2015 Consumer Confidence Report

Water System Name: **Quail Valley Water District, Eastside System** Report Date: June 30, 2016

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2015 and may include earlier monitoring data.

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

Type of water source(s) in use: Groundwater wells

Name & general location of source(s): Well 1 (Tanganda Well) located on Bloemfontein Court, Tehachapi, CA
Well 2 (Pretoria Well) located on Pretoria Road, Tehachapi, CA

Drinking Water Source Assessment information: N/A

Time and place of regularly scheduled board meetings for public participation: Regular Board meetings are held at the District Office at 8:30 A.M. on the last Saturday of each Month.

For more information, contact: Randy Hardenbrook Phone: (661) 822-1923

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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 are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

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 from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that 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*, that 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that 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 USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	**Highest No. of Detections**	**No. of months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment.
Fecal Coliform or *E. coli*	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste.

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	**Sample Date**	**No. of samples collected**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb)	N/A	N/A	N/A	N/A	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	N/A	N/A	N/A	N/A	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Sodium (ppm)	2014	250	210-290	none	none	Salt present in the water and is generally naturally occurring.
Hardness (ppm)	2014	5.16	0.92-9.4	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring.

***Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.*

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic	2015	70.13ppb *	46-89ppb	10ppb	0.004ppb	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Aluminum	2014	0.13ppm	0.13-0.26ppm	1ppm	0.6ppm	Erosion of natural deposits; residue from some surface water treatment processes.
Fluoride	2014	1.125ppm	0.65-1.6ppm	2.0ppm	1ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Gross Alpha Particle Activity	2014	2.49pCi/L	ND-4.97pCi/L	15pCi/L	(0)pCi/L	Erosion of natural deposits.
Gross Beta Particle Activity	2008	0.33pCi/L		50 (a)	(0)pCi/L	Decay of natural and man-made deposits.
(a) Effective 6/11/2006, the gross beta particle activity MCL is 4 millirems/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used as a screening level.						
Alachlor	2008	0.1ppb	ND-<0.1ppb	2ppb	4ppb	Runoff from herbicide used on row crops.
Atrazine	2008	0.15ppb	ND-<0.3ppb	1ppb	0.15ppb	Runoff from herbicide used on row crops and along railroad and highway right-of-ways.
Benzo(a)pyrene (PAH)	2007	<0.1ppt		200ppt	7ppt	Leaching from linings of water storage tanks and distribution mains.
Di(2-ethylhexyl) adipate	2007	<0.1ppb		4ppb	12ppb	Discharge from chemical factories.
Dibromochloropropane (DBCP)	2007	<0.1ppt		200ppt	1.7ppt	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit.
Hexachlorobenzene	2007	<0.1ppb		1ppb	0.03ppb	Discharge from metal refineries and agricultural chemical factories; byproduct of chlorination reactions in wastewater.
Hexachlorocyclopentadiene	2007	<3.0ppb		50ppb	2ppb	Discharge from chemical factories.
Lindane	2007	<0.1ppt		200ppt	32ppt	Runoff/leaching from insecticide used on cattle, lumber, and gardens.
Methoxychlor	2007	<0.3ppb		30ppb	0.09ppb	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock.
Molinate (Ordram)	2007	<0.5ppb		20ppb	1ppb	Runoff/leaching from herbicide used on rice.
Simazine	2007	<0.15ppb	ND-<0.3ppb	4ppb	4ppb	Herbicide runoff.
Thiobencarb	2007	<0.25ppb	ND-<.05ppb	70ppb	70ppb	Runoff/leaching from herbicide used on rice.

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride	2014	10.15ppm	9.3-11ppm	500ppm	N/A	Runoff/leaching from natural deposits; seawater influence.
Color	2014	5units	<5-5units	15units	N/A	Naturally-occurring organic materials.
Foaming Agents (MBAS)	2014	<50ppb		500ppb	N/A	Municipal and industrial waste discharges.
Manganese	2014	10ppb	ND-20ppb	50ppb	N/A	Leaching from natural deposits.
Specific Conductance	2014	1045uS/cm	890-1200uS/cm	1600 uS/cm	N/A	Substances that form ions when in water; seawater influence.
Sulfate	2014	47.5ppm	28-67ppm	500ppm	N/A	Runoff/leaching from natural deposits; industrial wastes.
Total Dissolved Solids (TDS)	2014	640ppm	520-760ppm	1000ppm	N/A	Runoff/leaching from natural deposits.
Turbidity	2014	1.38units	0.16-2.6units	5units	N/A	Soil runoff.
Zinc	2014	0.039ppm	ND-0.078ppm	5.0ppm	N/A	Runoff/leaching from natural deposits; industrial wastes.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
None					

***Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

Additional General Information on Drinking 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 about drinking water from their health care providers. USEPA/Centers for Disease Control (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).

Lead-Specific Language for Community Water Systems: 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 Valley Water District 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 http://www.epa.gov/lead.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
Arsenic is found to exceed the drinking water standard MCL of 10 µg/L	**Erosion of natural deposits.**	**On-going**	The District is working on a grant funded project to combine the Eastside and Westside systems, install an iron and manganese treatment facility, and utilize a water source meeting the drinking water standards. Construction is anticipated to begin in 2016.	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	**Total No. of Detections**	**Sample Dates**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
E. coli	0	N/A	0	(0)	Human and animal fecal waste
Enterococci	0	N/A	TT	n/a	Human and animal fecal waste
Coliphage	0	N/A	TT	n/a	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE
N/A
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES
N/A

VIOLATION OF GROUND WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
N/A				