

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

Detected Contaminants Table for the Lake County Pinecrest - 2018

Table 1 - Detected Contaminants in 2018						
PARAMETER	MCLG	MCL	LAKE COUNTY PINECREST VALUES FOR REPORTING PERIOD	RANGE OF MEASUREMENTS	REPORTING PERIOD OR DATE LAST TESTED	MAJOR SOURCES IN DRINKING WATER
Turbidity (NTU)	N/A	TT (NTU)	0.19 (highest value) with 100% of samples meeting the limits	0.3 - 0.19	2018	Soil runoff
Lead (µg/L)	0	AL=15	<2.0 (90th percentile) 5 samples collected	no samples above AL	2018	Corrosion of household plumbing
Copper (mg/L)	1.3	AL=1.3	0.094 (90th percentile) 5 samples collected	no samples above AL	2018	Corrosion of household plumbing
** Values below are the range of the results from the Standard Monitoring Plan (SMP), a required yearly compliance monitoring program.						
**TTHMs (µg/L) SMP Results	N/A	80	64.8 as the locational running annual average	39.1 - 87.6	2018	By-product of drinking water chlorination
**HAA5 (µg/L) SMP Results	N/A	60	32.5 as the locational running annual average	22.6 - 54.5	2018	By-product of drinking water chlorination
** Values below are the range of the results from the Standard Monitoring Plan (SMP), a required yearly compliance monitoring program.						
Tap Fluoride (mg/L)	4	4	1.03	0.81 - 1.28	2018	Water additive which promotes strong teeth
Nitrate (mg/L)	10	10	0.74	ND - 0.74	2018	Runoff from fertilizer use; leaching from septic tanks
Barium (mg/L)	2	2	0.020	0.020 only sample	2018	Erosion of natural deposits
Chromium (µg/L)	100	100	1.8	1.8 only sample	2018	Discharge from steel and pulp mills; erosion of natural deposits
TOC (compliance ratio)	N/A	TT	1.05	0.80 - 1.56	2018	Naturally present in environment
Distribution Total Chlorine (mg/L)	4 (MRDLG)	4 (MRDL)	1.1	0.4 - 1.6	2018	Water additive used to control microbes
Gross Alpha (pCi/L)	0	15	0.66	N/A	2015	Erosion of natural deposits
Combined Radium (pCi/L)	0	15	0.13	N/A	2015	Erosion of natural deposits

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

Lake 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 treatment technique under certain conditions.

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:

Lake 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 and 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://www.wapp.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.gov/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 2018 was 0.19 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)

Key to Tables:

NTU is Nephelometric Turbidity Unit.
mg/L is Milligrams per Liter, or 1 part in a million parts. (PPM)
µg/L is Micrograms per Liter, or 1 part in a billion parts. (PPB)
TT is Treatment Technique.
AL is Action Level.
ND is Non-detected.
N/A is Non-applicable.
MCL is Maximum Contaminant Level.

MCLG is Maximum Contaminant Level Goal.
MRDL is Maximum Residual Disinfectant Level.
MRDLG is Maximum Residual Disinfectant Level Goal.
TTHMs are Trihalomethanes, which are created by the disinfection process.
HAAs are Haloacetic Acids, which are created by the disinfection process.
< is Less Than.
pCi/L is Picouries per Liter, or a common measure of radioactivity

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 Utilities**
PO. Box 490
105 Main Street
Painesville, OH 44077

LAKE COUNTY DEPARTMENT OF UTILITIES DIVISION OF WATER

WATER QUALITY REPORT



2018

LAKE COUNTY PINECREST

**THIS BROCHURE IS A SUMMARY
OF THE QUALITY OF WATER
PROVIDED TO OUR
CUSTOMERS IN 2018.**

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**

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