

## 2017 City of Derby Water Results

Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	2017	14	9.1-23	ppb	60	0	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2017	31	23-38	ppb	80	0	By-product of drinking water chlorination

Microbiological	Monitoring Period	Results	MCL	MCLG	Typical Source
Coliform (TCR)	2017	No positive samples in 2017	Systems which collect fewer than 40 samples a month are in compliance if no more than one sample collected during a month is total coliform-positive.	0	Naturally present in the environment

The tables below list drinking water contaminants detected in 2017 from the water system from which we purchase drinking water.

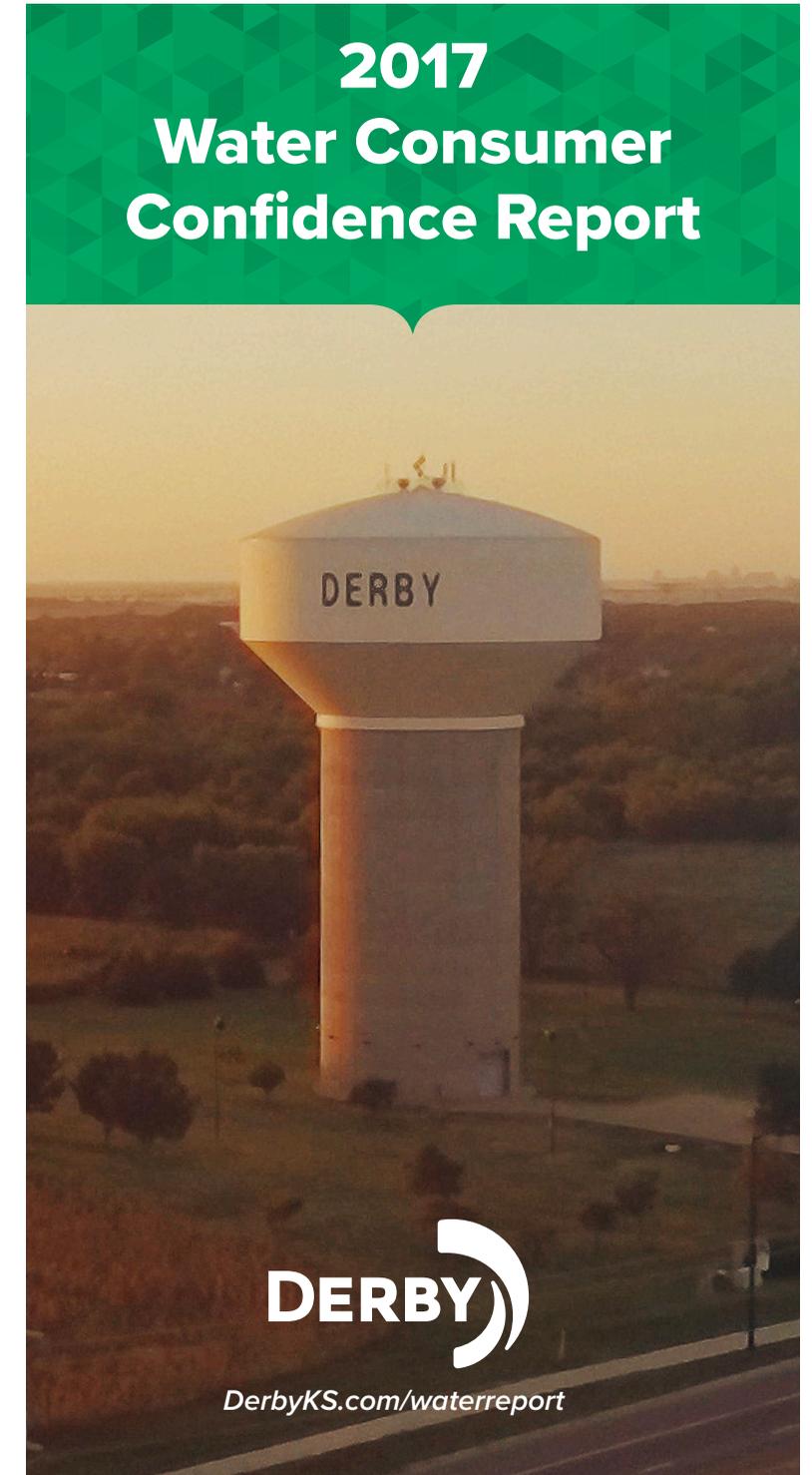
Regulated Contaminants	Collection Date	Water System	Highest Value	Range	MCL	MCLG	Typical Source
Arsenic	5/17/2017	City of Wichita	1.2	1.2	ppb	10	Erosion of natural deposits
Atrazine	8/8/2017	City of Wichita	.36	.36	ppm	3	Run-off from herbicide used on crops
Barium	5/17/2017	City of Wichita	.05	.05	ppm	2	Discharge from metal refineries
Nitrate	7/11/2017	City of Wichita	.63	.59 - .63	ppm	10	Run-off from fertilizer
Selenium	5/17/2017	City of Wichita	2	2	ppb	50	Erosion of natural deposits

Secondary Contaminants	Collection Date	Water System	Highest Value	Range	Unit	SMCL
Alkalinity Total	5/17/2017	City of Wichita	93	93	MG/L	300
Bromate	10/2/2017	City of Wichita	7.5	5.1 - 7.5	ppb	10
Calcium	5/17/2017	City of Wichita	31	31	MG/L	200
Chloride	5/17/2017	City of Wichita	93	93	MG/L	250
Conductivity @ 25 C UMHOS/CM	5/17/2017	City of Wichita	700	700	UMHO/CM	1500
Corrosivity	5/17/2017	City of Wichita	-0.46	-0.46	LANG	0
Hardness Total (as CaCO3)	5/17/2017	City of Wichita	140	140	MG/L	400
Magnesium	5/17/2017	City of Wichita	15	15	MG/L	150
PH	5/17/2017	City of Wichita	7.7	7.7	PH	8.5
Phosphorus Total	5/17/2017	City of Wichita	0.063	.063	MG/L	5
Potassium	5/17/2017	City of Wichita	4.7	4.7	MG/L	100
Silica	5/17/2017	City of Wichita	7.7	7.7	MG/L	50
Sodium	5/17/2017	City of Wichita	78	78	MG/L	100
Sulfate	5/17/2017	City of Wichita	82	82	MG/L	250
Total Dissolved Solids	5/17/2017	City of Wichita	370	370	MG/L	500

**Note:**

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Chlorine/Chloramines	MPA	MPA Units	RAA	RAA Units
5/1/17-5/31/17	2.63	MB/L	2.5	MG/L
Total Organic Carbon Lowest month for removal	Number of Samples	Actual Removal Ratio	Required Removal Ratio	Lowest Monthly Removal
1/1/17-1/31/17	48	1.73	1.0 ratio	1.41



[DerbyKS.com/waterreport](http://DerbyKS.com/waterreport)

# The Quality of Derby's Water

This brochure serves as the annual quality report about the water in the City of Derby in 2017. The City is pleased to report that our water system had no violations of drinking water regulations and the water provided to you was safe.

Our drinking water is supplied from another water system through a Consecutive Connection. Your water comes from 83 ground water wells and:

Source Name	Source Water Type
Intake 998	Surface water
Intake 999	Surface water

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 broadcast live and available on-demand on [derbyks.com/Channel7](http://derbyks.com/Channel7) and broadcast live on Derby Channel 7 (Cox cable customers only).

The City's drinking water is supplied by the City of Wichita. The water is treated to remove 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 by contacting the City of Derby at 788-1151.

Some people may be vulnerable to contaminants found in drinking water

due to health issues such as cancer, undergoing chemotherapy, organ transplant, HIV/AIDS, or age (infants and elderly). 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 [visitingwater.epa.gov/drink/hotline](http://visitingwater.epa.gov/drink/hotline).

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. For more information about contaminants and potential health effects, call the Safe Drinking Water Hotline at 800-426-4791 or [visitwater.epa.gov/drink/hotline](http://visitwater.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.

If you would like to observe the decision-making process that affect drinking water quality, contact Michael Jacobs at 316-269-4760

**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 resulting from urban stormwater run-off), industrial or domestic wastewater discharge, oil and gas production, mining or farming.
- Pesticides/herbicides:** may come from stormwater run-off and agriculture and residential users.
- Radioactive:** can occur naturally as the result of mining activity.
- Organic:** synthetic and volatile chemicals (by-products of industrial processes and petroleum production), gas stations, urban stormwater run-off 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.

Our water system is required to test a minimum of 25 samples per month in accordance with the Total Chlorine Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-carrying 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 is required to notify the public.

For more information, contact Jason Bradshaw, Derby Utilities Manager, at 788-1151 or [jasonbradshaw@derbyweb.com](mailto:jasonbradshaw@derbyweb.com).

## Definitions

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

**Langlier Saturation Index Calculator (LANG):** Helps determine the scaling potential of the water.

**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.

**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.

**Units of Micromhos per Centimeter: UMHOS/CM**

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## Lead Information

If present, elevated levels of lead and copper can cause serious health problems, especially for pregnant women, babies 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.

The City of Derby's next Lead and Copper sampling event will take place in 2018.

If you have concerns about lead in the water system, you may 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 at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).