Drinking Water Quality Report

Kings Grant Water Company

PWS ID # 4211001

For year 2018

King's Grant Water Company
839 Newport Ave.
South Attleboro, MA 02703
Contact: John Brady (508) 761-8531

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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER PROGRAM

King's Grant Water Company (PWS #4211001) 2018 CCR
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2018 DRINKING WATER QUALITY REPORT

CONSUMER CONFIDENCE REPORT

King's Grant Water, your water, is safe and healthy to drink. We have been proudly providing pure quality good tasting water and personalized service to our neighbors for **55** years. We are pleased to be able to share with our customers this report on the high quality of your water. The EPA and MA DEP have mandated these reports from all water companies to educate consumers on water quality in general as well as the quality of their drinking water source. King's Grant Water System is routinely inspected by the Massachusetts Department of Environmental Protection (DEP) for its technical, financial and managerial capacity. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified operator, John Brady, who oversees its routine operations. John is assisted by Mary Brady and Jim Brady, also Massachusetts Certified Operators.

YOUR DRINKING WATER SOURCE

The source of your water from King's Grant Water Co., is an underground well which draws ground water from the Blackstone River Basin. Our primary (DEP Source ID# 4211001-01G) and backup wells (DEP Source ID# 4211001-02G) are located near the Abbott Run Valley Stream.

The King's Grant Water Co. currently serves the residents from 193 to 400 Mendon Road, Lincolnshire Drive, Longview Drive, Monticello Drive, King Charles Court, Montclair Drive, Mabel's Way, Camelot Dr, King's Way and Tracy Beth Drive in North Attleboro, Massachusetts. Under the direction of the Massachusetts Department of Environmental Protection, we are constantly testing to insure and maintain the high quality and purity of water for our customers. We live in the area we service, so we work hard to insure a pure healthy water supply for our neighbors as well as ourselves. This document provides information about your drinking water and is published yearly. Copies of this document and all the supporting water source assessments including the SWAP report for King's Grant Water are available to be viewed by our customers. Please contact John Brady with any questions about this report on your water, or make an appointment with John to view these documents.

John Brady at 839 Newport Ave South Attleboro, MA 02703. (508) 761-8531.

The Department of Environmental Protection (DEP) has prepared a Source Water Assessment Program (SWAP) Report for the water supply source(s) serving King's Grant Water System. The SWAP Report assesses the susceptibility of public water supplies. The DEP has determined that the significant sources of potential contamination to KGW water supply are from fertilizer, pesticides and hazardous material from lawn runoff, storm runoff, spills and poorly maintained septic systems. A susceptibility ranking of moderate was assigned to this system using the information collected during the assessment by the DEP.

Residents can help protect sources by:
Practicing good septic system maintenance and limiting pesticide and fertilizer use.
Taking hazardous household chemicals to hazardous materials collection days.
Not dumping any rubbish including any yard or garden material such as grass clippings or leaves anywhere in the woods within 600 feet of the pump house. Yard waste contains fertilizer and pesticides which can contaminate our water.
Contact John Brady immediately at (508 761-8531) if you see any one dumping or vandalizing in the area near the pump house or pouring any hazardous materials into storm drains or land near pump house. We need everyone's cooperation in this effort to maintain our water purity.
To continually educate our customers we include information on water quality in water bills and this document. Any further questions may be directed to John Brady.

SUBSTANCES FOUND IN TAP WATER

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 mineral, and in some cases, radioactive material. It can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water 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 water 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 agricultural, 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, the Massachusetts Department of Environmental Protection (DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

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 from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Corrosion Control through pH Adjustment and Inhibitor Addition Many drinking water sources in New England are naturally corrosive (i.e. they have a pH of less than 7.0) So, the water they supply has a tendency to corrode and dissolve the metal piping it flows through. This not only damages pipes but can also add harmful metals, such as lead and copper to the water. For this reason, it is beneficial to add chemicals that provide a protective pipe coating and make the water neutral or slightly alkaline. This is done by adding combinations of water treatment chemicals. The King's Grant Water Co. adds potassium hydroxide to its water. Potassium hydroxide is often referred to as an inhibitor and is what coats the inside of the pipe. Potassium hydroxide raises the water's pH to a non-corrosive level. Testing throughout the water system has shown that this treatment has been effective at reducing lead and copper concentrations. Note: any chemicals which are used for public water treatment in the U.S. are approved by one of the following organizations: National Sanitation Foundation (Now known as the NSF International), or UL, both accredited by the American National Standards Institute (ANSI). Chemicals also have to meet performance standards established by the American Water Works Association.

IMPORTANT DEFINITIONS

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.

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.

Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ND None Detected –The concentration of the contaminant is so low or absent, that if present, it can not be detected by the laboratory test.

NR Not Regulated by EPA. The purpose of monitoring these as well as not regulated contaminants is to assist the EPA in determining their occurrence in drinking water and whether future regulation is warranted.

ppm = parts per million **ppb =** parts per billion **pCI/L =**picocuries per liter: a measure of radioactivity
n/a = not applicable **MFL =**million fibers per liter

90th Percentile Out of every 10 homes sampled, 9 were at or below this level**.** This number is compared to the action level to determine lead and copper compliance.

Variances and Exceptions State or EPA permission not to meet an MCL or treatment technique under certain conditions.

Please Note: Copper, Nitrogen-Nitrate, and Nitrogen-Nitrite are all reported in traditional lab values of parts per *million* or milligrams/liter (mg/L) However, Lead is required by the EPA to be reported in parts per *billion*, so the traditional lab values and allowable ranges of milligrams/Liter(mg/L) are edited by being multiplied by 1000.

What Does this Data Represent? KGW tests for the contaminants mentioned above as frequently as directed by the MA DEP. The water quality information presented in the tables below is from the most recent round of testing done in accordance with the regulations. Not listed are over 100 contaminants which were tested for, but not found. All data shown was collected during the last calendar year unless otherwise noted in the tables.

WATER QUALITY TESTING RESULTS FOR 2018

Tested at Customer's Tap &Water Sources

CONTAMINANT (Units)	HIGHEST # POSITIVE SAMPLES IN A MONTH	HIGHEST LEVEL ALLOWED EPA'S MCL	GOALS EPA's MCLG	VIOLATION (Y/N)	POSSIBLE CONTAMINATION SOURCE
Total Coliform bacteria Tested monthly	NONE	Presence in one (1) of monthly samples	1	N	Naturally present in environment.

Tested at Customer's Tap

Lead Sampling 9/29/2017

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10
ppb	.000	.000 .	0	0.000	0.0	0.001	0.001	0.001	0.002	0.002
REPORT IN TABLE: 90th percentile = 0.002 AND Number of Sites above AL (0.015) = **none**										

Copper Sampling 9/29/2017

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10
ppm	0.09	0.17	0.19	0.21	0.42	0.49	0.59	0.64	0.70	1.05
REPORT IN TABLE: 90th percentile = 0.70 AND Number of Sites above AL (1.30) = **none**										

LEAD and COPPER

CONTAMINANT (Units)	**90 TH PERCENTILE**	**# OF SITES EXCEEDED**	**# OF SITES SAMPLED**	**ACTION LEVEL**	**GOALS EPA's MCLG**	**VIOLATION (Y/N)**	**POSSIBLE CONTAMINATION SOURCE**
Lead (ppb) * ***Edited value**	2	**None**	10	15	0	**N**	Corrosion of household plumbing systems; Erosion of natural deposits
Traditional lab value mg/L or ppm	0.002	**None**	10	.015	0	**N**	
Copper (ppm)	0.70	None	10	1.30	1.30	**N**	Corrosion of home plumbing systems; Erosion of natural deposits.

The results for lead & copper are from 3rd quarter 2017

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome

Tested at Distribution System:

CONTAMINANT (Units)	DATE(S) COLLECTED	HIGHEST DETECT	RANGE OF DETECT	HIGHEST LEVEL ALLOWED EPA'S MCL	GOALS EPA's MCLG	VIOLATION (Y/N)	POSSIBLE CONTAMINATION SOURCE
Nitrate ppm	Mar. 2018 June 2018 Aug 2018 Dec 2018	5.76	4.17-5.76	10.00	10	**N**	Runoff from fertilizer use, leaching from septic tanks, erosion from natural deposits
Barium ppm	Dec 2018	0.085	0.085	2.00	2.00	**N**	Erosion of natural deposits in soil
Sodium ppm	Dec 2018	42	42	NR	n/a	**N**	Discharge from the use and improper storage of sodium-containing de-icing compounds or in water-softening agents
Combined radium pCi/L	Dec 2015	2.04	2.04	5.0	0	**N**	Erosion of natural deposits
Perchlorate ppb* *Parts per billion	Oct 2018	0.447	0.447	2.0	n/a	**N**	Hypochlorite/ bleach solutions, rocket propellants, fireworks, munitions, flares, blasting agents

In 2018 KGW was required to test for a wide range of compounds including Volatile Organic Contaminants, PCB's, pesticides and Synthetic Organic Compounds. We are proud to report that these extensive tests found **NO** VOC ,PCB's, pesticides or SOC's in King's Grant Water.

DEP REQUIRED INFORMATION

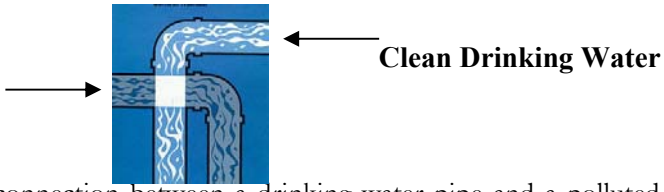
Lead If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. King's Grant Water is responsible for providing high quality 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 & copper 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at **http://www.epa.gov/safewater/lead**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Sodium sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the sodium levels where exposures are being carefully controlled. The Department of Environmental Protection Office of Research and Standards (ORS) guideline for sodium is 20 mg/L. Some people who drink water containing sodium at high concentrations for many years could experience an increase in blood pressure.

Radium Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer

What is a Cross Connection and What Can I Do About It?



A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For instance, you're going to spray fertilizer on your lawn. You hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops (say because of fire hydrant use in the town) when the hose is connected to the fertilizer, the fertilizer may be sucked back into the drinking water pipes through the hose. Using an attachment on your hose called a backflow-prevention device can prevent this problem.

The King's Grant Water Company recommends the installation of backflow prevention devices, such as a low cost hose bib vacuum breaker, for all inside and outside hose connections. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as our drinking water system. For additional information on cross connections and on the status of your water system's cross connection program, please contact John Brady 508-761-8531.

If you desire further information about contaminates and potential health effects and the EPA/CDC guidelines for safe drinking water, you may contact:

The EPA Safe Drinking Hotline (800)426-4791 Website www.epa.gov

The Massachusetts DEP Hotline (800) 266-1122 Website www.state.ma.us/dep

Thank you to our customers who allowed us to sample their taps for this as well as the copper and lead DEP requirements. We very much appreciate their kindness and consideration.

King's Grant Water Company has been providing pure, clean water and personalized service to our neighbors for 55 years. In the footsteps of his father John Brady, Sr. and mother, Irene O'Malley, John Brady is the current operator of King's Grant Water Company. John is a Certified Class 3 Water Operator licensed by the Commonwealth of Massachusetts. Both Jim and Mary Brady are also certified Water Operators licensed by the Commonwealth of Massachusetts so that they may assist John in daily operations and as backup when needed. In order to maintain their skills and stay current with new developments in water operations technology John, Mary and Jim are constantly taking courses provided by the New England Water Works Association and the DEP. It is the mission of King's Grant Water Company to provide pure, safe good-tasting drinking water for our neighbors as well as our own families. If you have any questions about your water, or this document, please contact John at 508 761-8531.