

## 2013 City of Derby Water Results

Microbiological	Result	MCL	MCLG	Typical Source
Coliform (TCR)	In the month of January, 2 samples returned as positive	In systems that collect less than 40 samples/month there can be no more than one positive monthly sample	0	Naturally present in the environment

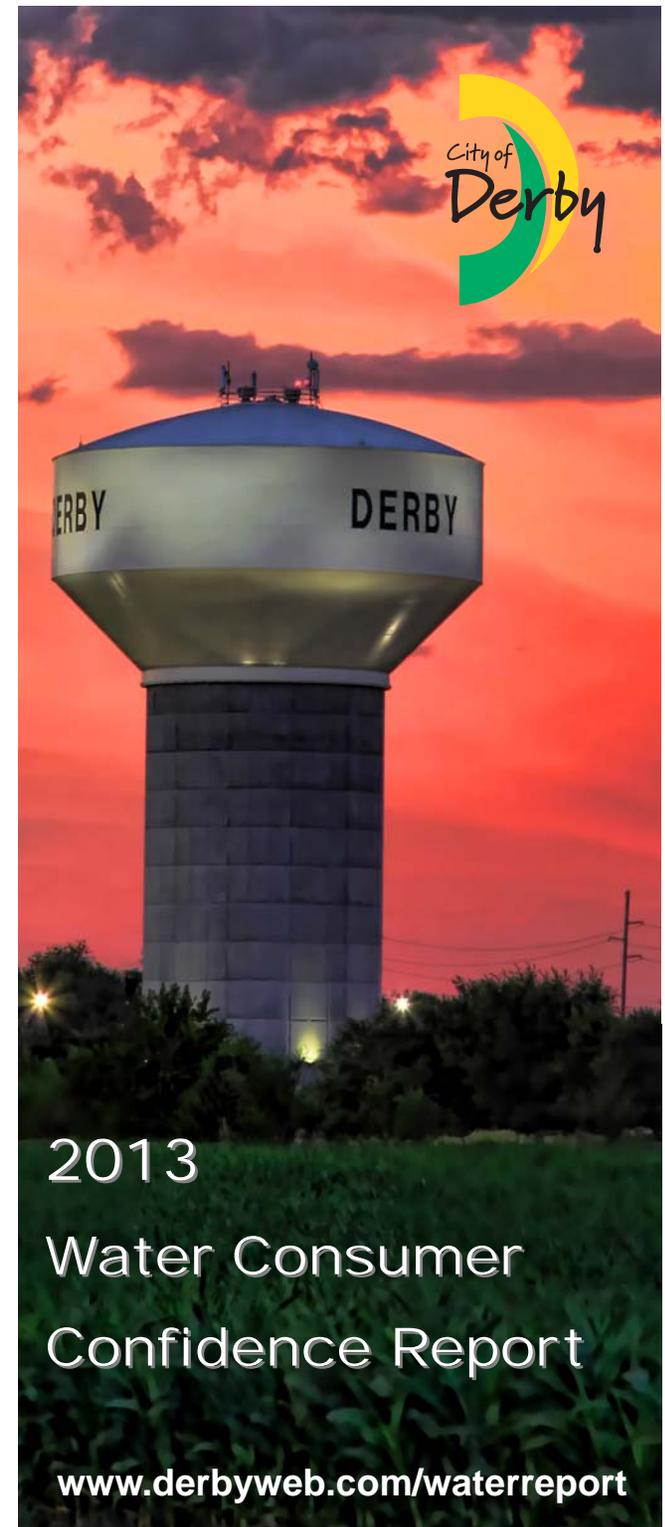
Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	2013	11	5.3-15	ppb	60	0	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)	2013	25	18-29	ppb	80	0	By-product of drinking water chlorination

Lead & Copper	Monitoring Period	90th Percentile	Range	Unit	AL	Sites Over AL	Typical Source
Copper, Free	2013	0.18	0.0088-0.23	ppm	1.3	0	Corrosion of household plumbing
Lead	2013	2	1-3.9	ppb	15	0	Corrosion of household plumbing

The table below lists all drinking water contaminants detected during 2013 from the water system from which we purchase drinking water.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Arsenic	5/21/2013	City of Wichita	1.6	1.6	ppb	10	0	Erosion of natural deposits
Barium	5/21/2013	City of Wichita	0.042	0.042	ppm	2	2	Discharge from metal refineries
Flouride	5/21/2013	City of Wichita	0.32	0.32	ppm	4	4	Natural deposits; water additive which promotes strong teeth
Nitrate	8/6/2013	City of Wichita	1.3	0.63-1.3	ppm	10	10	Runoff from fertilizer use
Selenium	5/21/2013	City of Wichita	3.5	3.5	ppb	50	50	Erosion of natural deposits

Secondary Contaminants	Collection Date	Water System	Highest Value	Range	Unit	SMCL
Alkalinity, Total	5/21/2013	City of Wichita	72.8	72.8	MG/L	300
Bromate	11/7/2012	City of Wichita	7.5	5.8-7.5	ppb	10
Calcium	5/21/2013	City of Wichita	22	22	MG/L	200
Chloride	5/21/2013	City of Wichita	130	130	MG/L	250
Conductivity @25 C UMHOS/CM	5/21/2013	City of Wichita	760	760	UMHO/CM	1500
Hardness, Total (as CaCO3)	5/21/2013	City of Wichita	120	120	MG/L	400
Magnesium	5/21/2013	City of Wichita	15	15	MG/L	150
PH	5/21/2013	City of Wichita	8	8	PH	8.5
Phosphorus, Total	5/21/2013	City of Wichita	0.049	0.049	MG/L	5
Potassium	5/21/2013	City of Wichita	4.3	4.3	MG/L	100
Silica	5/21/2013	City of Wichita	10	10	MG/L	50
Sodium	5/21/2013	City of Wichita	100	100	MG/L	100
Sulfate	5/21/2013	City of Wichita	84	84	MG/L	250
TDS	5/21/2013	City of Wichita	420	420	MG/L	500
Zinc	5/21/2013	City of Wichita	0.01	0.01	MG/L	5



# The Quality of Derby's Water

This brochure serves as the annual quality report about the water in the City of Derby in 2013. The City of Derby is happy to report that during the 2013 calendar year, our water system had no violations of drinking water regulations.

To learn more about water, attend a Water Board meeting on the fourth Tuesday of the month at 6:30 p.m. at City Hall, 611 Mulberry Rd. Meetings are also broadcast live on [www.derbyweb.com/Channel7](http://www.derbyweb.com/Channel7) and Derby Channel 7 (Cox cable customers only).

The City of Derby's drinking water is supplied by the City of Wichita. The water is treated to remove several contaminants, and a disinfectant is added to protect against microbial contaminants. The Safe Drinking Water Act requires each state to develop a Source Water Assessment for each public water supply that treats and distributes raw source water to identify potential contamination sources. The El Paso Water Company's Source Water Assessment is available at [www.kdheks.gov/nps/swap/SWreports.html](http://www.kdheks.gov/nps/swap/SWreports.html) or by contacting the City of Derby at 788-0301.

Some people may be vulnerable to contaminants found in drinking water due to health issues such as cancer, organ

transplant, HIV/AIDS, or age (elderly or infants). If you are in one of these at-risk groups, please seek advice from your health care provider about drinking water. EPA/CDC guidelines on how to reduce the risk of infection from cryptosporidium and other microbial contaminants are available by calling the EPA's Safe Drinking Water Hotline at 800-426-4791 or visiting <http://water.epa.gov/drink/hotline/>.

Please remember, all drinking water, including bottled water, may contain a small amount of contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at 800-426-4791 or visiting <http://water.epa.gov/drink/hotline/>.

The sources of drinking water, both tap and bottled, include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it absorbs naturally occurring minerals and, in some cases, radioactive material. As it travels, water can also pick up substances resulting from the presence of animal or human activity.

## Contaminants that water may be treated for include:

**Microbial** – viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**Inorganic** – salts and metals (naturally-occurring or result from urban stormwater runoff), industrial or domestic wastewater discharge, oil and gas production, mining or farming.

**Pesticides and herbicides** – may come from stormwater runoff and agriculture and residential users.

**Radioactive** – can be naturally occurring or the result of mining activity.

**Organic** – synthetic and volatile chemicals (by-products of industrial processes and petroleum production), gas stations, urban stormwater runoff and septic systems.

To ensure that tap water is safe to drink, the EPA regulates the amount of certain contaminants in water provided by public water systems. Derby treats its water according to EPA regulations. The Food and Drug Administration, which regulates bottled water, must provide the same protection for public health.

The City of Derby tested a minimum of 25 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria is naturally present in the environment and is usually harmless, but it's used as an indicator that other potentially harmful disease-causing bacteria may be present. When coliform bacteria is found, additional tests are performed to determine if harmful bacteria are present in the water supply. If the legal limit is exceeded, the water supplier must notify the public. The City of Derby did not exceed the allowed amount in 2013.

## Definitions

**ACTION LEVEL (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**MAXIMUM CONTAMINANT LEVEL GOAL (MCLG):** The goal is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**MAXIMUM CONTAMINANT LEVEL (MCL):** The maximum allowed MCL is the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology.

**NEPHELOMETERIC TURBIDITY UNIT (NTU):** A measure of clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**PARTS PER MILLION (ppm)** or milligrams per liter (mg/l).

**PARTS PER BILLION (ppb)** or micrograms per liter (ug/l).

**SECONDARY MAXIMUM CONTAMINANT LEVEL (SMCL):** The recommended level for a contaminant that is not regulated and has no MCL.

## Lead Information

If present, elevated levels of lead and copper can cause serious health problems, especially for pregnant women and young children. Lead in drinking water primarily comes from materials and components used in service and home plumbing lines.

The City of Derby is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, the potential for lead exposure can be minimized by flushing the tap for 30 seconds to two minutes before using water for drinking or cooking.

If you have concerns about lead in the water system, you can have your water tested. Information on lead in drinking water, testing methods, and steps to minimize exposure is available by calling the Safe Drinking Water Hotline at 800-426-4791 or online at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).