2013 ANNUAL WATER QUALITY REPORT

DESERT HILLS WATER SYSTEM

PWS ID: 04-07-026

Our Mission: To Serve Your Water Needs

The Town of Cave Creek is dedicated to protecting the environment while bringing you quality water at a fair price.

Our staff works hard to bring you refreshing water every time you pour a glass.

We start with a natural fresh water source. We regularly sample and analyze water before it enters our system. We conduct quality control checks as water leaves our plant.

Finally, we routinely check water quality at selected locations around our system to make sure everything is safe until the water arrives at your home.

Our Mark of Excellence

We are once again proud to present to you our annual water quality report. We have dedicated ourselves to producing drinking water that meets or exceeds all state and federal drinking water standards. We continually strive to adopt new and better methods of delivering the best quality drinking water to you. As regulations and drinking water standards change, it is our commitment to you to incorporate these changes system-wide in an expeditious and cost-effective manner.

As new challenges to drinking water safety emerge, we will be vigilant in maintaining our objective of providing quality drinking water at an affordable price. If you have any health concerns relating to the information in this report, we encourage you to contact your health care provider.

We hope you find this report informative and useful. It is our pleasure to serve you.

What's Inside

This report outlines the processes involved in delivering to you the highest quality drinking water available.

In it, we will answer these important questions:

Where does my water come from?

What is in my drinking water?

We will also provide information on other available resources that will answer questions about water quality and health effects.

Where Does My Water Come From?

The Desert Hills Water System is supplied by a combination of groundwater and surface water. There are 3 groundwater wells that provide the Desert Hills area 50-75% of their water supply. The remaining water comes from a connection to the Cave Creek Water System. Groundwater is pumped from the Southern Section of the Carefree Sub-Basin. The Carefree Sub-Basin is a small, shallow, unproductive dissected alluvial plain in the far Northern region of the Phoenix AMA. The sub-basin is underlain by volcanic rock and water generally moves in a west-southwest direction.

The Cave Creek Water System treats surface water delivered by the Central Arizona Project Canal. This water is principally Colorado River water delivered from Lake Havasu via the CAP Canal. Cave Creek water is removed from the CAP Canal downstream of Lake Pleasant and therefore the actual water delivered can be a mix of Colorado River water and Lake Pleasant water. The water is delivered to Cave Creek Water Treatment Plant via a thirteen-mile-long pipeline from the CAP Canal. The Cave Creek Water Treatment Plant is a coagulation/direct filtration plant.

Notice of Source Water Assessment

In 2004 the Arizona Department of Environmental Quality completed a source water assessment for the surface water source used by Cave Creek Water System. The assessment found that the surface water intake had one adjacent land use that posed a high risk to the source.

continued from page 1

The groundwater sources are currently protected by well construction and system operations and management. Residents can help protect the source by taking hazardous household chemicals to hazardous material collection days, and limiting pesticide and fertilizer use.

The complete Assessment is available for inspection. For more information, visit the ADEQ's Source Water Assessment and Protection Unit website at www.azdeq.gov/environ/water/dw/swap.html.

Special Health Information

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 may 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 and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Share This Report

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important water quality information with water users at their location who are not billed customers of the Cave Creek Water Company and therefore do not receive this report directly.

Substances Expected to be in Drinking Water

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity.

Substances That May be in Source Water

- Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.
- Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also, come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at 1-800-426-4791.

What's in My Water?

For your information, we have compiled a list in the table on the opposite page showing what substances were detected in our drinking water during 2010. The presence of a substance in drinking water does not necessarily indicate the drinking water poses a health risk.

How to Read This Table

Extensive monitoring is conducted to ensure that your water meets all water quality standards. The results of our monitoring are reported in the adjacent tables. For help with interpreting this table, see the "Table Definitions" section.

Starting with a **Substance**, read across. **Year Sampled** is usually in 2010 or years prior. **MCLG** is the goal level for that substance (this may be lower than what is allowed). **MCL** shows the highest level of substance (contaminant) allowed. **Highest Amount Detected** represents the highest amount found. **Range of Detections** tells the highest and lowest amounts found. A **Yes** under **Compliance Achieved** means the amount of the substance is below government requirements. **Typical Source** tells where the substance usually originates.

Unregulated substances are measured, but maximum contaminant levels have not been established by the government.

REGULATED SUBSTANCES MEASURED ON THE WATER LEAVING THE TREATMENT FACILITY

Substance (units)	Year Sampled	MCLG	MCL	Highest Amt. Detected	Range of Detections	Compliance Achieved	Typical Source
Arsenic	2013	NA[1]	10	7	0 - 7 *	YES	Erosion of natural deposits
Barium	2012	2000	2000	3	3	YES	Erosion of natural deposits
Chromium	2012	100	100	5	5	YES	Erosion of natural deposits
Fluoride	2012	4	4	3	0 - 3	YES	Erosion of natural deposits
Nitrate	2012	10	10	1.3	0 -1.3	YES	Leaching from septic tanks, sewage; erosion of natural deposits, livestock boarding
Alpha emitters	2012	0	15	4.4	4.4	Yes	Erosion of natural deposits

OTHER COMPOUNDS MEASURED IN THE DISTRIBUTION SYSTEM

Substance (units)	Year Sampled	MCLG/ MRDLG	MCL/ MRDL	Avg. Amount Detected	Range of Detections	Compliance Achieved	Typical Source
TTHMs	2012	NA[2]	80	35.5	0 - 59	YES	By-product of drinking water disinfection
HAA5s	2012	NA[2]	60	7.5	0 -14	YES	By-product of drinking water disinfection
Chlorine residual	2012	4.0	4.0	0.63	0.30 - 2.20	YES	Water additive used to control microbes

TAP WATER SAMPLES: LEAD[3] AND COPPER RESULTS

Substance (units)	Year Sampled	MCLG	Action Level	90th Percentile	Number of Samples	Number of Samples Above Action Level	Compliance Achieved	Typical Source
Copper	2012	1.3	1.3	0.3	20	0	YES	Corrosion of household plumbing systems
Lead	2012	0.015	0.015	0.003	20	0	YES	Corrosion of household plumbing systems

TAP WATER SAMPLES: MICROBIOLOGICAL SAMPLES

Substance (units)	Year Sampled	MCLG	Action Level	Number of Samples	Number of Samples Above Action Level	Compliance Achieved	Typical Source
Total Coliform Bacteria	2012	0 / absent	Present/positive	72	0	YES	Cross contamination or ineffective disinfection

UNREGULATED SUBSTANCES MEASURED ON THE WATER LEAVING THE TREATMENT FACILITY

Substance (units)	Year Sampled	Range Low-High	Typical Source
Sodium	2012	44	Natural erosion
Hardness	2012	12 – 15 grain/gal.	Natural erosion

FOOTNOTES

[1]Arsenic

*The Town of Cave Creek has implemented a blending plan to reduce the level of arsenic in the drinking water well that exceeded the arsenic MCL. The blending plan was complete in July 2010, and all samples taken after this date are in compliance with EPA levels.

While your drinking water meets EPA's current standard for arsenic (10 part per billion), it may 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.

[2] TTHM/HAA5

Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants:

Trihalomethanes: bromodichloromethane (zero); bromoform (zero); dibromochloromethane (0.06 mg/L). Chloroform is regulated with this group but has no MCLG.

Haloacetic acids: dichloroacetic acid (zero); trichloroacetic acid (0.3 mg/L). Monochloroacetic acid, bromoacetic acid, and dibromoacetic acid are regulated with this group but have no MCLGs.

Definitions of Terms Used in This Report

• **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.
• **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 control of microbial contaminants.
• **MRDLG (Maximum Residual Disinfectant Level 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 contaminants.
• **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
• **AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
• **ND:** None detected.
• **pCi/L (Picocuries per liter):** Measurement of the natural rate of disintegration.
• **ppb – (Parts per billion):** One part substance per billion parts water (or micrograms per liter).
• **ppm – (Parts per million):** One part substance per million parts water (or milligrams per liter).
• **grains/gallon:** A measure of concentration used to express total hardness by most water softening manufactures.
• **TTHM - (Total Trihalomethanes):** consist of Chloroform, Bromodichloromethane, Dibromochloromethane, and Bromoform.
• **HAA5- Five Haloacetic Acids:** consist of Monochloroacetic acid, Dichloroacetic acid, Trichloroacetic acid, Bromoacetic acid, and Dibromoacetic acid.

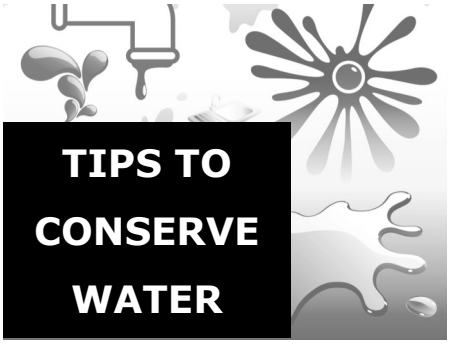
Home Water Treatment Units

If you install a home treatment system such as a water softener or reverse osmosis system to improve taste or odor, remember to follow the manufacturer's instructions on operation and maintenance. Failure to perform maintenance can result in poor water quality. We recommend contacting the manufacturer of your treatment system for maintenance instructions or assistance. Additional information about home treatment systems is available from the Arizona Water Quality Association at 480-947-9850 or by writing to 6819 E. Diamond St., Scottsdale, AZ 85257.

Town of Cave Creek
37622 N. Cave Creek Road
Cave Creek, Arizona 85331

Este informe contiene informaciòn muy impotante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. 480-488-6617.

For more information about this report, or for any questions relating to your drinking water, please call customer service at 480-488-6617.



TIPS TO CONSERVE WATER

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill.

Conservation measures you can use inside your home include:
• Fix leaking faucets, pipes, toilets, etc.
• Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
• Wash only full loads of laundry.
• Do not use the toilet for trash disposal.
• Take shorter showers.
• Do not let the water run while shaving or brushing teeth.
• Soak dishes before washing.
• Run the dishwasher only when full.

You can conserve outdoors as well:
• Water the lawn and garden in the early morning or evening.
• Use mulch around plants and shrubs.
• Repair leaks in faucets and hoses.
• Use water-saving nozzles.
• Use water from a bucket to wash your car, and save the hose for rinsing.