2013 Annual Water Quality Report

Ryan Ranch
PWS ID: 2701466

CALIFORNIA AMERICAN WATER

A Message from California American Water President Rob MacLean

Dear Customer:

We are proud to be your water service provider and we are proud to share with you this information about the quality of the water we deliver to your home. This report, called an Annual Water Quality Report or a Consumer Confidence Report, summarizes the results of tests that we conducted on the water we served you during 2013. As in years past, we provided water that met or exceeded all state and federal regulations. At about a penny a gallon - and for most people their least expensive utility bill - it is still quite a value.

Our employees work all day long and all year long to make sure water is there when you and your family need it, whether it is for cooking, cleaning or bathing or whether it is for firefighting, public health or to assist our economy. Keeping the water supply flowing to you requires continual investment in our infrastructure, and in 2013 alone we invested more than $54 million to maintain and improve our water infrastructure in California. While most of these projects are underground or out of sight, they are direct investments that improve your community and improve the water supply for your family.

Please take time to review this report and learn more about the water you drink every day. You will note there are results for both "source" or untreated water and treated water that is delivered to your home. As a reminder, this is a summary of test result for the year ending December 31, 2013.

Thank for your interest in water service and for allowing us to serve you. If you have any questions about your water quality, billing, customer service or other issues please call us at 888-237-1333.

Sincerely,

Rob G. MacLean
President, California American Water

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

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Dieser Bericht enthält wichtige Information über Ihr Trinkwasser. Bitte übersetzen Sie ihn oder sprechen Sie mit jemandem, der ihn versteht.

Questo rapporto contiene informazioni inportanti che riguardano la vostra aqua potabile. Traducetelo, o parlate con una persona qualificata in grado di spiegarvelo.

Our Commitment to Quality

Last year, as in years past, your tap water met U.S. Environmental Protection Agency (EPA) and state drinking water health standards. California American Water vigilantly safeguards its water supplies, and once again we are proud to report that our system has not violated a maximum contaminant level.

Founded in 1886, American Water is the largest publicly traded U.S. water and wastewater utility company. With headquarters in Voorhees, N.J., the company employs approximately 6,600 dedicated professionals who provide drinking water, wastewater and other related services to an estimated 14 million people in more than 40 states and parts of Canada. More information can be found by visiting www.amwater.com.

California American Water, a subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water and/or wastewater services to approximately 600,000 people.

AT ABOUT A PENNY PER GALLON WATER IS A GREAT VALUE™

What is a Consumer Confidence Report?

To comply with State and U.S. Environmental Protection Agency (EPA) regulations, California American Water issues a report annually describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect your drinking water sources. In 2013, we conducted thousands of tests at numerous sampling points in your water system, all of which were below Federal and State maximum allowable levels. It includes details about where your water comes from and what it contains. The data presented in this report is a combination of data from our local water quality laboratory, our nationally recognized water quality lab, and commercial laboratories, all of which are certified in drinking water testing by the State of California Department of Public Health.

For more information about this report, or for any questions relating to your drinking water, please contact California American Water's Customer Service Center at (888) 237-1333.

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 California American Water and therefore do not receive this report directly.

About Your Water

Ryan Ranch is served entirely by groundwater sources from the Santa Margarita Aquifer. Drinking water treatment technologies used in your water system include arsenic, iron, and manganese removal, disinfection byproduct control, corrosion control, pH Adjustment, and disinfection to ensure the bacteriological quality. The water supply is distributed for commercial use.

Notice of Source Water Assessment

An assessment of the drinking water sources for the California American Water - Ryan Ranch water system was completed in February 2003. No man-made contaminants have been detected in the groundwater supplies. The sources are considered vulnerable to the following activities: drinking water treatment plants, high-density housing and water supply wells.

A copy of the completed assessment may be viewed at: California American Water; 511 Forest Lodge Road, Suite 100, Pacific Grove, CA. You may request a summary of the assessment be sent to you by contacting: Travis Peterson, Water Quality & Environmental Compliance Manager, 831-646-3269.

Educational Information – Special Health Information

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. 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).

How to Contact Us

If you have any questions about this report, your drinking water, or service, please call California American Water Customer Service toll free: (888) 237-1333.

Water Information Sources

California American Water
www.amwater.com/caaw/

California Department of Public Health
http://www.cdph.ca.gov/

United States Environmental Protection Agency
http://www.epa.gov/safewater/

Safe Drinking Water Hotline: (800) 426-4791

Centers for Disease Control and Prevention
www.cdc.gov

American Water Works Association
www.awwa.org

Water Quality Association
www.wqa.org

National Library of Medicine/National Institute of Health
http://www.nlm.nih.gov/medlineplus/drinkingwater.html

What Are the Sources of Contaminants?

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 U.S. Environmental Protection Agency (USEPA) and the California 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 provide the same protection for public health.

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. California American Water 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/safewater/lead.

Radon

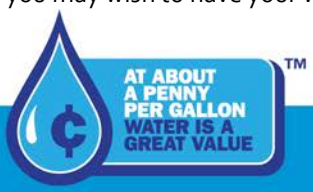
Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program (1-800-745-7236), the EPA Safe Drinking Water Act Hotline (1-800-426-4791), or the National Safe Council Radon Hotline (1-800-SOS-RADON).

How to Read This Table

California American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the following tables. While most monitoring was conducted in 2013, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting this table, see the "Table Definitions" section.

Starting with a **Substance,** read across; **Year Sampled** is usually in 2013 or a prior year. **MCL** shows the highest level of substance (contaminant) allowed. **MCLG** is the goal level for that substance (this may be lower than what is allowed). **Average Amount Detected** represents the measured amount (less is better). **Range** tells the highest and lowest amounts measured. A **No** under **Violation** indicates government requirements were met. **Major Sources in Drinking Water** tells where the substance usually originates.

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



Definitions of Terms Used in This Report

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

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.

MFL: Million fibers per liter

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.

NA: Not applicable

ND: Not detected

NS: No standard

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of the water.

picocuries per liter (pCi/L): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

pH: A measurement of acidity, 7.0 being neutral.

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.

parts per million (ppm): One part substance per million parts water or milligrams per liter.

parts per billion (ppb): One part substance per billion parts water, or micrograms per liter.

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

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

RAA: Running Annual Average

TON: Threshold Odor Number

Total Dissolved Solids (TDS): An overall indicator of the amount of minerals in water.

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

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

µmhos/cm (micromhos per centimeter): A measure of electrical conductance.

%: percent

Water Quality Results

Bacterial Results (from the Distribution System)

Substance (units)	Year Sampled	MCL	PHG (MCLG)	Highest Number Detected	Violation	Typical Source
Total Coliform Bacteria	2013	MCL: (systems that collect ≥ 40 samples/ month) more than 5% of monthly samples are positive; (systems that collect < 40 samples/ month), no more than 1 positive monthly sample	(0)	0	No	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

Regulated Substances

Substance (units)	Year Sampled	MCL	PHG (MCLG)	Average Amount Detected	Range Low-High	Violation	Major Sources in Drinking Water
Radioactive Contaminants							
Gross Alpha Particle Activity (pCi/L)	2009 & 2012	15	NA	3.36	ND – 8.7	No	Erosion of natural deposits
Combined Radium (pCi/L)	2013	5	NA	3.2	1.4 – 4.3	No	Erosion of natural deposits
Uranium (pCi/L)	2012 & 2013	20	0.43	0.2	ND – 0.4	No	Erosion of natural deposits
Volatile Organic Contaminants							
Toluene (ppb)	2013	150	150	0.09	ND – 4.2	No	Discharge from petroleum and chemical factories; underground gas tank leaks
Inorganic Contaminants							
Arsenic (ppb) [1]	2013	10	0.004	2.3	1 – 4	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Chromium (ppb)	2013	50	(100)	0.4	ND – 1.7	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (naturally occurring) (ppm)	2013	2	1	0.41	ND – 0.59	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Mercury (ppb)	2013	2	1.2	0.3	ND – 4.5	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands
Nickel (ppb)	2013	100	12	0.4	ND – 11	No	Erosion of natural deposits; discharge from metal factories
Nitrate as NO_3 (ppm)[2]	2013	45	45	3.1	ND – 28	No	Runoff and leaching from fertilizer use; Leaching from septic tanks and sewage; Erosion of natural deposits
Selenium (ppb)	2013	50	30	0.4	ND – 8	No	Discharge from petroleum, glass, and metal refineries; Erosion of natural deposits; Discharge from mines and chemical manufacturers; Runoff from livestock lots (feed additive)

Disinfection By-products, Disinfectant Residuals, and Disinfection By-products Precursors

Substance (units)	Year Sampled	MCL (MRDL)	PHG (MCLG)	Results	Range Low-High	Violation	Major Sources in Drinking Water
TTHMs (Total Trihalomethanes) (ppb)	2013	80	NA	50	31 – 110	No	By-product of drinking water chlorination
Haloacetic Acids (ppb)	2013	60	NA	40	N/A	No	By-product of drinking water chlorination
Chlorine (ppm)	2012	(4.0 as Cl_2)	0.8	1.0	0.1 – 3.1	No	Drinking water disinfectant added for treatment

Secondary Substances (Measured on the Water Leaving the Treatment Facility or within the Distribution System)

Substance (units)	Year Sampled	SMCL	PHG (MCLG)	Results	Range Low-High	Violation	Typical Source
Chloride (ppm)	2013	500	NS	161	16 – 229	No	Runoff/leaching from natural deposits; Seawater influence
Color (units)	2013	15	NS	0.9	ND – 10	No	Naturally-occurring organic materials
Iron (ppb)	2013	300	NS	1.6	ND – 110	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2013	50	NS	3.9	ND – 75	No	Runoff/Leaching from natural deposits
Odor (units)	2013	3	NS	2.1	ND – 10	No	Naturally-occurring organic materials
Specific Conductance (µmhos/cm)	2013	1,600	NS	1180	281 – 2009	N/A	Substances that form ions when in water; Seawater influence
Sulfate (ppm)	2013	500	NS	110	2 – 158	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	2013	1000	NS	612	104 – 974	N/A	Runoff/leaching from natural deposits
Zinc (ppm)	2013	5.0	NS	0.02	ND – 0.28	No	Runoff/leaching from natural deposits; Industrial wastes, Treatment Process

Tap Water Samples: Lead and Copper Results (from the Distribution System)

Substance (units)	Year Sampled	Action Level	PHG (MCLG)	Number of Samples	Amount Detected at the 90th Percentile	Number of Homes Above Action Level	Violation	Typical Source
Copper (ppm)	2012	1.3	0.3	13	0.572	1	No	Internal corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2012	15	2	13	3	1	No	Internal corrosion of household water plumbing system; Discharges from industrial manufacturers; Erosion of natural deposits

Additional Water Quality Parameters of Interest (Measured on the Water Leaving the Treatment Facility or within the Distribution System)

This table shows average levels of additional water quality parameters, which are often of interest to consumers. Values shown here are averages of operating data through 2013. Values may vary from day to day. There are no health-based limits for these substances in drinking water.

Substance (units)	Year Sampled	Average Amount Detected	Range Low-High
Alkalinity as $CaCO_3$ (ppm)	2013	229	48 – 365
Boron (ppm)	2013	0.14	ND – 0.88
Calcium (ppm)	2013	78	32 – 106
Magnesium (ppm)	2013	22	ND – 31
Potassium (ppm)	2013	6	N/A
pH (pH Units)	2013	7.5	6.6 – 8.9
Radon (pCi/L)	2010	614	163 – 905
Sodium (ppm)	2013	130	17 – 187
Total Hardness as $CaCO_3$ (ppm)	2013	272	ND – 395

Arsenic

[1] While your drinking water meets the EPA standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.

Nitrate

[2]Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.