Bermuda Water Company™

PWS: AZ04 08-063

Annual Water Quality Report 2020

Bermuda Water Company Customers:

Your drinking water ***meets or surpasses*** all federal and state drinking water standards.
Our goal is to deliver safe, clean water to our customers at a reasonable cost.

Bermuda Water is supplied by groundwater pumped from nine wells located within our service area, including south Bullhead City, Fort Mojave, and north Mohave Valley. Our water is pumped out of the Lake Mohave Basin which is one of nine basins located in northwestern Arizona.

Source Water Assessments provide a screening-level evaluation of potential contamination which could occur. It does not mean that the contamination has or will occur. This information can be used to evaluate possible needs to improve our current water treatment capabilities and prepare for any possible future contamination threats. This can also help us ensure continued water quality.

Bermuda Water Company did not receive a Source Water Assessment Plan because the public water system was either inactive at the time or did not exist. Further source water assessment documentation can be obtained by contacting ADEQ.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

COVID-19 Response

According to the Centers for Disease Control and Prevention (CDC) and the US Environmental Protection Agency (EPA), the virus that causes COVID-19 has not been detected in drinking water. Conventional water treatment methods that use disinfection, such as those provided by Bermuda Water Company, should remove or inactivate the virus that causes COVID-19 as they do for other pathogens.

Based on current evidence, the risk to water supplies remains low. Customers can continue using and drinking tap water as usual.

The EPA also encourages the public to help keep household plumbing and our nation's water infrastructure operating properly by only flushing toilet paper. **Disinfecting or other sanitary wipes, including those labeled as "flushable" and other non-toilet paper items, should NOT be flushed in toilets.**

For more information, visit the CDC at https://www.cdc.gov/coronavirus/2019-ncov/php/water.html and EPA at https://www.epa.gov/coronavirus/coronavirus-and-drinking-water-and-wastewater

Message from Sean Twomey, President

Dear Valued Customer,

Bermuda Water Company (BWC) is pleased to present your Annual Water Quality Report for 2020. Transparency, health, and safety are key priorities in our company's efforts to provide a high-quality, reliable water supply. Included in this report are details about where your water comes from, what it contains, and how it compares to regulatory standards.

As the Coronavirus (COVID-19) outbreak has evolved, transparency, health, and safety have guided our efforts to mitigate any potential public health or business impacts. Over the course of the past months, BWC, has instituted a company-wide Incident Command Task Force. The task force is charged with planning and executing preparedness activities, focused on protecting employee and public health and ensuring we continue to provide our customers and the community with safe, reliable and uninterrupted water services.

We are proud to share this report which is based on water quality testing through December 2020. You will find that we supply water that meets or exceeds all federal and state water quality regulations at your tap.

Our team is comprised of proud members of the community who are dedicated to providing safe, reliable and cost-effective service to you. This commitment includes acting with integrity, protecting the environment, and enhancing the local community.

Maintaining a safe and reliable water supply is hard work. Our devoted local team of water quality experts are working in the community every day, ensuring that our customers are our top priority, and providing the highest quality drinking water and service - now and well into the future.

Best regards,

Sean Twomey

Visit our website at
www.bermudawateraz.com

EPA Wants You To Know:

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. 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 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 stormwater 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 stormwater 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 stormwater runoff, and septic systems.

E) *Radioactive contaminants,* which can be naturally-occurring or the result of oil and gas production and mining activities.

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 United States Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. 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. 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. USEPA/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).

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. Bermuda 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. Do not boil your water to remove lead. Excessive boiling makes the lead more concentrated – the lead remains when the water evaporates. Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. If you are concerned about lead in your drinking 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 (800-426-4791) or at http://www.epa.gov/safewater/lead.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

Agua potable de las Bermudas cumple o supera todas estatales y federales las normas de calidad del agua potable

WaterSense
partner since October 11, 2019

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.

Why Save Water?

According to a 2014 Government Accountability Report, 40 out of 50 state water managers expect water shortages under average conditions in some portion of their states over the next decade.

- Each American uses an average of 88 gallons of water a day at home.
- We can all use at least 20 percent less water by installing water-efficient fixtures and appliances.
- The average family spends more than $1,000 per year in water costs but can save more than $380 annually from retrofitting with WaterSense labeled fixtures and ENERGY STAR certified appliances.

WaterSense labels products that are 20 percent more water-efficient and perform as well as or better than standard models.

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

Understanding This Report: In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

Action level (AL) - Action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum contaminant level (MCL) - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum contaminant level goal (MCLG) - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) – (mandatory language) 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.

Maximum Residual Disinfectant Level Goal (MRDLG) – (mandatory language) 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 contaminants.

Minimum Reporting Limit (MRL) – Minimum at which results are required to be reported.

Non-Detects (ND) – Analysis or test results indicate the constituent is not detectable at minimum reporting limit.

Parts per billion (ppb) or micrograms per liter (µg/L) - one part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.

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.

Picocuries per liter (pCi/L) – Picocuries per liter is a measure of radioactivity in the water.

Running Annual Average (RAA) – Calculated running average of the contaminant levels detected.

Based on certain criteria, some systems may be allowed to monitor for regulated contaminants less often than once a year. In this case, the table will include the date and results of the most recent sampling.

MCLs 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.

If You Have Questions Or Want To Get Involved?

Please contact Bermuda Water at (928) 763-6676 to learn more about what you can do to help protect your drinking water sources, any questions about the annual drinking water quality report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

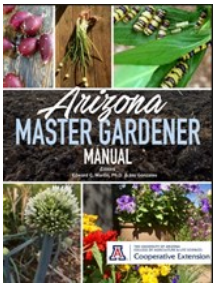
Explore, Learn, and Get Involved

Extension
University of Nevada Reno
https://extension.unr.edu/clark-laughlin.aspx
4-H Youth Development
Master Gardeners
55 Civic Way
Laughlin, NV 89029
702-299-1333
Fax: 702-299-1334

EXTENSION
College of Agriculture, Biotechnology & Natural Resources

University of Arizona Cooperative Extension takes the science of the University to the people of Arizona through programs, publications, classes, events and one-on-one teaching.
https://extension.arizona.edu/master-gardener

4-H Youth Development
Master Gardeners
101 E Beale St.
Kingman, AZ 86401-5808
928-753-3788



To access your utility account anytime, anywhere, please register for our customer portal & download
MyUtilityConnect *at* https://connect.myutility.us/connect/

WATER QUALITY TEST RESULTS

These tables show the results of our monitoring for the period of January 1 to December 31, 2020 unless otherwise noted.

Microbiological Contaminants

Contaminant	MCL	MCLG	Number of Positive Samples	Violation (Yes or No)	Sample Date	Likely Source of Contamination
E-coli	0	0	0	No	Monthly 2020	Human and animal fecal waste
Total Coliform Bacteria	0	0	0	No	Monthly 2020	Naturally present in the environment

Lead and Copper

Contaminant	AL	ALG	Units	90th Percentile	Number of Sites over AL	Violation (Yes or No)	Sample Date/Year	Likely Source of Contamination
Copper	1.3	1.3	ppm	0.37	0	No	6/2018	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	15	0	ppb	2.6	0	No	6/2018	Corrosion of household plumbing systems, erosion of natural deposits

Disinfectants

Contaminant	MRDL	MRDLG	Units	Range	Violation (Yes or No)	Running Annual Average Date /Sample Year	Source
Chlorine	4	4	ppm	0.18 - 0.87	No	0.45 / 2020	Water additive used to control microbes

Disinfection Byproducts

Contaminant	MCL	MCLG	Units	Highest Level Detected / Range	Violation (Yes or No)	Sample Date/ Year	Likely Source of Contamination
Haloacetic Acids (HAA)	0.06	N/A	ppb	2.7 1.5 - 2.7	No	8/2020	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	0.08	N/A	ppb	9.5 5.7 - 9.5	No	8/2020	By-product of drinking water disinfection

Inorganic Contaminants

Contaminant	MCL	MCLG	Units	Level Detected/ Range	Violation (Yes or No)	Sample Month/ Year	Likely Source of Contamination
Fluoride	4	4	ppm	2.4 ND - 2.4	No	5/2019	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	10	10	ppm	6.4 0.59 - 6.4	No	3/2020	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic	10	0	ppb	8.9 ND - 8.9	No	7/2019	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2	1	ppm	0.06 0.03 - 0.06	No	5/2019	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Selenium	.05	50	ppb	9.4 ND - 9.4	No	5/2019	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N/A	N/A	ppm	590 230 - 590	No	5/2019	Erosion of natural deposits

Radionuclides

Contaminant	MCL	MCLG	Units	Level Detected Range	Violation (Yes or No)	Sample Month/Year	Likely Source of Contamination
Alpha emitters	15	0	pCi/L	1	No	2019	Erosion of natural deposits
Combined radium 226 & 228	5	0	pCi/L	2 ND - 2	No	5/2019	Erosion of natural deposits
Uranium	30	0	ug/L	2.9	No	2019	Erosion of natural deposits

Health Effects Language

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, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

Arsenic – While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

PFAS Testing

Bermuda Water Company continues efforts to conduct statewide drinking water testing for Per- and Polyfluoroalkyl Substances (PFAS). These man-made compounds are used in the manufacturing of products resistant to water, grease or stains including firefighting foams, cleaners, cosmetics, paints, adhesives and insecticides. PFAS can migrate into the soil, water, and air and is likely present in the blood of humans and animals all over the world. The Environmental Protection Agency (EPA) has established a health advisory level at 70 parts per trillion. For more information visit https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos. Bermuda Water Company is committed to providing safe, reliable, and cost-effective drinking water services to all of our customers.

PFAS Results (*All results reported as Nanograms per liter (ng/L)*)

Contaminant	Sample Date	Range of Detect	Average	EPA Advisory	Below HAL
PFOS	2020	ND - ND	0	70	Yes
PFOA	2020	ND - 2	<2	70	Yes
Combined PFOS + PFOA	2020	ND - 2	<2	70	Yes

Terms and Abbreviations:

- **PFOS** – Perfluorooctane Sulfonate
- **PFOA** – Perfluorooctanoic Acid
- **Health Advisory Level (HAL)** – To provide Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS from drinking water, EPA established the healthadvisory levels at 70 parts per trillion.
- **Ng/L** – Nanograms per liter(ng/L) which equals Parts per trillion (ppt) – One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.
- **ND (No Detect)** - No detection means the constituent is not detectable at the minimum reporting limit. 2.0 ng/L is the minimum level the lab is reporting a detection for these parameters.

Violations

Three reporting violations and one monitoring violation. Tres infracciones de denuncia y una infracción de supervisión.

Type / Description	Compliance Period	Corrective Actions taken by PWS
Monitoring: 1 nitrate sample of 1 required nitrate samples from EPDS003 were not taken in 2020	2020	Sampling is planned to take place end of the 1st quarter 2021
Reporting: Nitrate results for EPDS010 were submitted to ADEQ after the due date	1Q2020 2Q2020	Analytical results were submitted to ADEQ
Reporting: Di(2-ethylhexyl) phthalate results for EPDS010 were submitted to ADEQ after the due date	1Q2020	Analytical results were submitted to ADEQ

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

PUBLIC NOTICE

Elevated Fluoride Levels Detected in Bermuda Water Company

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).

The drinking water provided by Bermuda Water Company has a natural fluoride concentration of 2.4 mg/l at one well on Joy Lane east of Mountain View. This well is only used as a backup well.

Dental fluorosis in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the US Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problem.

For more information, please contact Bermuda Water Company at 928-763-6676. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP. This information is also available on our website at www.bermudawateraz.com. We are continuing to monitor fluoride levels. We will inform you if they exceed the limit of 4 mg/l.