


# WATER QUALITY REPORT



Gordon's Corner Water Company is committed to providing our consumers with high quality drinking water and information about the drinking water that we provide.

Drinking water health and safety standards are set by the US Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). We regularly test water samples to ensure that the water meets these standards. We are pleased to report that, during the 2016 calendar year, our drinking water met all federal and state water quality standards.

The Water Quality Report is an annual report to all water consumers on the quality of water provided by Gordon's Corner Water Company. This report meets the Federal and State requirements for Consumer Confidence Reports. We encourage you to read this report and study the water quality test results for the 2016 calendar year. We hope you find this report informative and that the information provides you with a better understanding of what is involved in producing high quality water for your use.

Gordon's Corner Water Company is committed to providing water that meets or exceeds all federal and state requirements for drinking water. We do not hold public board meetings, but if you would like to learn more, please feel free to call Mark Eisenmann at 732.946.9333. You can also call the EPA Safe Drinking Water Hotline at 800.426.4791 for further information about drinking water.

#### IMPORTANT INFORMATION

This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.

## Sources of Drinking Water

Both tap water and bottled water may come from groundwater (springs, wells) or surface waters (rivers, lakes, ponds, streams, and reservoirs). As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity.

We are committed to ensuring the quality of your water. Our water source is a combination of well and surface water. Our 9 wells draw groundwater from the Potomac-Raritan-Magothy aquifer system. We purchase 1.5 million gallons of treated surface water per day from the Marlboro Township Water Utility Division whose source is the Delaware and Raritan Canal via Middlesex Water Company. We also purchase 1.5 millions of gallons of treated surface water per day from Suez Water Matchaponix, whose source is the Matchaponix Brook.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued Source Water Assessment Reports and Summaries for all public water systems. Further information on the Source Water Assessment Program can be obtained by logging onto the NJDEP's source water assessment web site at [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap) or by contacting NJDEP's Bureau of Safe Drinking Water at 609.292.5550.

## Potential Contaminants

The types of contaminants that may be found in the raw water before it is treated to produce drinking water include:

- Microbial Contaminants (Pathogens), 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 stormwater 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 stormwater runoff, and residential uses.
- Organic Chemical Contaminants, including synthetic (SOC) and volatile organic chemicals (VOC), which are the by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Nutrients, including nitrogen and phosphorous, which are compounds, minerals and elements that aid growth and are both naturally occurring and man-made.
- Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and mining.
- Radon, which is a colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to <http://www.nj.gov/dep/rpp/radon/index.htm> or call 800.648.0394.
- Disinfection By-Product Precursors, which are formed when disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.
- In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA), and the NJDEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems and require water suppliers to monitor and treat for potentially harmful contaminants.
- Bottled water is similarly regulated by the Food and Drug Administration and must provide the same protection for public health as tap water.

## TERMS AND ABBREVIATIONS

- N/A: not applicable.
- MCL (Maximum Contaminant Level): 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.
- MCLG (Maximum Contaminant Level Goal): 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.
- AL (Action Level): the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- TT (Treatment Technique): a required process intended to reduce the level of a contaminant in drinking water.
- ND: not detected.
- ppm: parts per million; (comparable to one minute in two years or 1 cent in \$10,000.00).
- ppb: parts per billion; (comparable to one minute in two thousand years or 1 cent in \$10,000,000.00).
- pCi/L: picocuries per liter, a measure of the radioactivity in water.
- MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- MRDLG (Maximum Residual Disinfectant Goal): The level of a 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 contamination.
- NJRUL (New Jersey Recommended Upper Limit): Secondary standards are non-mandatory guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. These contaminants are not considered to present a risk to human health. New Jersey has set Recommended Upper Limits for these contaminants.
- RAA (Running Annual Average): The running yearly average of all results at all sampling sites in the distribution system.
- LRAA (Locational Running Annual Average): The running yearly average of all results at each sampling site in the distribution system.

## Health/Educational Information

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at: 800.426.4791.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.

Special Consideration Regarding Children, Pregnant Women, Nursing Mothers, and Others: Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In cases of lead and nitrate, effects on infants and children are the health endpoints upon which standards are based.

**2016 WATER QUALITY REPORT – GORDON’S CORNER WATER COMPANY – PWSID# NJ1326001**

Contaminant	Violation Y/N	Gordon's Corner	Middlesex Water/ Marlboro Twp Water Utility Division	Suez Water Matchaponix	Unit Measurement	MCLG	MCL	Major Sources in Drinking Water
<b>MICROBIOLOGICAL CONTAMINANTS</b>								
Total Coliform (6)	N	1 positive			# positive	N/A	N/A (TT)	Naturally present in the environment.
Turbidity	N	N/A	Max: 0.184 100% samples <0.3	Max: 0.26 100% samples <0.3	NTU	0	5% samples ≥ 0.3	Soil runoff. Turbidity is a measure of cloudiness in the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
<b>RADIOLOGICAL CONTAMINANTS (3)</b>								
Combined Radium 226/228	N	1.03	ND	1.5	pCi/L	0	5	Erosion of natural deposits.
Gross Alpha	N	3.73	3.8	ND	pCi/L	0	15	Erosion of natural deposits.
<b>INORGANIC CONTAMINANTS (3)</b>								
Arsenic	N	0.556	ND	ND	ppb	N/A	5	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production waste.
Barium	N	0.607	0.576	ND	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beryllium	N	0.052	ND	ND	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace and defense industries.
Copper	N	90th percentile: 0.24 0 sites > AL			ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits.
Lead (2)	N	90th percentile: 2.8 1 site > AL			ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits.
Nickel	N	2.04	2.02	ND	ppb	N/A	N/A	Erosion of natural deposits.
Nitrate (as Nitrogen)	N	ND	1.0	0.5	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
<b>DISINFECTANTS AND DISINFECTION BY-PRODUCTS</b>								
Chlorine (1)	N	highest avg: 0.84			ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes.
TTHM (total trihalomethanes) (4)	N	Max. LRAA: 40.6, range 2.2 - 46.0			ppb	N/A	80	By-product of drinking water disinfection.
HAA5 (Haloacetic acids) (4)	N	Max. LRAA: 32.7, range 0.0 - 32.7			ppb	N/A	60	By-product of drinking water disinfection.
<b>UNREGULATED CONTAMINANTS (3)(5)</b>								
Chlorate (UCMR3)	N	130	110	180	ppb	N/A	N/A	Naturally occurring element; runoff from industrial waste.
Hexavalent chromium (UCMR3)	N	0.11	0.16	0.091	ppb	N/A	N/A	Naturally occurring element; runoff from industrial waste.
Strontium (UCMR3)	N	36	120	100	ppb	N/A	N/A	Naturally occurring element; runoff from fertilizer use.
Total Chromium (UCMR3)	N	0.20	0.35	0.41	ppb	N/A	N/A	Naturally occurring element; runoff from industrial waste.
Vanadium	N	ND	0.20	ND	ppb	N/A	N/A	Naturally occurring elemental metal.
<b>SOURCE WATER PATHOGEN MONITORING – SEE NEXT PAGE</b>								
Contaminant	Matchaponix Brook				Typical Sources			
Cryptosporidium Oocysts/L	0-0.286				Microbial pathogens found in surface water throughout the United States.			
Giardia Cysts/L	0-0.286							

\*see next page for footnotes



As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

### Table Notes

1. Compliance is based on running systemwide annual average.
2. Special Notice Regarding 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 materials and components associated with service lines and home plumbing. Gordon's Corner Water Company 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 is available from the Safe Drinking Water Hotline or at: <http://www.epa.gov/safewater/lead>.
3. The state allows us to monitor for some contaminants less than once per year because the concentration of these do not change frequently. The following data was collected prior to 2016: Inorganics, Gordon's Corner Water Company 2014; Radiologicals, Gordon's Corner Water Company and Suez Water Matchaponix, 2011; UCMR3, Gordon's Corner Water Company, 2013; UCMR3, Suez Water Matchaponix and Marlboro Township, 2014.
4. Compliance is based on Location Running Annual Average (LRAA) of quarterly samples at individual sites.
5. Gordon's Corner Water Company, Middlesex Water Company and United Water Matchaponix participated in the Unregulated Contaminant Monitoring Rule (UCMR3). Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA and NJDEP in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted.
6. Beginning April 1, 2016, all water systems are required to comply with the Federal Revised Total Coliform Rule (RTCR) under the RTCR, systems are no longer required to meet an MCL for total coliforms. Detection of total coliforms requires follow up testing and assessments to ensure that there are no sanitary defects in the system.

### WATER QUALITY DATA TABLE

The table on the previous page lists all drinking water contaminants detected during the 2016 calendar year. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data shown in the table represents the highest result found from testing performed on samples of water taken from Jan.1 through Dec.31, 2016. The State allows 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. Also, monitoring waivers for asbestos and synthetic organic chemicals were granted to Gordon's Corner Water by NJDEP for the 2016 calendar year.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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 (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the EPA Safe Drinking Water Hotline at: 800.426.4791.

### Cryptosporidium

*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Monitoring performed by Suez Water Matchaponix indicates the presence of these organisms in their source water. Current test methods do not allow determination of whether the organisms are viable or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water. The data collected in 2016 is presented in the Source Water Pathogen Monitoring Table on page 3.

## GORDON'S CORNER WATER COMPANY

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