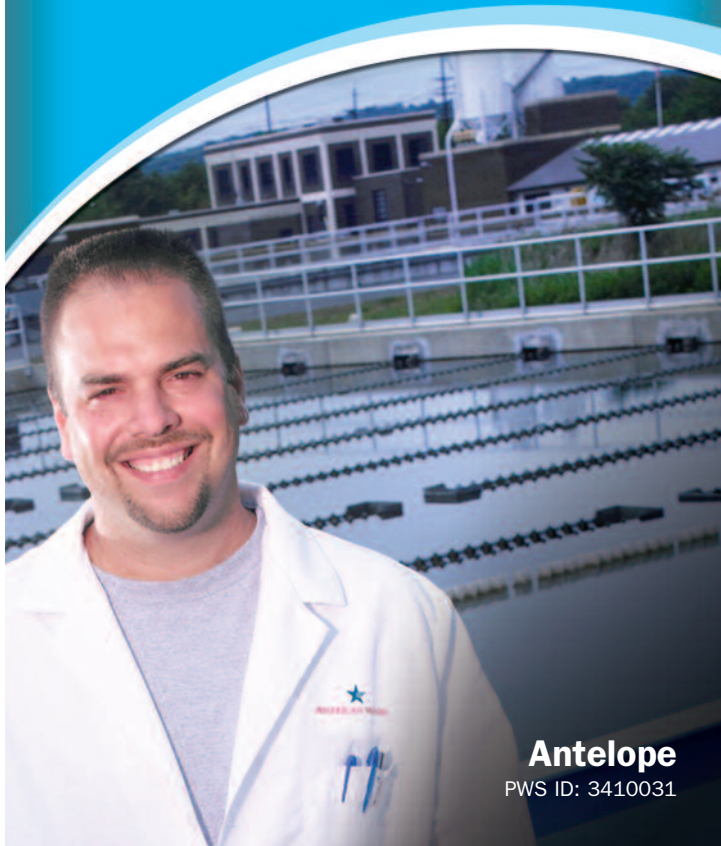


# 2008 Annual Water Quality Report



**Antelope**  
PWS ID: 3410031

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.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

Chi tiết này thật quan trọng.  
Xin nhờ người dịch cho quý vị.

Данный рапорт содержит важную информацию о вашей питьевой воде.  
Переведите его или проконсультируйтесь с тем, кто его понимает.

## A Message from Rob MacLean, President

*As a trusted leader in the industry, California American Water places a strong emphasis on sharing information about the quality of the water we provide our customers. One way we do this is by reporting to you annually the results of our tests on the water we deliver to your home.*

*Please review this water quality report, which outlines information applicable to your local water system for testing completed through December 2008. You'll find that we provide water that meets or surpasses federal and state water quality regulations. In fact, we often address regulations well before they go into effect.*

*Just as important, California American Water makes the necessary investments to maintain and upgrade its facilities, so that we can deliver quality water directly to your tap 24 hours a day, seven days a week.*

*Our customers are our top priority, and we are committed to providing them with the highest quality drinking water and service possible, now and in the years to come. In addition to this written report, you can view information about California American Water and your water system throughout the year on our website, [www.calamwater.com](http://www.calamwater.com).*

*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.*

Sincerely,

Rob MacLean

## Continuing our Commitment

Once again, we proudly present our annual water quality report. This document covers testing completed through December 2008. We are pleased to tell you that our compliance with state and federal drinking water regulations remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

California American Water provides reliable, quality service to 500,000 people in 30 communities. California American Water, with the support of American Water, has the technical support of a global network and the local knowledge to provide the highest quality water with personal service.

## **What is a Water Quality Report?**

To comply with state and U.S. Environmental Protection Agency (USEPA) 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. Since 2006, we have conducted tests for over 250 contaminants at numerous sampling points in your water system. Overall results were below state and federal maximum allowable levels. This report provides an overview of last year's (2008) water quality. 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 nationally recognized main water quality lab, and commercial laboratories, all certified in drinking water testing by the California Department of Public Health.

If you have any questions about this report or your drinking water, please call our 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**

Water in the Antelope system comes from deep wells that pump groundwater from aquifers in the Sacramento Valley. California American Water chlorinates your drinking water to ensure that it meets bacteriological quality standards. The water supply is distributed for residential and commercial use.

California American Water supplements the Antelope system with water purchased from the Sacramento Suburban Water District (SSWD). Water from SSWD is a blend of surface water and groundwater supplies. Surface water treatment technologies include conventional treatment (coagulation, sedimentation, filtration, and disinfection). The groundwater is chlorinated to ensure that it meets bacteriological quality standards.

## **Notice of Source Water Assessment**

An assessment of the drinking water sources in the Antelope system was completed in February 2003. The sources are considered most vulnerable to the following activities (although not associated with any detected chemicals): sewer collection systems, grazing, low density septic systems, agricultural and irrigation wells, automobile – gas stations / repair shops / body shops, underground storage tanks – confirmed leaking tanks, photo processing/printing, and dry cleaners.

A copy of the completed assessment may be viewed at: California American Water; 4701 Beloit Drive; Sacramento, CA 95838.

An assessment of the surface water source from SSWD was conducted in 2001 by the San Juan Water District. The source is considered most vulnerable to potential contamination from the Folsom Lake State Recreation Area facilities, high-density housing and associated activities such as sewer and septic systems and fertilizer, pesticide and herbicide application, as well as illegal activities and dumping.

## 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.calamwater.com](http://www.calamwater.com)
- **California Department of Public Health**  
<http://www.cdph.ca.gov/programs/pages/dwp.aspx>
- **United States Environmental Protection Agency (USEPA)**  
[www.epa.gov/safewater](http://www.epa.gov/safewater)
- **Safe Drinking Water Hotline:** (800) 426-4791
- **Centers for Disease Control and Prevention**  
[www.cdc.gov](http://www.cdc.gov)
- **American Water Works Association**  
[www.awwa.org](http://www.awwa.org)
- **Water Quality Association**  
[www.wqa.org](http://www.wqa.org)
- **National Library of Medicine/  
National Institute of Health**  
[www.nlm.nih.gov/medlineplus/drinkingwater.html](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 human activity.

In order to ensure that tap water is safe to drink, the 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 must provide the same protection for public health.

## Contaminants that may be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic Contaminants**, such as salts and metals, 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**, 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**, can be naturally-occurring or may be the result of oil and gas production and mining activities.

## 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. You can obtain more information about contaminants and potential health effects by calling the USEPA's Safe Drinking Water Hotline (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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (800) 426-4791.

## Radon

Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the United States. 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 in most cases will 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 or call the USEPA's Radon Hotline (800) SOS-RADON.

## Notice of Unregulated Contaminant Monitoring (UCMR)

Testing was conducted between 2001 and 2004 for contaminants specified by the California Department of Public Health (Department) and the USEPA. Unregulated contaminants are those for which the Department and/or USEPA have not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the Department and/or USEPA in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted.

The results of this monitoring are incorporated in the data tables of this report, as appropriate. For more information, contact our Customer Service Center at (888) 237-1333.

## Cryptosporidium Monitoring

*Cryptosporidium* is a microbial pathogen found in surface waters throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring indicates the presence of these organisms in source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water. You can obtain more information on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants by calling the USEPA's Safe Drinking Water Hotline (800) 426-4791.

## How to Read This Table

California American Water conducts extensive monitoring to ensure that your water meets water quality standards. The results of our monitoring are reported in the adjacent tables. While some of the monitoring was conducted in 2008, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting this table, see the "Definition of Terms" section.

Starting with a **Substance**, read across. **Year Sampled** is usually 2008 or the most recent data from a prior year. **MCL** shows the highest level of the substance (contaminant) allowed. **PHG** or (**MCLG**) is the goal level for that substance (this may be lower than what is allowed). **Average Amount Detected** represents the (calculated) average level of that substance from the drinking water sources that California American Water used in 2008. **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, however, no maximum contaminant level has been established for them by either the California Department of Public Health, or the USEPA.

### Definition of Terms

- **AL (Action Level):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **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.
- **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 USEPA.
- **MFL (Million fibers per liter):** The number of asbestos fibers per liter (in millions) greater than 10 microns in length.
- **MRDL (Maximum Residual Disinfectant Level):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
- **MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the USEPA.
- **NA:** Not applicable
- **ND:** Not detected
- **NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity of the water.
- **Notification Level:** The concentration of a contaminant, which, if exceeded, requires notification to the California Department of Public Health and the consumer. Not an enforceable standard.
- **pCi/L (picocuries per liter):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).
- **PDWS (Primary Drinking Water Standard):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **pH:** A measurement of acidity, 7.0 being neutral.
- **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.
- **ppm (parts per million):** One part substance per million parts water, or milligrams per liter.
- **ppb (parts per billion):** One part substance per billion parts water, or micrograms per liter.
- **SMCL (Secondary Maximum Contaminant Level):** SMCLs are set to protect the aesthetic properties of drinking water (odor, taste and appearance).
- **TOC:** Total Organic Carbon.
- **TON:** Threshold Odor Number.
- **Total Dissolved Solids:** 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.
- **µmhos/cm (micromhos per centimeter):** A measure of electrical conductance.

## Water Quality Statement

Last year, as in years past, your tap water met USEPA and state health-based drinking water standards. California American Water vigilantly safeguards its water supplies, and once again we are proud to report that our system did not violate a maximum contaminant level or any other water quality standard.

## Water Quality Results

## Antelope

Regulated Substances									
Substance (units)	Year Sampled	MCL	PHG (MCLG)	Antelope		SSWD (Blend)		Violation	Major Sources in Drinking Water
				Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High		
Aluminum (ppm)	2006 - 2007	1	0.6	ND	ND	ND	ND - 0.580	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb) <sup>1</sup>	2006 - 2008	10	0.004	3	2 - 5	ND	ND - 3.9	No	Erosion of natural deposits; runoff from orchards; glass, and electronics production wastes
Asbestos (MFL)	2003 - 2006	7	(7)	ND	ND - 0.95	ND	ND - 0.2	No	Internal corrosion of asbestos cement water mains; erosion of natural deposits
Barium (ppm)	2006 - 2007	1	2	ND	ND - 0.104	ND	ND - 0.14	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (ppb)	2006 - 2008	50	100	ND	ND	ND	ND - 14	No	Erosion of natural deposits
Fluoride (ppm)	2006 - 2008	2.0	1	0.2	0.2 - 0.3	ND	ND - 0.32	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as NO <sub>3</sub> (ppm) <sup>2</sup>	2008	45	45	5.4	ND - 17.3	12.5	2.5 - 29	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Tetrachloroethylene (ppb) (PCE)	2008	5	0.06	ND	ND	ND	ND - 2.2	No	Discharge from factories, dry cleaners, and auto shops
Combined Radium (pCi/L)	2007	5	(0)	NA	NA	NA	ND - 1.07	No	Erosion of natural deposits
Uranium (pCi/L)	2003 - 2007	20	ND	ND	ND	ND	ND - 2.68	No	Erosion of natural deposits
Control of Disinfection Byproduct Precursors (TOC) (ppm)	2008	Treatment requirement if average TOC > 2	NA	NA	NA	1.4	1.3 - 1.8	NA	Various natural and man-made sources
Distribution System Monitoring									
Chlorine (ppm)	2008	MRDL = 4.0	MRDLG = 4.0	0.44	0.38 - 0.50	NA	NA	No	Treatment chemical used to disinfect drinking water
Total Trihalomethanes (TTHM) (ppb)	2008	80	NA	2.4	ND - 30.2	NA	NA	No	Byproduct of drinking water disinfection
Haloacetic Acids (ppb)	2008	60	NA	1.6	ND - 20.6	NA	NA	No	Byproduct of drinking water disinfection
Secondary Substances									
Substance (units)	Year Sampled	SMCL	Antelope		SSWD (Blend)		Violation	Typical Source	
			Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High			
Aluminum (ppb)	2006 - 2007	200	ND	ND	ND	ND - 580	No	Erosion of natural deposits; residual from some surface water treatment processes	
Chloride (ppm)	2006 - 2007	500	43	12 - 152	16	ND - 60	No	Runoff/leaching from natural deposits; seawater influence	
Color (units)	2006 - 2008	15	ND	ND	ND	ND - 10	No	Erosion of natural deposits	
Iron (ppb)	2006 - 2008	300	ND	ND	ND	ND - 240	No	Leaching from natural deposits	
Foaming Agents (MBAS)	2007	500	ND	ND	ND	ND - 0.09	No	Municipal and industrial waste discharges	
Manganese (ppb)	2006 - 2008	50	ND	ND - 73 <sup>3</sup>	ND	ND - 230	No	Leaching from natural deposits	
Odor (TON)	2006 - 2008	3	1	1 - 1	1	1 - 2	No	Naturally-occurring organic materials	
Specific Conductance (umhos/cm)	2006 - 2008	1,600	311	210 - 620	186	39 - 640	No	Substances that form ions when in water; seawater influence	
Sulfate (ppm)	2006 - 2008	500	5	1 - 10	5	ND - 25	No	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (ppm)	2006 - 2008	1000	282	200 - 500	140	26 - 340	No	Runoff/leaching from natural deposits	
Turbidity (NTU)	2006 - 2008	5	0.17	ND - 0.78	0.18	ND - 1.7	No	Soil runoff	
Zinc (ppm)	2006	5	ND	ND - 0.191	ND	ND	No	Runoff/Leaching from natural deposits; industrial wastes	
Turbidity - A Measure of the Clarity of the Water (at the surface water treatment facility from San Juan Water District)									
Plant	Year Sampled	MCL		PHG (MCLG)	Highest Single Measurement		Violation	Typical Source	
Turbidity (NTU)	2008	TT = 1.0 NTU		NA	0.039		No	Soil runoff	
		TT = percentage of samples < 0.3 NTU			99.99%				
Unregulated Substances*									
Substance (units)	Year Sampled	Notification Level	Antelope			SSWD			
			Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High			
Boron (ppb)	2001 - 2004	1,000	207	ND - 600	37	ND - 430			
Chromium VI (Hexavalent chromium) (ppb)	2001 - 2004	NA	5	ND - 11	5.5	ND - 17			
Vanadium (ppb)	2001 - 2004	50	21	ND - 30	ND	ND - 20			
Lead and Copper (tap water samples from the Antelope system only)									
Substance (units)	Year Sampled	Action Level	PHG (MCLG)	Number of Samples	Amount Detected at 90th Percentile	Homes Above Action Level	Violation	Typical Source	
Copper (ppm)	2007	1.3	0.17	30	0.486	0	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead (ppb)	2007	15	2	30	ND	0	No	Internal corrosion of household plumbing systems; erosion of natural deposits; discharges from industrial manufacturers	

## Additional Water Quality Parameters of Interest

This table shows average levels of additional water quality parameters, which are often of interest to consumers. The average levels shown here are calculated from the levels detected at each source in 2006 or 2008 and used to supply water in 2008. Values may vary from day to day. There are no health-based limits for these substances in drinking water.

Additional Constituents					
Substance (units)	Year Sampled	Antelope		SSWD (Blend)	
		Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High
Alkalinity as CaCO <sub>3</sub> (ppm)	2006	112	90 - 140	---	---
Calcium (ppm)	2006 - 2007	21	13 - 35	14.4	4.2 - 44
Magnesium (ppm)	2006 - 2007	13	8 - 20	7.3	1.3 - 28
pH	2006	8.0	7.8 - 8.1	---	---
Radon (pCi/L)	2006	198	ND - 497	---	---
Sodium (ppm)	2006 - 2007	30	16 - 57	13.1	1.8 - 51
Total Hardness as CaCO <sub>3</sub> (ppm)	2006 - 2007	106	76 - 170	66.3	16 - 200
Dichlorodifluoromethane (ppb)	2008	ND	ND	ND	ND - 1.2

<sup>1</sup> While your drinking water meets the current 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.

<sup>2</sup> 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.

<sup>3</sup> Elevated levels of manganese shown in the table above were from a single source collected by California American Water. California American Water has removed the pump and is in the process of rehabilitating the well as part of an effort to attenuate elevated levels of manganese found in that source.

\*Indicates data from the Unregulated Contaminant Monitoring Rule.