# The Jackson County Water Consumer Confidence Report For The Calendar Year 2016



# **Jackson County Water Company**

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PWS: 4002012

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 2016. 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.

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 2016. 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, **2016.** 

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 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.



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 corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or 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 have begun 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

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# **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 analysis 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 RESULT account # account # account # account # account # account #	101-XXX 102-XXX 103-XXX 104-XXX	XX- XX XX-XX XX-XX XX-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	XXXX-XX XXXX-XX XXXX-XX XXXX-XX	4002012)	
account #	112-XXX	XX-XX		ccount # 353-XX			
Contaminant	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	YEAR SAMPLED	Likely Source of Contamination
INORGANIC C	CONTAM	INANTS			l	1	1
LEAD (ppb)	0	AL= 15.00	<5.0	NA	NO	2014	Corrosion of household plumbing systems. Erosion of natural deposits.
COPPER (ppb)	1,300	A.L.= 1,300	162	<50-392	NO	2014	Corrosion of household plumbing systems, erosion of natural deposits: leaching from wood preservatives.
FLUORIDE (ppm)	4	4	0.949	0.812-1.08	NO	2016	Water additive which promotes strong teeth; erosion of natural deposits.
BARIUM (ppb)	2,000	2,000	57	NA	NO	2014	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
NITRATE	10	10	0.14	ND-0.14	NO	2016	Runoff from fertilizer use; Erosion of natural deposits.
VOLATILE OR	RGANIC (	CONTAI	MINANTS	<u> </u>			
Total THM's (ppb)	NA	80	12.9	4.85-35.1	NO	2016	By-products of drinking water chlorination.
Five Haloacetic Acid (ppb)	NA	60	<6.0	<6.0-9.2	NO	2016	By-products of drinking water chlorination
RESIDUAL DIS	SINFECT	ANTS					
Total Chlorine (ppm)	4	4	1.25	0.95-1.48	NO	2016	Water Additive Used to Control Microbes



TEST RESULT			•	Company source	= JCWC WTP)	-4002012	
Contaminant	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	YEAR SAMPLED	Likely Source of Contamination
INORGANIC CO	ONTAM	INANTS				l l	
LEAD (ppb)	0	AL= 15.00	<5.0	NA	NO	2014	Corrosion of household plumbing systems. Erosion of natural deposits.
COPPER (ppb)	1,300	A.L.= 1,300	162	<50-392	NO	2014	Corrosion of household plumbing systems, erosion of natural deposits: leaching from wood preservatives.
FLUORIDE (ppm)	4	4	0.949	0.812-1.08	NO	2016	Water additive which promotes strong teeth; erosion of natural deposits.
BARIUM (ppb)	2,000	2,000	57	NA	NO	2014	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
NITRATE	10	10	0.14	ND-0.14	NO	2016	Runoff from fertilizer use; Erosion of natural deposits.
VOLATILE ORG	GANIC (	CONTAI	MINANTS				
Total THM's (ppb)	NA	80	12.9	4.85-35.1	NO	2016	By-products of drinking water chlorination.
Five Haloacetic Acid (ppb)	NA	60	<6.0	<6.0-9.2	NO	2016	By-products of drinking water chlorination
RESIDUAL DISI	NFECT	ANTS					
Total Chlorine (ppm)	4	4	1.25	0.95-1.48	NO	2016	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	0.57	N/A	NO	2016	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.



Contaminant	MCLG	MCL	LEVEL FOUND	Range of Detections	Violations	Date Of Sample	Likely Source of Contamination
Bacteriological							
Turbidity NTU	NA	TT	0.100	0.022-0.100	NO	2016	Soil runoff
Turbidity (%sample meeting standards)	NA	ТТ	100%		NO	2016	Soil runoff
Total Organic Carbon	NA	TT	2.1	1.60-2.10	NO	2016	Naturally present in the environment.
Inorganic Contar	minants	1	Т		1		
Fluoride (ppm)	4.0	4.0	1.20	0.88-1.20	NO	2016	Water additive which promotes strong teeth.
Nitrate (ppm)	10	10	0.19	0-0.19	NO	2016	Runoff from fertilizer use; Erosion of natural deposits.
Barium (ppb)	2,000	2,000	0.022	0-0.022	NO	2016	Discharge of drilling wastes; metal refineries; erosion of natural deposits.
Lead (ppb)	0	AL-15	<5.0	NA	NO	2015	Corrosion of household plumbing systems
Copper (ppb)	1.300	1.300	<5.0	NA	NO	2015	Corrosion of household plumbing systems, erosion of natural deposits;
Volatile Organic	Contamin	ants	1	T	1		
Total Trihalomethanes (ppb)	NA	80	42.9	042.9	NO	2016	By-products of drinking water chlorination
Five Haloactic Acids (ppb)	NA	60	28.5	028.5	NO	2016	By-products of drinking water chlorination

<sup>&</sup>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%."



TEST RESULTS account # 215-XX			Village of	Oak Hill) - O –	4001803		
Contaminant	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	YEAR SAMPLED	Likely Source of Contamination
RESIDUAL DISI	NFECT	ANTS					•
Chlorine (ppm)	4	4	1.34	0.79-1.73	NO	2016	Water additive used to control microbes.
INORGANIC CO	NTAMI	INANTS					
LEAD (ppb)	0	Action Limit= 15.	<5.0	0<5.0	NO	2015	Corrosion of household plumbing systems. Erosion of natural deposits.
COPPER (ppb)	1300	Action Limit= 1300	34	<50-68	NO	2015	Corrosion of household plumbing systems, erosion of natural deposits: leaching from wood preservatives.
NITRATE (ppm)	10	10	0.57	N/A	NO	2016	Runoff from fertilizer use; erosion of natural deposits.
FLUORIDE (ppm)	4	4	1.05	0.74-1.26	NO	2016	Water additive which promotes strong teeth; erosion of natural deposits.
VOLATILE ORG	GANIC (	CONTAN	IINANTS				
Total THM's	NA	80	25.4	025.4	NO	2016	By-products of drinking water chlorination.
Total Haloacetic acid	NA	60	8.1	08.1	NO	2016	By-products of drinking water chlorination



TEST RESULTS account # 216-XX			Deloto III		001700		
Contaminant	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	YEAR SAMPLED	Likely Source of Contamination
RESIDUAL DISI	NFECT	ANTS				<u> </u>	
Chlorine (ppm)	MRD LG=4	MRDL =4	1.34	0.89-1.74	NO	2016	Water additive used to control microbes.
INORGANIC CO	NTAMI	INANTS					
LEAD (ppb)	0	Action Limit= 15.	<5.0	NA	NO	2015	Corrosion of household plumbing systems. Erosion of natural deposits.
COPPER (ppb)	1300	Action Limit= 1300	94	<50-104	NO	2015	Corrosion of household plumbing systems, erosion of natural deposits: leaching from wood preservatives.
NITRATE (ppm)	10	10	0.57	N/A	NO	2016	Runoff from fertilizer use; erosion of natural deposits.
FLUORIDE (ppm)	4	4	1.01	0.74-1.26	NO	2016	Water additive which promotes strong teeth; erosion of natural deposits.
VOLATILE ORG	GANIC (	CONTAN	MINANTS				
Total THM's	NA	80	16.6	016.6	NO	2016	By-products of drinking water chlorination.
Total Haloacetic acid	NA	60	<6.0	0<6.0	NO	2016	By-products of drinking water chlorination

<sup>&</sup>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."

## 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. Customers will be advised to boil water that is to be used for consumption for two minutes at a full boil before using. This is a precautionary measure to safeguard our customers' public health and laboratory analysis ensures 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.

