



Water testing performed in 2009



Presented By:
**VALLEY OF THE MOON
WATER DISTRICT**

PWS ID#: 4910013

Maintaining High Standards

Once again we are proud to present our annual water quality report. This report covers all testing performed between January 1, 2009, and December 31, 2009. The events of the past few years have presented many of us with challenges we could not have imagined. Yet in spite of this, we have maintained our high standards in an effort to continue delivering the best quality drinking water possible. There may be other hurdles in the future, but know that we will always stand behind you and the drinking water we work diligently to provide.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions, we are always available to assist you.

Important 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. The U.S. 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 at (800) 426-4791 or www.epa.gov/safewater/hotline/.

Community Participation

The Valley of the Moon Water District encourages and invites the public to voice their concerns, if any, about their drinking water. They may write to the District or attend any of the regularly scheduled board meetings. The board of directors meets on the first Tuesday of each month at 6:30 p.m. at the District's office located at 19039 Bay Street in El Verano.

Safe Medicine Disposal Program

When cleaning out your medicine cabinet, what do you do with your expired pills? Many people flush them down the toilet or toss them into the trash. Although this seems convenient, these actions could threaten our water supply. The best and most cost-effective way to ensure safe water at the tap is to keep our source waters clean. Never flush unused medications down the toilet or sink. Instead, simply bring your out of date or unneeded medications to one of the drop off locations shown below for safe and secure disposal. Please bring pills and capsules, over the counter pills and capsules, liquid medication, ointments, lotions, creams (in sealed container), vitamins and supplements, pet medications, medication patches, homeopathic remedies, medication samples, all in original containers if possible. You may use a marking pen to black out any personal information on the containers. A licensed hazardous waste firm will collect these bins and incinerate the medicines. This is the best way to make sure these chemicals stay out of our rivers, streams, and lakes.

Drop off Locations:

Safeway Pharmacy, 477 West Napa Street, Ph: 996-3697

CVS/Pharmacy, 201 West Napa Street, Ph: 938-4738

Questions?

For more information about this report, or for any questions relating to your drinking water, please contact Paul Gradolph, Operations and Maintenance Supervisor, at (707) 996-1037.



Substances That Could Be in Water

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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that 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 contaminants does not necessarily indicate that water poses a health risk.

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 can 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, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessment

An assessment of the drinking water sources for the Sonoma County Water Agency was completed in January 2001. The sources are considered vulnerable to wastewater treatment and disposal, mining operations, septic systems, and agricultural operations. A copy of the complete assessment is available at the California Department of Public Health Office, 50 D Street, Suite 200, Santa Rosa, California 95404, or at the CDPH Web site: www.cdph.ca.gov/certlic/drinkingwater/Pages/DWSAP.aspx.

An assessment of the District's wells was performed in 2003 as required by the U.S. Environmental Protection Agency. This assessment identified the sewer collection system as the most likely source of possible contamination to the wells. Please note that no contaminants have been detected in the water supply above state primary drinking water standards; however, the sources are still considered vulnerable to activities located near the drinking water sources. The Valley of the Moon Water District routinely monitors and samples the wells to ensure the water is free from contamination. A copy of the completed assessment is on file at the Valley of the Moon Water District office located at 19039 Bay Street, El Verano, or at the CDPH Web site: www.cdph.ca.gov/certlic/drinkingwater/Pages/DWSAP.aspx.

“WHEN THE WELL'S DRY, WE KNOW
THE WORTH OF WATER. - Benjamin Franklin”

Lead and Drinking Water

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. We are 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.

Where Does My Water Come From?

One of the most important factors in water quality is its source: the purer the source, the better the water. The Valley of the Moon Water District's customers are fortunate because they enjoy a reliable water supply from two sources. The District's primary source is purchased water from the Sonoma County Water Agency (Water Agency). In 2009, the Water Agency's water originated from six Ranney Collectors (or caissons), seven production wells along the Russian River, and, to a minor degree, from three wells in the Santa Rosa plain. One of the Water Agency's Ranney Collectors, referred to as Caisson 5, is the only source among these wells that is subject to surface water treatment regulations, and this is only when high flow conditions exist in the Russian River.

The Russian River originates in central Mendocino County, approximately 15 miles north of the City of Ukiah. The main channel of the Russian River is 110 miles long and flows southward from its headwaters near Potter Valley to the Pacific Ocean near Jenner, about 20 miles west of the City of Santa Rosa. Three main reservoirs, Lake Sonoma, Lake Pillsbury, and Lake Mendocino, feed the Russian River, replenishing the aquifer. Ranney Collectors withdraw water from about 40 to 60 feet below the Russian River streambed. Streambeds beneath the Russian River provide the required filtration. The Water Agency treats the water for bacterial disinfection with chlorine in the form of chlorine gas and to a lesser extent with sodium hypochlorite and sodium hydroxide (also known as caustic soda), to adjust the pH before it is delivered to the District. There is no additional treatment within the District's system. In addition to the Valley of the Moon Water District, the Water Agency system supplies water to the cities of Santa Rosa, Cotati, Petaluma, Rohnert Park, Sonoma, and Windsor, as well as the North Marin, Forestville, and Marin Municipal Water Districts.

Our secondary source consists of five District ground water wells and one leased well. The Valley of the Moon Water District uses these wells to supplement its primary source of water throughout the year. In 2009, the Valley of the Moon Water District purchased 2,186 acre feet of water from the Water Agency and produced 533 acre feet from local wells.

Once the water has been purchased or produced, it enters the District's distribution system, which includes more than 92 miles of water main, 6,840 service connections, 12 storage tanks, and 11 pumping stations. Before the water comes to your tap, the District takes many steps to ensure its quality and safety. These include carefully treating the water, sampling and monitoring, analyzing results of the sampling, and repairing pipes.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

Turn off the tap when brushing your teeth.

Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.

Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.

Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Avail the District's FREE Water Smart Home Program to help you save water and money by calling (707) 933-2247. A Water Smart Home Program representative will visit your home to review your outdoor and indoor water use and give you customized tips to help you save money while you beautify your yard.

Information on other ways you can conserve water can be found at:

www.epa.gov/safewater/publicoutreach/index.html

<http://www.scwa.ca.gov/conservation>

www.h2ouse.org

Sampling Results

We are pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. To ensure safe drinking water, we continually monitor water quality, drawing samples from various locations throughout the water system. For your information, we have compiled the following tables showing what constituents were detected in your drinking water during 2009. Although all of the constituents listed below are under the Maximum Contaminant Level (MCL) set by the U.S. Environmental Protection Agency, we feel it is important that you know exactly what was detected and how much of the constituent was present in the water.

The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

				Valley of the Moon Water District		Sonoma County Water Agency			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2009	1,000	600	ND	NA	4.3	ND-51	No	Erosion of natural deposits; residue from some surface water treatment processes
Gross Alpha Particle Activity (pCi/L)	2007	15	(0)	0.95	0.37-1.41	1.16 ¹	0.613-2.25 ¹	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2009	60	NA	2.9	ND-6.7	4.88	1.05-15.01	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2009	45	45	3.2	ND-16.0	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radium 228 (pCi/L)	2007	5	0.019	0.97	0.39-1.72	0.486 ²	0.438-0.7 ²	No	Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2009	80	NA	19.3	7.8-36	17.0	8.5-26.3	No	By-product of drinking water chlorination

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2008	1.3	0.3	0.003	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2008	15	2	0.2	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

				Valley of the Moon Water District		Sonoma County Water Agency			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2008	500	NS	27.8	6.2-67	8.6 ³	5.4-24 ³	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	2008	1,600	NS	303	170-390	201 ³	180-220 ³	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2008	500	NS	10.1	3.2-20.0	10.6 ³	2.3-14 ³	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2008	1,000	NS	238	180-270	106 ³	72-150 ³	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2008	5	NS	0.33	ND-0.82	0.04 ³	0.02-2.0 ³	No	Soil runoff
Zinc (ppm)	2008	5.0	NS	0.05	ND-0.27	1.2 ³	ND-14 ³	No	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED SUBSTANCES

		Valley of the Moon Water District		Sonoma County Water Agency		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Calcium (ppm)	2008	16.2	9.9–27.0	17.2 ³	12–20 ³	Erosion of natural deposits
Magnesium (ppm)	2008	8.7	5.8–15.0	10.4 ³	2–17 ³	Erosion of natural deposits
pH (Units)	2008	7.1	6.6–7.6	7.7 ³	7.4–8.3 ³	Runoff/leaching from natural deposits; industrial wastes
Sodium (ppm)	2008	31.00	16–76	14 ³	8–35 ³	Erosion of natural deposits
Total Hardness (ppm)	2008	79.8	49–140	85.3 ³	37–114 ³	Calcium and magnesium concentration

¹ Sampled in 2008.

² Sampled in 2006.

³ Sampled in 2009.

Definitions

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

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 are set by the U.S. EPA.

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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

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

PHG (Public Health Goal): 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 EPA.

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).