

# Leavenworth Rural Water District #7

## Water Quality Report



**Our Consumer Confidence Report covers the 2011 calendar year.  
Water District # 7's water tests, water resources and other  
information may be found in this flyer. Our goal is to provide  
quality water and service to all our patrons.**

# LEAVENWORTH CO. RWD #7

## Consumer Confidence Report – 2012

### Covering Calendar Year – 2011

This brochure is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It's important that customers be aware of the efforts that are made continually improve their water system. To learn more, please attend any of the regularly scheduled monthly meetings, which are held **at 7:00 p.m. at the Bonner Springs Church of the Nazarene, Fellowship Hall - 742 N. Nettleton Ave, Bonner Springs, KS for a list of meeting dates call the office or go to our website: [www.leavenworthrwd7.com](http://www.leavenworthrwd7.com).** For more information please contact, **David Rinaldi at (913)441-1205.**

Your water comes from two ground water wells. We treat your water to remove several contaminants and we also add disinfectant to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) required states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state had completed an assessment of our source water. For the results of the assessment, please contact us or download the results at <http://www.kdheks.gov/nps/swap/SWreports.html>.

#### A Message From EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water 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 from human activity.



Contaminants that may be present in source water before we treat it 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 storm water run off, agriculture, and residential uses.

*Radioactive contaminants*, which can be naturally occurring or the result of mining activity.

*Organic 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.

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. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Total Coliform Rule - Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

#### Water Quality Data

The table on the following page lists all of the drinking water contaminants, which were detected during the **2011** calendar year. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Unless noted, the data presented in this table is from testing done **January 1 - December 31, 2011**. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. **The bottom line is that the water that is provided to you is safe.**



**TESTING RESULTS FOR: LEAVENWORTH CO. RWD #7**

<b>REGULATED CONTAMINANTS</b>	<b>WELL #1</b>	<b>Well #2</b>	<b>UNIT</b>	<b>MCL</b>	<b>MCLG</b>	<b>Violation (Yes/No)</b>	<b>TYPICAL SOURCE</b>
Arsenic	1.4	2.6	ppb	10	0	N	Erosion of natural deposits
Barium	200	190	ppm	2	2	N	Discharge from metal refineries
Chromium	2.0	3.5	ppb	100	100	N	Discharge from Steel and Pulp Mills
Selenium	14	4.7	ppb	50	50	N	Erosion of natural deposits
Fluoride	0.25	< 0.15	ppm	4	4	N	Erosion of natural deposits; water additive which promotes strong teeth
Nitrate	9.7	1.4	ppm	10	10	N	Runoff from Fertilizer use
Turbidity	0.51	0.17	ntu	1	1	N	Soil Runoff

<b>90th PERCENTILE</b>	<b>RESULT</b>	<b>Range</b>	<b>UNIT</b>	<b>AL</b>	<b>Sites over AL</b>	<b>Violation</b>	<b>TYPICAL SOURCE</b>
Lead	1.3	1.3 – 2.7	ppb	15	0	N	Corrosion of household plumbing system
Copper, Free	1.1	0.028 – 1.3	ppm	1.3	0	N	Corrosion of household plumbing system

<b>SECONDARY CONTAMINANTS</b>	<b>WELL #1</b>	<b>Well #2</b>	<b>UNIT</b>	<b>SMCL</b>		<b>Violation</b>	<b>TYPICAL SOURCE</b>
Calcium	88	140	Mg/l	200		N	Erosion of natural deposits
Magnesium	13	9.6	Mg/l	150		N	Erosion of natural deposits
Sodium	25	15	Mg/l	100		N	Erosion of natural deposits
Potassium	0.58	3.8	Mg/l	100		N	Erosion of natural deposits
Chloride	11	23	Mg/l	250		N	Erosion of natural deposits
Sulfate	37	41	Mg/l	250		N	Erosion of natural deposits
Total Hardness	280	390	Mg/l	400		N	Erosion of natural deposits
Alkalinity as CaCO3	238	347	Mg/l	300		N	Erosion of natural deposits
pH	7.2	6.9	pH units	8.5		N	Erosion of natural deposits
Specific Conductivity	610	770	Umho/cm	1500		N	Erosion of natural deposits
Total Dissolved Solids	390	480	Mg/l	500		N	Erosion of natural deposits
Total Phosphorus (P)	0.73	0.90	Mg/l	5		N	Erosion of natural deposits
Corrosivity	-0.12	0.012	Lang	0		N	Erosion of natural deposits
Nickel	<1.0	1.1	Mg/l	0.1		N	Erosion of natural deposits
Zinc	1.6	1.6	Mg/l	5		N	Erosion of natural deposits
Silica	25	33	Mg/l	50		N	Erosion of natural deposits
Iron	0.027	< 0.010	Mg/l	0.3		N	Erosion of natural deposits
Manganese	2.2	< 1.0	Mg/l	0.05		N	Erosion of natural deposits

<b>RADIONUCLIDES</b>	<b>RESULT</b>	<b>Range</b>	<b>UNIT</b>	<b>MCL</b>	<b>MCLG</b>	<b>Violation</b>	<b>TYPICAL SOURCE</b>
Gross Alpha	4	4	pCi/L	15	0	N	Erosion of natural deposits
Combined Radium	1.3	1.3	pCi/L	5	0	N	Erosion of natural deposits
Uranium	6.3		ppb	30	0	N	Erosion of natural deposits

Microbiological	Result	MCL	MCLG	Typical Source
Coliform (TCR)	In the month of August, 1 sample returned as positive	MCL: Systems that Collect Less Than 40 Samples per Month – No more than 1 positive monthly sample	0	Naturally present in the environment

Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the Calendar Year of 2011							

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** 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.

**Maximum Contaminant Level (MCL):** the highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs allow for a margin of safety.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

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

**Treatment Technique (TT):** a required process intended to reduce the level of contaminants in water

**ppb:** parts per billion or micrograms per liter (µg/L)      **ppm:** parts per million or milligrams per liter (mg/L)

**N/A:** not applicable      **ND:** non detect at testing limit      **pCi/L:** picocuries per liter (a measure of radiation)

**NTU:** a measure of the clarity of water

Please Note: Well #1 is the North well at 158<sup>th</sup> St. & Metro Ave. - Well # 2 is South well at 142<sup>nd</sup> St. & Loring Rd.

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Coliform are bacteria that are naturally present in environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

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. Your water system 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>.

**During the 2011 calendar year, we had no violation (s) of drinking water regulations.**

***The bottom line is that the water that is provided to you is safe.***