

## 2012 City of Derby Test Results

| Microbiological | Result  | MCL  | MCLG | Typical Source                       |
|-----------------|---|--|------|--------------------------------------|
| Coliform (TCR)  | In the month of November, 1 sample 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) | 2012              | 10          | 5-12  | ppb  | 60  | 0    | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHMs) | 2012              | 21          | 16-30 | 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  | 2010-2012         | 0.269           | 0.0052-0.32 | ppm  | 1.3 | 0             | Corrosion of household plumbing |
| Lead          | 2010-2012         | 1.8             | 1-31        | ppb  | 15  | 1             | Corrosion of household plumbing |

The table below lists all drinking water contaminants detected during 2012 from the water system from whom we purchase drinking water.

| Regulated | Collection | Water System    | Highest | Range    | Unit | MCL | MCLG | Typical Source   |
|-----------|------------|-----------------|---------|----------|------|-----|------|--|
| Arsenic   | 5/22/2012  | City of Wichita | 2       | 2        | ppb  | 10  | 0    | Erosion of natural deposits                                  |
| Barium    | 5/22/2012  | City of Wichita | 0.052   | 0.052    | ppm  | 2   | 2    | Discharge from metal refineries                              |
| Flouride  | 5/22/2012  | City of Wichita | 0.35    | 0.35     | ppm  | 4   | 4    | Natural deposits; water additive which promotes strong teeth |
| Nitrate   | 5/22/2012  | City of Wichita | 1.1     | 0.67-1.1 | ppm  | 10  | 10   | Runoff from fertilizer use                                   |
| Selenium  | 5/22/2012  | City of Wichita | 3.8     | 3.8      | ppb  | 50  | 50   | Erosion of natural deposits                                  |

| Secondary Contaminants     | Collection Date | Water System    | Highest Value | Range     | Unit    | SMCL |
|----------------------------|-----------------|-----------------|---------------|-----------|---------|------|
| Alkalinity, Total          | 6/22/2012       | City of Wichita | 227           | 85.3-227  | MG/L    | 300  |
| Bromate                    | 8/1/2012        | City of Wichita | 7.2           | 5.8-7.2   | ppb     | 10   |
| Calcium                    | 5/22/2012       | City of Wichita | 27            | 27        | MG/L    | 200  |
| Carbon, Total              | 4/13/2012       | City of Wichita | 6.18          | 1.56-6.18 | Ppm     |      |
| Chloride                   | 5/22/2012       | City of Wichita | 120           | 120       | MG/L    | 250  |
| Conductivity @25C UMHOS/CM | 5/22/2012       | City of Wichita | 750           | 750       | UMHO/CM | 1500 |
| Hardness, Total (as CaCO3) | 5/22/2012       | City of Wichita | 130           | 130       | MG/L    | 400  |
| Magnesium                  | 5/22/2012       | City of Wichita | 15            | 15        | MG/L    | 150  |
| PH                         | 5/22/2012       | City of Wichita | 8.2           | 8.2       | PH      | 8.5  |
| Phosphorus, Total          | 5/22/2012       | City of Wichita | 0.095         | 0.095     | MG/L    | 5    |
| Potassium                  | 5/22/2012       | City of Wichita | 4.6           | 4.6       | MG/L    | 100  |
| Silica                     | 5/22/2012       | City of Wichita | 11            | 11        | MG/L    | 50   |
| Sodium                     | 5/22/2012       | City of Wichita | 100           | 100       | MG/L    | 100  |
| Sulfate                    | 5/22/2012       | City of Wichita | 75            | 75        | MG/L    | 250  |
| TDS                        | 5/22/2012       | City of Wichita | 410           | 410       | MG/L    | 500  |
| Zinc                       | 5/22/2012       | City of Wichita | 0.0055        | 0.0055    | MG/L    | 5    |

# 2012 DERBY Water Consumer Confidence Report



[www.derbyweb.com](http://www.derbyweb.com)

# The Quality of Derby's Water

This brochure serves as the annual quality report about the water in the City of Derby in 2012. 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](http://www.derbyweb.com) and Derby Channel 7. Meetings are also available on-demand on our website.

The City'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. Derby's 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 categories, 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 that 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, and can 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. Coliforms are bacteria that are naturally present in the environment and usually harmless, but are used as an indicator that other potentially harmful disease-causing bacteria may be present. When Coliform bacteria are 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 allowed amount in 2012.

## 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.

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## Lead & Copper Violation

In 2012, the City did not to comply with the States triennial lead and copper monitoring requirements. Due to a miscommunication, only 29 of the required 30 samples were registered. As a result, the city will monitor for lead and copper again in 2013. None of the 29 registered samples indicated the presence of abnormal levels.

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