Quail Creek Water Company
Annual Drinking Water Quality Report
PWS: AZ0410262

INTRODUCTION

The Federal Safe Drinking Water Act (SDWA), which is administered by the Environmental Protection Agency (EPA) and the Arizona Department of Environmental Quality (ADEQ), governs the quality of the water we drink. Quail Creek Water Company (QCWC) owns and operates the drinking water system that provides water service to you, and is responsible for complying with the drinking water standards set by these regulatory agencies so that the water you receive at your tap meets ADEQ standards. Quail Creek meets all requirements of the SDWA.

PURPOSE OF THIS REPORT

A provision of the SDWA requires all community water systems to deliver to their customers an annual water quality report, which is referred to as the Consumer Confidence Report (CCR).

TYPE AND SOURCE OF WATER

The source of your drinking water is groundwater that is delivered from 3 deep wells. The water comes from the Alluvial Aquiver of the Upper San Cruz, which is located in the sub-basin of the Tucson Active Management Area.

CONTACT PERSON

For any questions regarding water quality or the information contained in this report, contact Mr. Ed Baker at (520) 825-3423. Mr. Baker is a Grade 3 certified water operator in the state of Arizona. The time period covered by this report is January 1, 2023, to December 31, 2023. Este informe continene informacion muy importante sobre su agua beber. Tranduzcalo o hable con alguien que lo entiande bien.

DEFINITIONS

MAXIMUM CONTAMINENT LEVEL (MCL) – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG (defined below) as feasible using best available treatment technology.

MAXIMUM CONTAMINENT LEVEL GOAL (MCLG) – 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) – 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) – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ACTION LEVEL – The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

ppm – One part per million
ppb – One part per billion
mfl – million fibers per liter
pCi/L – Picocuries per liter is a measure of the radioactivity in water. A Picocurie is 10^{-12} curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

SOURCE WATER ASSESSMENT

In 2004, the Arizona Department of Environmental Quality completed a source water Assessment for the 3 deep wells used by Quail Creek Water Company. The assessment reviewed the adjacent land uses that may pose a potential risk to the sources. These risks include, but are not limited to, gas stations, landfills, dry cleaners, agriculture fields, wastewater treatment plants, and mining activities. Once ADEQ identified the adjacent land uses, they were ranked as to their potential to affect the water source. The result of the assessment was a low risk designation for all of the QCWC source water. The complete assessment is available for inspection at the Arizona Department of Environmental Quality, 1110 W Washington, Phoenix AZ 85007, between the hours of 8:00 am and 5:00 pm. Electronic copies are available from ADEQ at http://www.azdeq.gov/records-center. For more information, call Ed Baker, Superintendent at Quail Creek Water Company, (520) 825-3423 or visit the ADEQ's Source Water Assessment and Protection Unit website at: www.azdeq.gov/environ/water/dw/swap.html.

WAIVERS

A waiver from conducting certain tests generally may be obtained if the water provider conducted all of the tests necessary to obtain the waiver without exceeding an MCL for the constituent, if the historical use of the property does not lend itself to the presence of the particular constituents in the groundwater, and if the present use of the property does not make the groundwater vulnerable to the contaminant. The absence of a waiver does not imply that the water provider is out of compliance for the constituents it must test for.

DETECTED CONTAMINANTS

The following contaminants were detected in the drinking water from tests conducted during 2023 (unless otherwise noted, the information is the most recent per the testing requirements). Note that the quantities detected are below the MCL, and that 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. It is therefore important to remember that the presence of these constituents does not necessarily pose a health risk.

DETECTIONS

Lead and Copper

Parameter	Date	Highest Level	MCL	MCLG	Number of Samples Exceeds Action Level	Likely Source of Contamination
Copper (ppm)	8/2021	0.015 90th%	1.3	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Disinfectants

Parameter	Date	Average	Range	MCL	MCLG	Units	Potential Sources Could Include:
Chlorine	2023	1.1	0.6-1.5	MRDL 4.0	MRDLG 4.0	ppm	Water additive used to control microbes

Disinfection Byproducts

Parameter	Date	Highest Level	Lowest Level	MCL	MCLG	Units	Potential Sources Could Include:
TTHM's	2023	2.2	0.6	80	No MCLG	ppb	By-product of drinking water chlorination

Inorganic Contaminants

Parameter	Date	Highest Level	Range	MCL	MCLG	Units	Potential Sources Could Include:
Arsenic*	2020-2023	1.7	1.3-1.7	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2020-2023	.036	0.034-0.036	2	2	ppm	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Sodium	2020-2023	40	40	3000	No MCLG	ppm	Naturally present in water
Nitrate	2020-2023	0.79	0.27-0.79	10	10	ppm	Runoff from fertilizer use; Leaching from septic tank, sewage; Erosion of natural deposit
Fluoride	2020-2023	0.24	0.19-0.24	4.0	4.0	ppm	Erosion of natural deposits; Water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

Radionuclides

Parameter	Date	Highest Level	Lowest Level	MCL	MCLG	Units	Potential Sources Could Include:

Alpha Emitters	5/10/2023	5.6	2.7-5.6	15	0	pCi/L	Erosion of natural deposits.

*Arsenic is a mineral known to cause cancer in humans at high concentration and is linked to other health effects, such as skin damage and circulatory problems. If arsenic is less than or equal to the MCL, your drinking water meets EPA's standards. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water, and continues to research the health effects of low levels of arsenic.

The nitrate level at Quail Creek is below EPA Standards. 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 advice from your health care provider.

ADEQ PFAS Monitoring

PFAS are man-made chemicals that are resistant to heat, water, and oil. They have been used since the 1940s to manufacture various consumer products, including fire-fighting foam and stain resistant, water-resistant, and nonstick items. Many PFAS do not break down easily and can build up in people, animals, and the environment over time. Scientific studies have shown that exposure to certain PFAS can be harmful to people and animals, depending on the level and duration of exposure.

Your drinking water was tested in 2023 and **no PFAS** was detected in the samples.

To learn more about this group of chemicals, we encourage you to read the ADEQ-provided "PFAS 101 Fact Sheet" and to visit the ADEQ website at https://www.azdeq.gov/pfas-resources.

VIOLATIONS

No violations to report for 2023.

EDUCATIONAL INFORMATION

The sources of drinking 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.

Contaminants that may be present in source water include the following:

1. Microbial contaminants, such as viruses and bacteria, that may be from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;
2. Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
3. Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
4. Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and
5. Radioactive contaminants, which can be naturally-occurring or can be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the United States Environmental Protection Agency prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The United States Food and Drug Administration regulation establish limits for contaminants in bottled water. 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 Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791. Information on bottled water can be obtained from the United States Food and Drug Administration.

ADDITIONAL HEALTH INFORMATION

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 people, 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 infection by cryptosporidium and other microbiological contaminants are available from the Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791.

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. Quail Creek 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.