net).

### simple ways you can help:

- Never submerge a hose in buckets, pools, tubs or sinks.
- Always keep the end of the hose clear of possible contaminants.
- Don't use spray attachments without a backflow prevention device.
- If your outdoor faucet doesn't have a built in anti-siphon valve, you can buy and install an inexpensive screw-on backflow prevention device (hose bib vacuum breaker). Be sure to replace these types of devices often, as there is no accurate way to test them.

## remember:

If you draw from a lake to irrigate your lawn, make sure your irrigation system is not also connected to the City's water.

# monitoring results

## disinfection byproducts

Substance (unit of measure)	Monitoring Period	MCL (MRDL)	MCLG (MRDLG)	RAA	Range Low-High	Typical Source
Haloacetic Acids [HAA5] (ppb)	2012	60	NA	16	11-19.11	By product of drinking water disinfection
TTHMs [Total Trihalo-methanes] (ppb)	2012	80	NA	9	2.28-9.41	By product of drinking water disinfection

Substance (unit of measure)	Sample point	Monitoring Period	MCL (MRDL)	MCLG (MRDLG)	LRAA	Range Low-High	Typical Source
Haloacetic Acids [HAA5] (ppb)	Where KC water is received.	2012	60	NA	12	0-12.4	By product of drinking water disinfection
Haloacetic Acids [HAA5] (ppb)	On the west side of the system and supplied from Scherer water tower and South Terminal station.	2012	60	NA	19	0-19.1	By product of drinking water disinfection
Haloacetic Acids [HAA5] (ppb)	On the southeastern portion of system near the end of the water main.	2012	60	NA	17	0-17.2	By product of drinking water disinfection
Haloacetic Acids [HAA5] (ppb)	Near the south-center of the City between Ranson and Scherer water towers.	2012	60	NA	16	0-16.4	By product of drinking water disinfection
TTHMs [Total Trihalo-methanes] (ppb)	Where KC water is received.	2012	80	NA	9	5.63-8.72	By product of drinking water disinfection
TTHMs [Total Trihalo-methanes] (ppb)	On the west side of the system and supplied from Scherer water tower and South Terminal station.	2012	80	NA	9	2.37-9.41	By product of drinking water disinfection
TTHMs [Total Trihalo-methanes] (ppb)	On the southeastern portion of system near the end of the water main.	2012	80	NA	8	0-8.11	By product of drinking water disinfection
TTHMs [Total Trihalo-methanes] (ppb)	Near the south-center of the City between Ranson and Scherer water towers.	2012	80	NA	8	2.28-8.42	By product of drinking water disinfection

## lead and copper

SUBSTANCE (unit of measure)	SAMPLE PERIOD	VIOLATION	(90TH%TILE)	RANGE LOW-HIGH	AL	SITES OVER AL	TYPICAL SOURCE
Copper (ppm)	2009-2011	No	0.00999	0.00139-0.0365	1.3	0	Corrosion of household plumbing systems

## microbiological

SUBSTANCE (unit of measure)	RESULT	MCL (MRDL)	MCLG (MRDLG)	VIOLATION	TYPICAL SOURCE
Coliform (TCR)	In the month of November, 1.06% of sample returned as positive	Systems that collect 40 samples or more per month: No more than 5% positive samples.	0	No	Naturally present in the environment

## regulated contaminants

SUBSTANCE (unit of measure)	year sampled	violation	MCL (MRDL)	MCLG (MRDLG)	independence water		kansas city water		Typical Source
					Highest Detected	Range Low-High	Highest Detected	Range Low-High	
Atrazine (ppb)	2012	No	3	3	NA	NA	2.47	ND-2.47	Runoff from herbicide used on row crops
Barium (ppm)	2012	No	2	2	0.06	0.06-0.06	0.016	0.005-0.016	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	2012	No	100	100	NA	NA	7	2-7	Discharge from steel and pulp mills; Erosion of natural deposits
Dichloromethane (ppb)	2012	No	5	0	NA	NA	1.1	ND-1.1	Discharge from pharmaceutical and chemical factories
Fluoride (ppm)	2012	No	4	4	0.19	0.19-0.19	1.27	0.18-1.27	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Mercury (ppb)	2012	No	2	2	NA	NA	0.1	ND-0.1	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Nitrate (ppm)	2012	No	10	10	0.08	0.08-0.08	3.7	ND-3.7	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2012	No	50	50	NA	NA	2.5	ND-2.5	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

## disinfection byproducts

SUBSTANCE (unit of measure)	year sampled	violation	MCL (MRDL)	MCLG (MRDLG)	independence water		kansas city water		Typical Source
					Highest RAA	Range Low-High	Highest RAA	Range Low-High	
Haloacetic Acids [HAA5] (ppb)	2012	No	60	NA	0	0	20	1.46-99.1	By-product of drinking water disinfection
TTHMs [Total Trihalo-methanes] (ppb)	2012	No	80	NA	3	4.15-11	11	4.9-62	By-product of drinking water disinfection

Over the past year, we have taken hundreds of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table lists substances found in Lee's Summit's drinking water during 2012 in accordance with EPA standards. We have provided definitions so that you will be able to better understand the terms and abbreviations in the table.

### 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 – 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: 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.

**AVERAGE:** The average of all test results for a particular contaminant. Highest Values: Shows the highest levels found during a testing period. If only one sample was taken, then this number equals the average.

**90TH PERCENTILE:** For lead and copper testing. Ten percent of test results are above this level and 90 percent are below this level.

**ppb:** parts per billion or micrograms per liter.

**ppm:** parts per million or milligrams per liter.

**pCi/L:** pico Curies per liter.

**NA:** non-applicable.

**ND:** Not detectable at testing limits.

**RAA:** Running annual average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

**LRAA:** Locational Running Annual Average, or the locational average of sample analytical results for samples taken during previous four calendar quarters.

**TCR:** Total Coliform Rule.