The Jackson County Water Consumer Confidence Report For The Calendar Year 2017



Jackson County Water Company

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PWS: 4002012

4001603

4001803

4001903

Annual Drinking Water Quality Report

www.jacksoncountywater.net

Jackson County Water Company, Inc. is pleased to present to you the required Annual Water Quality Report for the year 2017. We are proud of the job we do, and this report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

J.C.W.C. serves approximately 95% of our customers with water from our new treatment plant, (which has as its source ground water from the Teays River Aquifer). The remaining customers are served from water purchased from the following: the City of Jackson (which treats surface water from the Hammertown and Jisco Lake Reservoirs); Scioto Water Inc. (which has as its source ground water from Scioto River Valley Aquifer); and the Village of Oak Hill (which has as its source ground water treated by the Jackson County Water Company and the Scioto Water Company. The information and corresponding tables for these water suppliers (Village of Oak Hill, City of Jackson and Scioto Water Inc.) are from consumer confidence reports submitted to JCWC from these suppliers.

We are pleased to report that our drinking water is safe and meets federal and state requirements. We want you to have confidence in the quality of water Jackson County Water delivers to your home. Jackson County Water did have one violation in the past year that was not an exceedance of a contaminant, but was related to the sampling date and not the results. (Please see the public notice following the tables of test results below.)



Jackson County Water currently operates our system(s) under active unconditional Licenses-To-Operate from Ohio EPA. These Licenses-To-Operate were in effect throughout the calendar year of 2017. The systems that Jackson County Water operates are Ohio Environmental Protection Agency-designated Public Water Systems 4002012, 4001603, 4001803 and 4001903.

Jackson Co Water routinely monitors for contaminants in your drinking water according to Federal and State laws. This report is for the monitoring period of January 1 to December 31, **2017.**

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. Jackson County Water meets all applicable standards for safe drinking water as the analysis tables show. If you are interested in more information, please contact the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.



The sources of drinking water for 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.

Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- (B) Inorganic contaminants, 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;
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses;
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water run-off and septic systems;
- (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes regulations on the federal level that limit the amount of certain contaminants in water provided by public water systems. The Ohio Environmental Protection Agency enforces

these regulations for public water systems in the State of Ohio to insure protection for the public health.

In addition to the normal routine monitoring performed by Jackson County Water, We have also begun reporting under the following new rules:

- Revised Total Coliform Rule (OAC 3745-81-51 to 3745-81-55)
- Harmful Algal bloom (OAC 3745-90) (only applies to PWSs with surface water sources)
- Lead and Copper House Bill 512

We at Jackson County Water want you to have confidence in the water that comes from your faucet, knowing that it meets or exceeds the requirements set by USEPA and Ohio EPA.

At the 2017 Ohio Rural Water Technical Conference held at Ohio University in Athens, the Jackson County Water Company was selected as the winner of the ORWA Annual Water Tasting Contest. Of the samples of water from those systems who submitted samples of water from around the state, an independent panel of judges selected Jackson County Water as the best tasting water.



This is the travelling trophy that Jackson County Water kept last year until this past May.

Jackson County Water went on to compete this past February at the National Rural Water Association Water Tasting Contest in Washington, DC. Unfortunately, Jackson County Water did not win in that national competition. And at the Ohio Rural Water Association Conference in May, Jackson County Water placed 2nd in the Ohio Water Tasting Contest.

"Congratulations to our treatment plant operators who produce such a fine product and our distribution staff who see that it is delivered to our customers' homes 24/7 and the administrative staff in our office who insure that our customers receive the finest customer service. I am proud of the employees of Jackson County Water who provide the best possible product to our customers along with the best possible service. It is very gratifying for the hard work of our staff to be recognized in this way. But more than just this award, their dedication deserves to be recognized year-round." Larry Foster, General Manager of Jackson County Water.



In this report, you may find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million would be comparable to a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion would be comparable to a single penny in \$10,000,000.

Less Than = <

More Than = >

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions. *Not Given in Ohio*

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - (mandatory language) 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.

Maximum Contaminant Level Goal - (mandatory language) The "Goal" (MCLG) is 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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some common contaminants:

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. 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 by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

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 material and components associated with service lines and home plumbing. Jackson County Water 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 in your drinking water, you may wish to have your water tested. Fortunately, Jackson County Water takes special care to ensure that our water is not corrosive and does not "leach" minerals out of the pipes or fittings. By monitoring the corrosivity with an independent lab as well as the addition of a sequestering additive to protect your plumbing, we are confident that our customers can have confidence in the safety of our water. Information on lead in drinking water, test methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at http://www.epa.gov/safewater/lead.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised 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 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).



We at Jackson Co. Water work around the clock to provide top quality water to every tap. Also, in an effort to maintain the condition of our system, in 2016, we began the preliminary engineering for the construction of additional wells at our wellfield and the replacement of approximately 22,000 feet of waterline. This project is intended to insure capacity and minimize future interruptions of service within our existing water system. The actual construction of these facilities will be dependent on funding and design timelines.

Source Water Information

High Susceptibility PWS Based on High Sensitivity

Ohio EPA Recently completed a study of JCWC - Bronx Corner WTP and Scioto Water, Inc. - Rosehill's source of drinking water to identify potential contaminant sources and provide guidance on protecting the drinking water source.

According to this study, the aquifer (water-rich zone) that supplies water to JCWC-WTP and Scioto Water, Inc. has a high susceptibility to contamination. This determination is based on the following:

- The presence of a relatively thin protective layer of silty loam overlying the aquifer;
- The shallow depth (less than 15 feet below ground surface) of the aquifer;
- The presence of the significant potential contaminant source in and just beyond the protection area.

This susceptibility means that under currently existing conditions, the likelihood for the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling Larry Foster or Jeff Chesser 740-286-5929.

Jackson County Water also purchases water from the City of Jackson for customers on Smith Bridge Road. This water is surface water from the Hammertown Reservoir and is treated at the City of Jackson's Water Plant. Being surface water, the treatment techniques and the susceptibility to contamination are governed by different factors. If you have further questions, please contact our office at 740-286-5929.

Because water is such a precious commodity and a very vulnerable resource, we ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Be cautious with possible contaminants, use water wisely, and report any activity which could have an adverse impact to any water source, whether treated or untreated, and whether it be intentional or even unintentional. Please contact Jackson County Water or the OEPA hotline or call direct to the National Response Center, if you suspect any sign of possible contamination.



Furthermore, any tampering or vandalism to a public water facility or its fixtures is a federal offense under US Code Title 42, Section 300i-1.

Help Protect Our Water Security!



PLEASE REPORT ANY SUSPICIOUS ACTIVITY YOU MAY OBSERVE AROUND OUR FACILITIES

For Emergencies, Call 1-740-286-6180 or Local Law Enforcement



Tables of Test Results

Because Jackson County Water operates four separate PWS systems, we want to provide you with the water analysis results that are specific to your residence. To make it easy for you to view the table that applies to your service, we have used your account number. Every account (customer) with Jackson County Water is assigned a unique account number. The account number can be found on your bill. It is made up of three digits, a hyphen, then 5 digits, a hyphen, and then two digits.

To make this simple to identify, please refer to the first 3 numbers of your 10-digit customer account number.

Each of the following tables will address the analyses of those systems identified by the first three numbers of the account number and are color-coded for your benefit.

If you have any questions as you look over these tables, please feel free to contact our office.



TEST RESULTS (Jackson Count account # 101-XXXXX-XX account # 102-XXXXX-XX account # 103-XXXXX-XX account # 104-XXXXX-XX account # 107-XXXXX-XX account # 111-XXXXX-XX account # 111-XXXXX-XX account # 111-XXXXX-XX			a a a a a	Company source ccount # 117-XX ccount # 205-XX ccount # 206-XX ccount # 210-XX ccount # 351-XX ccount # 352-XX ccount # 353-XX	XXXX-XX XXXX-XX XXXX-XX XXXX-XX XXXX-XX	4002012)	
Contaminant	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	YEAR SAMPLED	Likely Source of Contamination
INORGANIC CO	ONTAM	INANTS					
LEAD (ppb)	0	AL= 15.00	<5.0	0<5.0	NO	2017	Corrosion of household plumbing systems. Erosion of natural deposits.
COPPER (ppm)	1.3	A.L.= 1.3	0.129	<.50220	NO	2017	Corrosion of household plumbing systems, erosion of natural deposits: leaching from wood preservatives.
FLUORIDE (ppm)	4	4	0.971	0.837-1.12	NO	2017	Water additive which promotes strong teeth; erosion of natural deposits.
BARIUM (ppm)	2	2	0.0057	N/A	NO	2014	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
NITRATE	10	10	0.10	N/A	NO	2017	Runoff from fertilizer use; Erosion of natural deposits.
CYANIDE (ppm)	200	200	10.0	N/A	NO	2015	Discharge from steel/metal factories, Discharge from plastic and fertilizer factories.
VOLATILE OR	GANIC (CONTAI	MINANTS				
Total THM's (ppb)	NA	80	10.9	10.5-11.3	YES	2017	By-products of drinking water chlorination.
Five Haloacetic Acid (ppb)	NA	60	<6.0	0<6.0	YES	2017	By-products of drinking water chlorination

RESIDUAL DISI	NFECTA	ANTS					
Total Chlorine	4	4	1.12	0.93-1.50	NO	2017	Water Additive Used
(ppm)							to Control Microbes



Contaminant	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	YEAR SAMPLED	Likely Source of Contamination
INORGANIC CO	ONTAM	INANTS					'
LEAD (ppb)	0	AL= 15.00	<5.0	0<5.0	NO	2017	Corrosion of household plumbing systems. Erosion of natural deposits.
COPPER (ppm)	1.3	A.L.= 1.3	0.129	<.50220	NO	2017	Corrosion of household plumbing systems, erosion of natural deposits: leaching from wood preservatives.
FLUORIDE (ppm)	4	4	0.971	0.837-1.12	NO	2017	Water additive which promotes strong teeth; erosion of natural deposits.
BARIUM (ppm)	2	2	0.0057	NA	NO	2014	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
NITRATE	10	10	0.10	N/A	NO	2017	Runoff from fertilizer use; Erosion of natura deposits.
CYANIDE (ppm)	200	200	10.0	N/A	NO	2015	Discharge from steel/metal factories, discharge from plastic and fertilizer factories
VOLATILE ORG	GANIC (CONTAI	MINANTS				
Total THM's (ppb)	N/A	80	10.9	10.5-11.3	YES	2017	By-products of drinking water chlorination.
Five Haloacetic Acid (ppb)	NA	60	<6.0	0.<6.0	YES	2017	By-products of drinking water chlorination

RESIDUAL DISI	NFECTA	ANTS					
Total Chlorine (ppm)	4	4	1.12	0.93-1.50	NO	2017	Water Additive Used to Control Microbes

TEST RESULTS account #	•			-4002012			
Contaminant	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	YEAR SAMPLED	Likely Source of Contamination
INORGANIC CO	ONTAMI	INANTS					,
NITRATE (ppm)	10	10	.92	N/A	NO	2017	Runoff from fertilizer use; erosion of natural deposits.
BARIUM (ppm)	2	2	0.029	N/A	NO	2016	Discharge from wastes; Discharge from metal refineries; Erosion of natural deposits.



TEST RESULTS account	5 (JCWC so # 113-XXX		y of Jackso	on) – M – 400	1603		
Contaminant	MCLG	MCL	LEVEL FOUND	Range of Detections	Violations	Date Of Sample	Likely Source of Contamination
Bacteriological							
Turbidity NTU	N/A	TT	0.110	0.02-0.100	NO	2017	Soil runoff
Turbidity (%sample meeting standards)	N/A	TT	100%		NO	2017	Soil runoff

Total Organic Carbon	N/A	ТТ	2.1	1.50-2.30	NO	2017	Naturally present in the environment.
Inorganic Contan	 ninants						the environment.
Fluoride (ppm)	4.0	4.0	1.22	0.94-1.22	NO	2017	Water additive which promotes strong teeth.
Nitrate (ppm)	10	10	0.32	00.32	NO	2017	Runoff from fertilizer use; Erosion of natural deposits.
Barium (ppb)	2,000	2,000	0.023	0-0.023	NO	2017	Discharge of drilling wastes; metal refineries; erosion of natural deposits.
Lead (ppb)	0	AL-15	<5.0	N/A	NO	2015	Corrosion of household plumbing systems
Copper (ppm)	1.3	1.3	<0.050	N/A	NO	2015	Corrosion of household plumbing systems, erosion of natural deposits;
Volatile Organic	Contamin	ants					
Total Trihalomethanes (ppb)	N/A	80	37.0	N/A	YES	2017	By-products of drinking water chlorination
Five Haloactic Acids (ppb)	N/A	60	17.7	N/A	YES	2017	By-products of drinking water chlorination
Residual Disinfec	tants						
Total Chlorine (ppm)	MRD LG=4	MRDL=4	1.11	0.71-1.45	NO	2017	Water additive to control microbes

[&]quot;Turbidity is a measure of cloudiness of water and is an indication of the effectiveness of a filter system. The turbidity limit set by the EPA is 0.3 in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported above, the City of Jackson's highest recorded turbidity result for 2015 was 0.1 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%."



Contaminant	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	YEAR SAMPLED	Likely Source of Contamination
RESIDUAL DISI	NFECT	ANTS				<u> </u>	<u> </u>
Chlorine (ppm)	4	4	1.31	0.88-1.71	NO	2017	Water additive used to control microbes.
INORGANIC CO	NTAM	NANTS					
LEAD (ppb)	0	Action Limit= 15.	<5.0	0<5.0	NO	2015	Corrosion of household plumbing systems. Erosion of natural deposits.
COPPER (ppm)	1.3	Action Limit= 1.300	0.034	<0.050-0.068	NO	2015	Corrosion of household plumbing systems, erosion of natural deposits: leaching from wood preservatives.
NITRATE (ppm)	10	10	0.92	N/A	NO	2017	Runoff from fertilizer use; erosion of natural deposits.
FLUORIDE (ppm)	4	4	0.99	0.71-1.19	NO	2017	Water additive which promotes strong teeth; erosion of natural deposits.
VOLATILE ORG	GANIC (CONTAN	IINANTS				
Total THM's	NA	80	33.9	N/A	YES	2017	By-products of drinking water chlorination.
Total Haloacetic acid	NA	60	8.8	N/A	NO	2017	By-products of drinking water chlorination



Contaminant	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	YEAR SAMPLED	Likely Source of Contamination
RESIDUAL DISI	NFECT	ANTS					•
Chlorine (ppm)	MRD LG=4	MRDL =4	1.39	1.00-1.42	NO	2017	Water additive used to control microbes.
INORGANIC CO	NTAMI	INANTS					
LEAD (ppb)	0	Action Limit= 15.	<5.0	N/A	NO	2015	Corrosion of household plumbing systems. Erosion of natural deposits.
COPPER (ppm)	1.3	Action Limit= 1.3	0.094	N/A	NO	2015	Corrosion of household plumbing systems, erosion of natural deposits: leaching from wood preservatives.
NITRATE (ppm)	10	10	0.92	N/A	NO	2017	Runoff from fertilizer use; erosion of natural deposits.
FLUORIDE (ppm)	4	4	0.99	0.71-1.19	NO	2017	Water additive which promotes strong teeth; erosion of natural deposits.
VOLATILE ORG	GANIC (CONTAN	IINANTS				
Total THM's	N/A	80	20.5	N/A	YES	2017	By-products of drinking water chlorination.
Total Haloacetic acid	N/A	60	<6.0	N/A	NO	2017	By-products of drinking water chlorination

[&]quot;The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than (1) indicates a violation of the TOC removal requirements."

Notice of violation for Jackson County Water PWS# 4002012

Jackson County Water is required to monitor your drinking water for specific contaminants on a regular basis. There is a wide variety of contaminants that we test for at different times throughout the year. Results of these regular monitorings are an indicator of whether or not our drinking water meets health standards. During the 2017 Annual time period we sampled 3 days prior to the required sampling period for disinfection by-products. Because we technically did not sample during the prescribed period, and even though the samples analyzed were well within the acceptable levels, we can not verify the levels of disinfection by-products (total trihalomethanes – TTHM, and haloacetic acids – HAA5) during the required period. For this reason, Jackson County Water has been issued a notice of violation from Ohio EPA. Jackson County Water always intends to provide safe drinking water to our customers and maintain our customers' trust so that you, as the customer, can always have confidence that JCWC is providing you the best water possible.

What should I do?

As a customer, there is no action you are required or recommended to take.

What is being done

As soon as JCWC was notified of this violation, JCWC has been in contact with Ohio EPA. JCWC will insure that the required monitoring will ways be done within the prescribed time frame. Although the samples were collected on 6/27/17 and were found to be completely below any acceptable levels, the samples should have been collected during the required monitoring period of 7/1/17 - 9/30/17. Needless to say, care will be taken to make sure the timing of these sample collections is accurate in the future.

"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."

Contact

If you have any questions, please contact our office at 124 W. Huron Street in Jackson, Ohio. The phone number for our office is 740-286-5929.

Larry Foster

General Manager

And now, just a note:

Boil Advisories

From time to time, water service may be interrupted or water lines depressurized due to maintenance or emergency repairs. When this happens, Jackson County Water will place a boil advisory in effect for the affected area. Customers are notified by messages on the local radio and automated calling. For this reason, we ask that you contact our office to inform us of your correct contact information and update your contact information each time it changes so that your contact information is as up-to-date as possible. Customers will be advised to boil water that is to be used for consumption for two minutes at a full boil before using and then allow it to

cool. This is a precautionary measure to safeguard our customers' public health and laboratory analysis will ensure that the water quality and safety is confirmed before lifting the advisory.

We realize when this occurs, that it is an inconvenience to you. And so, we do our best to restore your service as soon as possible, but we apologize for the inconvenience.

If you have any questions about this report or concerning your water utility, please contact Larry Foster, General Manager of JCWC. We want our valued customers to be informed about their water utility. If you want to learn more, please contact our office. To make arrangements to attend any of our regularly scheduled meetings and be placed on the agenda, please contact the business office. These meetings are held on the third Monday of each month at 6:00 pm at the JCWC administrative office located at 124 W. Huron St. in Jackson, Ohio.

An annual meeting of the members is scheduled each year on the first Thursday in January for all Jackson County Water customers.

We thank you for the opportunity to serve you.

