The City of Arkansas City presents the 2016 Consumer Confidence Report. This brochure is a snapshot of the quality of the water that we provided last year. Included are the 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 is important that customers be aware of the continued efforts that are made to improve their water systems.



To learn more about your drinking water, please attend any of the city commission meetings which are held on the first and third Tuesdays of each month at City Hall at 5:30pm. The public is welcome. Meeting agendas and relevant information are provided on local cable TV on channel 7. Other announcements can be found in the Arkansas City Traveler and heard over KSOK 1280 AM, 95.9 FM or KACY 102.5 FM radio. Further information is available on the City of Arkansas City's web site at: http://www.arkcity.org For more information, please contact Eric Broce at 620-441-4420.

## IMPORTANT HEALTH INFORMATION:

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).

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 (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 other and microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

# WATER CONSERVATION TIPS:

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

# SOURCE WATER ASSESSMENT & ITS AVAILABILITY:

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. Your water is treated to remove several contaminants and a disinfectant is added 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 has completed an assessment of our source water. For results of the assessment, please contact us or view on-line at:

 $\underline{http://www.kdheks.gov/nps/swap/SWreports.html}$ 



During the 2015 calendar year, we had one violation (s) of drinking water regulations.

# City of Arkansas City



#### **Covering Year 2015**



Public Works Department 118 W Central Ave Arkansas City, KS 67005 Phone: 620-441-4420

The City of Arkansas City strives to provide a high quality of life for its citizens by furnishing a variety of efficient services in a professional, courteous manner."

www.arkcity.org

# WHERE DOES MY WATER COME FROM?

Your water is supplied by 10 ground water wells west of the Arkansas River. A surface water supply is also available from the Walnut River on the east side of town, but for the last several years only the water well source has been utilized.



The water treatment facility is permitted to soften and filter the source water at a rate up to 7 million gallons per day. The average water quantity delivered to customers in 2015 was 2.8 million gallons per day.



Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

### Water Quality Data Table

Please Note: Because of sampling schedules, results may be older than 1 year.

Lead & Copper	Monitoring Period	90th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2013-2015	0.013	0.0011-0.045	ppm	1.3	0	Corrosion of household plumbing
LEAD	2013-2015	1.4	1.2-2.7	ppb	15	0	Corrosion of household plumbing

#### **Additional Information for Lead**

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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>

RADIOLOGICAL CONTAMINANTS	COLLECTION DATE	YOUR HIGHEST VALUE	RANGE (low/high)	UNIT	MCL	MCLG	TYPICAL SOURCE
COMBINED RADIUM (-226 & -228)	1/06/2014	0.5	0.5	PCI/L	5	0	Erosion of natural deposits

Microbiological	Results	MCL	MCL G	Typical source
COLIFORM (TCR)	In the month of March, one (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

#### **Additional Information**

Our water system tested a minimum of 10 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If any of these monthly samples detect the presence of coliform bacteria, the water supplier must notify the public.

Disinfection Byproducts	Monitoring Period	Your Highest RAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS	2015	23	5.6-32	ppb	60	0	By-product of drinking water disinfection
ТТНМ	2015	61	41-72	ppb	80	0	By-product of drinking water chlorination

#### **Addition Information**

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.

Regulated Contaminants	Sample Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	4/6/2015	1.4	1.4	ppb	10	0	Erosion of natural deposits
BARIUM	4/6/2015	0.055	0.055	ppm	2	2	Discharge from metal refineries
FLUORIDE	7/8/2015	0.49	0.45 0.49	ppm	4	4	Natural deposits; Water additive which promotes strong teeth
NITRATE	4/6/2015	0.9	0.28-0.9	ppm	10	10	Runoff from fertilizer use
SELENIUM	04/6/2015	3.6	3.6	ppb	50	50	Erosion of natural deposits

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Secondary Contaminants	Sample Date	Our Highest Value	Range (low/high)	Unit	SMCL
ALKALINITY, TOTAL	4/6/2015	44	44	MG/L	300
ALUMINUM	4/6/2015	0.02	0.02	MG/L	0.05
CALCIUM	4/6/2015	28	28	MG/L	200
CHLORIDE	4/6/2015	220	220	MG/L	250
CONDUCTIVITY @ 25 C UMHOS/CM	4/6/2015	1000	1000	UMHO/CM	1500
CORROSIVITY	4/6/2015	0.41	0.41	LANG	0
HARDNESS, TOTAL (AS CACO3)	4/6/2015	140	140	MG/L	400
IRON	4/6/2015	0.011	0.011	MG/L	0.3
MAGNESIUM	4/6/2015	17	17	MG/L	150
MANGANESE	4/6/2015	0.0076	0.0076	MG/L	0.05
NICKEL	4/6/2015	0.0011	0.0011	MG/L	0.1
PH	4/6/2015	8.9	8.9	PH	8.5
PHOSPHORUS, TOTAL	4/6/2015	0.34	0.34	MG/L	5
POTASSIUM	4/6/2015	6.2	6.2	MG/L	100
SILICA	4/6/2015	12	12	MG/L	50
SODIUM	4/6/2015	140	140	MG/L	100
SULFATE	4/6/2015	93	93	MG/L	250
TDS	4/23/2014	620	620	MG/L	500
ZINC	4/6/2015	0.16	0.16	MG/L	5

#### **Treatment Violation**

We had the below noted violation of drinking water regulations during the calendar year.

Compliance Period	Analyte	Comment
12/1/2015-12/31/2015	Ground Water Rule (GWR)	Failure Maintain Microbial Treatment (GWR)

### **Terms & Abbreviations**

- 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 that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- <u>Secondary Maximum Contaminant Level (SMCL):</u> recommended level for a contaminant that is not regulated and has no MCL.
- <u>Action Level (AL)</u>: the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.
- <u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water
- Maximum Residual Disinfectant Level (MRDL): 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.
- Non-Detects (ND): lab analysis indicates that the contaminant is not present.
- Parts per Million (ppm) or milligrams per liter (mg/l)
- Parts per Billion (ppb) or micrograms per liter (µg/l)
- <u>Picocuries per Liter (pCi/L)</u>: a measure of the radioactivity in water.
- Millirems per Year (mrem/yr): measure of radiation absorbed by the body.
- Monitoring Period Average (MPA): an average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.
- Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.
- Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

Contaminants that may be present in source water before we treat it include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.
- <u>Inorganic contaminants</u>, 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.
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.
- <u>Radioactive contaminants</u>, which can be naturally occurring or the result of mining activity.
- <u>Organic contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

