### WATER QUALITY. . . that meets or exceeds all compliance standards

### Detected Contaminants Table for the Lake County Pinecrest - 2019

aminants Detected	in 2019					
MCLG	MCL	Lake County Pinecrest Values for Reporting Period	RANGE OF MEASUREMENTS	Violation	REPORTING PERIOD OR DATE LAST TESTED	Major Sources in Drinking Water
N/A	TT (NTU)	0.11 (highest value) with 100% of samples meeting the limits	0.03 - 0.11	NO	2019	Soil runoff
0	AL=15	<2.0 (90th percentile) 5 samples collected	no samples above AL	NO	2018	Corrosion of household plumbing
1.3	AL=1.3	0.094 (90th percentile) 5 samples collected	no samples above AL	NO	2018	Corrosion of household plumbing
of the results from the S	Standard Monitoring Pla	n (SMP), a required yearly compl	iance monitoring pro	gram.		
N/A	80	66.8 as the locational running annual average	38.3 - 87.6	NO	2019	By-product of drinking water chlorination
N/A	60	35.3 as the locational running annual average	20.1 - 57.0	NO	2019	By-product of drinking water chlorination
of the results from the S	Standard Monitoring Pla	n (SMP), a required yearly compl	iance monitoring pro	gram.		
4	4	1.04	0.80 - 1.22	NO	2019	Water additive which promotes strong teeth
10	10	0.82	ND - 0.82	NO	2019	Runoff from fertilizer use; leaching from septic tanks
2	2	0.019	0.019 only sample	NO	2019	Erosion of natural deposits
100	100	2.5	2.5 only sample	NO	2019	Discharge from steel and pulp mills; erosion of natural deposits
N/A	TT	1.02	0.62 - 1.41	NO	2019	Naturally present in environment
4 (MRDLG)	4 (MRDL)	13	0.5 - 1.4	NO	2019	Water additive used to control microbes
0	15	0.66	N/A	NO	2015	Erosion of natural deposits
0	5	0.13	N/A	NO	2015	Erosion of natural deposits
	MCLG  N/A  0  1.3 of the results from the S  N/A  N/A  of the results from the S  4  10  2  100  N/A  4 (MRDLG)	N/A         TT (NTU)           0         AL=15           1.3         AL=1.3           of the results from the Standard Monitoring Pla           N/A         80           N/A         60           of the results from the Standard Monitoring Pla           4         4           10         10           2         2           100         100           N/A         TT           4 (MRDLG)         4 (MRDL)           0         15	MCLG         MCL         LAKE COUNTY PINECREST VALUES FOR REPORTING PERIOD           N/A         TT (NTU)         0.11 (highest value) with 100% of samples meeting the limits           0         AL=15         <2.0 (90th percentile) 5 samples collected	MCLG         MCL         LAKE COUNTY PINECREST REPORTING PERIOD         RANGE OF MEASUREMENTS           N/A         TT (NTU)         0.11 (highest value) with 100% of samples meeting the limits         0.03 - 0.11           0         AL=15         <2.0 (90th percentile) 5 samples collected	MCLG         MCL         LAKE COUNTY PINECREST VALUES FOR REPORTING. PERIOD         RANGE OF MEASUREMENTS         VIOLATION           N/A         TT (NTU)         0.011 (highest value) with 100% of samples meeting the limits         0.03 - 0.11         NO           0         AL=15         <2.0 (90th percentile) 5 samples collected	MCLG

Table 2 - Unregulated Contaminants Detected in 2015

Unregulated contaminants monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. The results in this table are from sampling done for the Unregulated Contaminant Monitoring Rule.

Contaminant		Chlorate (ppb)	Chromium (ppb)	Hexavalent Chromium (ppb)	Molybdenum (ppb)	Strontium (ppb)	Vanadium (ppb)	
Plant Tap	Average	126	0.28	0.082	1.2	177	0.23	
	Range	87 - 190	0.26 - 0.29	0.069 - 0.094	1.2 - 1.3	150 - 210	0.23	
Distribution	Average	124	0.26	0.37	1.2	173	0.29	
	Range	90 - 190	0.21 - 0.3	0.11 - 0.14	1.2 - 1.3	160 - 190	0.29	
Table 3 - Unregula	ted Contaminants D	etected in 2019	KEY TO TABLES MCLG is Maximum Contaminant					
Contaminant		HAA5 Group (μg/L)	HAA6Br Group (μg/L)	HAA9 Group (μg/L)	NTU is Nephelometric Turbidity Unit. ND is Non-detected. N/A is Non-applicable.  Level Goal. AL is Action Le MRDL is Maxin		aximum Residual	
Plant Tap	Average Range	N/A	N/A	N/A	mg/L is milligrams per Liter, or 1 part in a million parts. (PPM)  MRDLG is Maxit Disinfectant Lev  µg/L is micrograms per Liter, or 1 part  TTHMs are Triha		Maximum Residual t Level Goal. Trihalomethanes.	
Distribution	Average	32.2	12.9	45.0	in a billion parts. (PPB)  TT is Treatment Technique.		<b>A5</b> are Haloacetic Acids. / <b>L</b> is Picocuries per Liter, or a nmon measure of radioactivity.	
	Range	12.3 - 45.0	7.9 - 19.2	20.2 - 63.4	MCL is Maximum Contami	nant Level. common r		

ake County regularly samples to ensure excellent drinking water quality is achieved. The tables above are a summary of the water quality characteristics for Lake County Department of Utilities - Pinecrest Sub district. They show levels of regulated and unregulated contaminants that were detected while sampling.

Maximum contaminant level goal (MCLG). 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.

Maximum contaminant level (MCL). 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.

"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.

"MRDLG": the level of 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.

Treatment technique. A required process intended to reduce the level of a contaminant in drinking water.

Action level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Variance and exemption. State or EPA permission not to meet an MCL or a

The "<" symbol. A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminants in that sample was not detected.

### SOURCE OF SUPPLY:

ake County Department of Utilities operates and maintains two drinking water systems. "We have a current, unconditional license to operate our water system". Water is treated and disinfected before delivery to you. We take every precaution necessary to see that you and your family are getting the best possible product. With that said, residents of the Lake County Pinecrest sub district receive water that has been purchased from Aqua Lake Shore Division – Lake County water treatment facility.

Water for Aqua's Lake Shore Division – Lake County comes from Lake Erie. For the purpose of source water assessments, in Ohio, all surface waters are considered to be susceptible to contamination. By their nature, surface waters are accessible and can be readily contaminated by chemicals and pathogens with relatively short travel times from source to intake. Although Aqua's surface water intake is located offshore in Lake Erie, the proximity of several onshore sources increases the susceptibility of the source water to contamination. The Lake Shore

Division – Lake County system's drinking water source protection area is susceptible to contamination from municipal wastewater treatment discharges, runoff from residential, agricultural and urban areas, oil and gas production, transportation and accidents, releases and spills from vehicular traffic, as well as, from commercial shipping operations and recreational boating. Aqua treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. More detailed information is provided in Aqua's Lake Shore Division – Lake County water system Drinking Water Assessment report, which can be obtained by visiting http://wwwapp.epa.ohio.gov/gis/swpa/OH4301511.pdf.

Lake Erie is classified as a surface supply and serves as a valuable resource for drinking water to millions of Ohio's residents. 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.

### SOURCE WATER CONTAMINANTS MAY INCLUDE:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm 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 storm water runoff, and residential uses.
- 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 runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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

"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. Lake County Utilities Water Division 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 thirty seconds to two 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 at 800-426-4791 or at www.epa.goy/safewater/lead."

Soil erosion is the major factor impacting Lake Erie waters. The wearing away of the shoreline results in an overall cloudiness - called turbidity. We measure samples of water with sensitive instruments that can detect slight changes in cloudiness, changes you could not detect by looking at water. We continually measure these changes in turbidity, so that treatment can be optimized by adjusting pretreatment and filtration processes to achieve maximum effectiveness. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 5 NTU at any time. As reported in the table, the Lake County Pinecrest highest recorded turbidity result for 2019 was 0.11 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

Drinking water, including bottle 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791)

LAKE COUNTY DEPARTMENT
OF UTILITIES IS PROUD TO
ANNOUNCE THAT OUR
RECORD FOR MEETING ALL
LOCAL, STATE AND FEDERAL
DRINKING WATER STANDARDS
REMAINS EXEMPLARY.

# Our Mission: To Treat And Protect

Simply put, there is nothing more important than the quality of the water we provide to you.

We here in the Lake County Department of Utilities water division are ever vigilant to make sure the water will be safe to drink, achieves the highest standards of excellence and is available when you need it.

More than 120,000 samples are collected each year at the treatment plant, reservoirs and point-of-use locations throughout our systems. The samples are then tested by state-certified employees and laboratories that check the purity and insure that a consistent, high quality drinking water is produced and delivered to our customers.

Once you receive the water from us, no additional treatment is necessary. If you choose to use a point-of-use treatment system, be sure to follow the manufacturer's instructions so the quality of your water supply is not adversely affected.

## PUBLIC PARTICIPATION IN YOUR WATER SYSTEM:

See lakecountyohio.gov for scheduled public meetings IF YOU ARE INTERESTED IN MORE INFORMATION ABOUT WATER QUALITY, PLEASE CALL OUR LAB AT 440-918-3420

### SAFEGUARDING YOUR DRINKING WATER

### Securing Safe Drinking Water

As a public water system, we understand concerns over security. In light of recent events, we are reviewing our contingency plans (emergency preparedness plans) and determining what security measures are appropriate for protecting your water system. The review has resulted in documentation of specific policies and procedures relating to security.

In addition to reviewing our contingency plans we have also enacted the following measures.

- Routine verification of security at all water system related buildings and facilities (locking doors, fencing, gates, access hatches, etc.)
- Restricted public access to water treatment facilities and distribution components.
- Increased frequency of inspections of water system (booster stations, tanks, etc.).
- Investigation of any reports of tampering with water system components.
- Meetings with local law enforcement officers including review of facilities to determine areas of concern. Increased patrolling of water system buildings and facilities.
- Maintaining our good relationship with the Lake County Emergency Management Agency.





The Ohio EPA has recognized our employees' commitment, dedication and expertise.

As a repeat recipient of the "Outstanding Public Drinking Water System" award of excellence, we in Lake County can be proud to have the only water supplier (out of 6,000) in Ohio to earn such a distinction.

Return Service Requested

Lake County

Department of Utility
PO. Box 490
105 Main Street

DIVISION OF WATER

# WATER QUALITY REPORT Lake County Department of Utilities 2019

# THIS BROCHURE IS A SUMMARY OF THE QUALITY OF WATER PROVIDED TO OUR CUSTOMERS IN 2019.

LAKE COUNTY PINECREST

Included are details about where your water comes from, how it is processed, what it contains, and how it meets the standards set by the Federal and the Ohio EPA.

We are pleased to provide this information to you.

### Lake County Board of Commissioners

John R. Hamercheck, President Ron Young, Vice President Jerry C. Cirino

