BOURBON CO RWD 4

Consumer Confidence Report – 2019 Covering Calendar Year – 2018



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. If you would like to observe the decision-making process that affect drinking water quality, please call PAUL WERKOWITCH at 913-731-8510.

Your water comes from:

| Source Name | Source Water Type |
|-------------|-------------------|
| INTAKE 999 | Surface Water |

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

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).

The sources of drinking water (both tap water and bottled water) included 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.

Contaminants that may be present in sources 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.

Radioactive contaminants, 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits 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 regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system is required to test a minimum of 4 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing 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 must notify the public.

Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2018 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2018. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. The bottom line is that the water that is provided to you is safe.



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.

Action Level (AL): 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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)

Picocuries per Liter (pCi/L): 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.

<u>Locational Running Annual Average (LRAA):</u> Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Testing Results for: BOURBON CO RWD 4

| Microbiological | Result | MCL | MCLG | Typical Source |
|-----------------|--|--|------|--------------------------------------|
| COLIFORM (TCR) | In the month of August, 1 sample(s) returned as positive | TT | N/A | Naturally present in the environment |
| E. COLI | In the month of August, 1 sample(s) returned as positive | Routine and repeat samples are total coliform- positive and either is E. coli-positive or system fails to take repeat samples following E. coli- positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli. | | Human and animal fecal waste |

| Regulated Contaminants | Collection Date | Highest Value | Range (low/high) | Unit | MCL | MCLG | Typical Source | |
|------------------------|--------------------|---------------|---------------------|------|-----|------|-------------------------------------|--|
| BARIUM | 4/11/2018 | 0.045 | 0.045 | ppm | 2 | 2 | Discharge from metal refineries | |
| CHROMIUM | 4/11/2018 | 1.6 | 1.6 | ppb | 100 | 100 | Discharge from steel and pulp mills | |
| NITRATE | 2/14/2018 | 0.23 | 0.19 - 0.23 | ppm | 10 | 10 | Runoff from fertilizer use | |

| Disinfection Byproducts | Monitoring Period | Highest RAA | Range (low/high) | Unit | MCL | MCLG | Typical Source |
|-------------------------------|----------------------|----------------|---------------------|------|-----|------|---|
| TOTAL HALOACETIC ACIDS (HAA5) | 2018 | 28 | 28 - 42 | ppb | 60 | 0 | By-product of drinking water disinfection |
| TTHM | 2018 | 51 | 29 - 54 | ppb | 80 | 0 | By-product of drinking water chlorination |

| Lead and Copper | Monitoring Period | 90 th Percentile | Range (low/high) | Unit | AL | Sites Over AL | Typical Source |
|-----------------|----------------------|--------------------------------|---------------------|------|-----|------------------|---------------------------------|
| COPPER, FREE | 2014 - 2016 | 0.079 | 0.0064 - 0.19 | ppm | 1.3 | 0 | Corrosion of household plumbing |
| LEAD | 2014 - 2016 | 2.1 | 1 - 2.7 | ppb | 15 | 0 | Corrosion of household plumbing |

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 http://www.epa.gov/safewater/lead.

| Total Organic Carbon Lowest Month for Removal | Number of Samples | Actual Removal Ratio | Required Removal Ratio | Lowest Monthly Removal Ratio |
|--|-------------------|----------------------|------------------------|------------------------------|
| 7/1/2018 - 7/31/2018 | 12 | 1.59 | 1.0 RATIO | 0.90 |

| Radiological Contaminants | Collection Date | Highest Value | Range (low/high) | Unit | MCL | MCLG | Typical Source |
|-------------------------------|--------------------|------------------|---------------------|-------|-----|------|-----------------------------|
| COMBINED RADIUM (-226 & -228) | 2/3/2014 | 0.1 | 0.1 | PCI/L | 5 | 0 | Erosion of natural deposits |

| Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established. | Collection Date | Highest Value | Range (low/high) | Unit | SMCL |
|--|-----------------|---------------|---------------------|---------|------|
| ALKALINITY, TOTAL | 4/11/2018 | 130 | 130 | MG/L | 300 |
| CALCIUM | 4/11/2018 | 58 | 58 | MG/L | 200 |
| CHLORIDE | 4/11/2018 | 8.8 | 8.8 | MG/L | 250 |
| CONDUCTIVITY @ 25 C UMHOS/CM | 4/11/2018 | 350 | 350 | UMHO/CM | 1500 |
| CORROSIVITY | 4/11/2018 | 0.077 | 0.077 | LANG | 0 |
| HARDNESS, TOTAL (AS CACO3) | 4/11/2018 | 160 | 160 | MG/L | 400 |
| MAGNESIUM | 4/11/2018 | 3.3 | 3.3 | MG/L | 150 |
| MANGANESE | 4/11/2018 | 0.0058 | 0.0058 | MG/L | 0.05 |
| METOLACHLOR | 5/23/2017 | 0.54 | 0.54 | ppb | |
| PH | 4/11/2018 | 7.8 | 7.8 | PH | 8.5 |
| POTASSIUM | 4/11/2018 | 2.1 | 2.1 | MG/L | 100 |
| SILICA | 4/11/2018 | 4.7 | 4.7 | MG/L | 50 |
| SODIUM | 4/11/2018 | 2.6 | 2.6 | MG/L | 100 |
| SULFATE | 4/11/2018 | 14 | 14 | MG/L | 250 |
| TDS | 4/11/2018 | 170 | 170 | MG/L | 500 |

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Bourbon Co RWD #4

Our water system recently incurred a drinking water violation. Even though this was not an emergency, as our customers, you have a right to know what happened and what we are doing to correct this situation. We did not submit the monitoring report on time. It is a tier 3, violation of Federal and Kansas regulations and requires us to distribute the notice of the violation to our customers.

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. Monitoring for turbidity (cloudiness) tells us whether we are effectively filtering the water supply. Monitoring for disinfectant residual in the water tells us whether we are effectively disinfecting the water supply. Disinfectant residual is the amount of chlorine or related disinfectant present in the pipes of the distribution system. If the amount of disinfectant is too low, organisms could grow in the pipes.

Each monthly report is due to KDHE ten (10) days after the last day of the month. KDHE did not receive our reports for Turbidity for the months of: November 2018, December 2018 and January 2019.

What happened: The Monthly Turbidity Disinfection CT Report's were not submitted in a timely manner. The reports should be completed in the first few days after the end of the month. During the months listed the reports were provided to KDHE in time to avoid a reporting violation.

What you should do and who is at risk: This is not an emergency. There is nothing you need to do at this time. There is no direct health risk to consumers. You do not need to use an alternative water source, such as bottled water.

What we are doing: We are notifying our customers of the District's violations. In the future we will be sending our reports via. Email.

We anticipate resolving the problem within 30 days

Additionally we incurred a violation for failing to collect three required samples for, LT2 Rule, on time from our source water, Xenia Lake Reservoir, sample #s 841375, 841411, 841414 and #1012479. For the months Jan. and Jul. 2018 respectively. The protocol required multiple samples per month. Bourbon County Rural Water #4 has at this time completed the LT2 Protocol. The failure to collect on time was not an emergency. The monitoring samples we failed to collect properly were raw, untreated water samples; not samples of finished drinking water provided to customers.

What happened: Sample #841375 collected 30 Jan 2018, was scheduled for 17 Jan 2018. Sample result of 0 will be used as part of 26 valid samples. Sample #841411 collected on 12 Jul 2018, was scheduled for 2 Jul 2018. Sample result of 0 will be used as part of 26 valid samples. Sample #1012479 collected on 22 Aug was replacement sample for rejected sample #841414 collected on 25 Jul 2018, was scheduled for 18 Jul 2018. Sample result of 1 will be used as part of 26 valid samples.

What you should do and who is at risk: This is not an emergency. There is nothing you need to do at this time. There is no direct health risk to consumers. You do not need to use an alternative water source, such as bottled water.

What we are doing: We are notifying our customers of the District's violations. In the future we will be sending our reports via. Email.

The problem has been resolved as a result of successful completion of the LT2 Protocol

For more information regarding this notice, please contact <u>Jack Ripper at Phone: 620-224-8095 or Paul Werkowitch at Phone 913-731-8510</u>
Or by Mail: <u>2145 62nd Terrace</u>, Bronson, Kansas 66716.

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). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent by Bourbon Co RWD 4. PWS ID KS2001101 / D4510. Date distributed: 1 July 2019