

ANNUAL WATER QUALITY REPORT

Water testing performed in 2007



Presented By:

THE RAYTOWN WATER
COMPANY

PWS ID#: 1010676

Meeting the Challenge

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1 through December 31, 2007. Over the years, we have dedicated ourselves to providing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Where Does My Water Come From?

The Raytown Water Company purchases water from Kansas City Water, which produces drinking water from the Missouri River and deep wells dug in the Missouri River Aquifer. Kansas City Water received an "A" rating in the March 2007 issue of Men's Health Magazine. Only 10 cities out of a 100 received an "A" rating. To learn more about our watershed on the Internet, go to the U.S. EPA's Surf Your Watershed at www.epa.gov/surf.

Water Treatment Process

The treatment process consists of a series of steps. First, raw water is drawn from our water source and sent to an aeration tank, which allows for oxidation of the high iron levels that are present in the water. The water then goes to a mixing tank where polyaluminumchloride and soda ash are added. The addition of these substances cause small particles to adhere to one another (called "floc") making them heavy enough to settle into a basin from which sediment is removed. Chlorine is then added for disinfection. At this point, the water is filtered through layers of fine coal and silicate sand. As smaller, suspended particles are removed, turbidity disappears and clear water emerges.

Chlorine is added again as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, soda ash (used to adjust the final pH and alkalinity), fluoride (used to prevent tooth decay) and a corrosion inhibitor (used to protect distribution system pipes) are added before the water is pumped to sanitized, underground reservoirs, water towers and into your home or business.

Lead and Drinking Water

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. Raytown Water Company 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 www.epa.gov/safewater/lead.



Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25% of bottled water is actually just bottled tap water (40% according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70% of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their Web site at www.nrdc.org/water/drinking/bw/exesum.asp.



Questions?

For more information about this report, or for any questions relating to your drinking water, please call Neal Clevenger, President/General Manager, at (816) 356-0333 ext.107 or visit our Web site, www.raytownwaterco.com.

About our Violation

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During April 2007, we did not adequately test for total coliform bacteria and therefore cannot be sure of the quality of our drinking water during that time.

This is a minor monitoring violation of the Missouri Public Drinking Water Regulations. The Missouri Department of Natural Resources (MO DNR) requires that drinking water from this supply be tested for this type of bacteria by submitting at least one valid sample per month. Bacteriologically-contaminated water can cause a variety of disease symptoms. It is important that drinking water be routinely tested to ensure the safety of those who consume it.

Number of Routine Samples Required for April 2007 : 15

Number of Routine Samples Provided for April 2007 : 8

For further information, contact Neal Clevenger, (816) 356-0333 ext. 107 or MO DNR's department's Public Drinking Water Program at (573) 751-5331 or Kansas City Regional Office (KCRO) at (816) 622-7000. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses).

Radon

Radon is a radioactive gas that occurs naturally in some ground water. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes and clothes. Radon gas released from drinking water is a relatively small part of the total radon in air. Radon is released into homes and ground water from soil. Inhalation of radon gas has been linked to lung cancer, however, the effects of radon ingested in drinking water are not yet clear. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on how to have your home tested, call (800) SOS-RADON.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water and items which are monitored by the MO DNR but show no detection (ND). Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES				The Raytown Water Company		Kansas City Water Dept.			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Antimony (ppb)	2007	6	6	NA	NA	1	ND-2	No	Discharge from petroleum refineries; Fire retardants; Ceramics; Electronics; Solder
Atrazine (ppb)	2007	3	3	NA	NA	0.24	ND-1.53	No	Runoff from herbicide used on row crops
Barium (ppm)	2007	2	2	NA	NA	0.034	0.01 -0.16	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Cyanide (ppb)	2007	200	200	NA	NA	5	ND-30	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Nitrate (ppm)	2007	10	10	NA	NA	2.13	ND-6.4	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Coliform Bacteria ¹ (# positive samples)	2007	0	0	0	NA	NA	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	2007	TT	NA	NA	NA	2.71	1.42-7.88	No	Naturally present in the environment
Turbidity ² (ppm)	2007	TT	NA	0.42	0.03	NA	NA	No	Soil runoff

Tap water samples were collected from 30 sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2007	1.3	1.3	0.771	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2007	15	15	1.53	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES (KANSAS CITY WATER DEPT. RESULTS)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2007	0.50	NA	21	9-36	No	Runoff/leaching from natural deposits
Color (color units)	2007	1	NA	4	1-10	No	Naturally-occurring organic materials
Fluoride (ppm)	2007	0.05	NA	0.91	0.36-1.32	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Odor (TON)	2007	3	NA	2	1-8	No	Naturally-occurring organic materials
pH (Units)	2007	6.5-8.5	NA	9.8	9.2-10.4	No	Naturally occurring
Sulfate (ppm)	2007	250	NA	128	33-273	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids [TDS] (ppm)	2007	1	NA	302	150-520	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES (KANSAS CITY WATER DEPT. RESULTS)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2007	0.49	ND-3.13	By-product of disinfecting water using chlorine
Chloroform (ppb)	2007	8.4	1.39-28.9	By-product from disinfecting water using chlorine.
Sodium (ppm)	2007	45.0	20.1-56.3	By-product from disinfecting water using chlorine
Sulfate (ppm)	2007	128	33-273	Naturally occurring

IDSE (RAYTOWN WATER COMPANY RESULTS) ³

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Haloacetic Acids [HAA]- IDSE Results (ppb)	2007	29.266	<13.5-38.80	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes]-IDSE Results (ppb)	2007	7.390	3.190-13.20	By-product of drinking water disinfection

OTHER SUBSTANCES (KANSAS CITY WATER DEPT. RESULTS)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Boron (ppm)	2007	0.034	0.010-0.16	Boron in water sources comes from the residues of detergent formulations that are present in treated sewage effluents.
Calcium (ppm)	2007	32.2	21.6-52.6	Natural occurring mineral
Hardness (total) (ppm)	2007	99	67-128	This represents the concentration of both naturally occurring calcium and magnesium in the source water.
Magnesium (ppm)	2007	4.93	1.15-10.90	Occurs naturally in all water sources along with calcium. Is responsible for hardness in water.
Phenol, Total (ppm)	2007	0.002	ND-0.005	NA
Phosphate Ortho (ppm)	2007	0.16	.01-0.44	Phosphates are also used in water treatment as a health protection measure to reduce lead content that may come from consumers; pipes.
Potassium (ppm)	2007	7.02	5.46-8.47	Occurs naturally in all water sources
Silicon (as Silica) (ppm)	2007	4.02	2.09-5.94	NA
Strontium (ppm)	2007	0.184	0.157 -0.218	Naturally present in the environment
Temperature (F) (Units)	2007	57.4	35.8-81.3	NA
Zinc (ppm)	2007	0.004	ND-0.009	NA

¹ All samples collected were absent of Coliform. We are obligated to report all findings present or absent per MODNR regulations.

² Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of disinfectants.

³ Our public water system was required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated disinfection by-product concentrations. Disinfection by-products are the result of continuous disinfection of your drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water.

Definitions

AL (Action Level): The concentration of a contaminant which, if 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.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TON (Threshold Odor Number): A measure of odor in water.