

## UNIT DESCRIPTIONS

ug/L: Parts per billion

mg/L: Number of milligrams of substance in one liter of water

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

ppq: Parts per quadrillion, or picograms per liter

pCi/L: Picocuries per liter (a measure of radioactivity)

mrem/yr: Millirems per year (a measure of radiation absorbed by the body)

MFL: Million Fibers per Liter, used to measure asbestos concentration

NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

positive samples/month: The number of samples taken monthly that were found to be positive

positive samples/yr: The number of positive samples taken that year

% positive samples/month: Percentage of samples taken monthly that were positive

% killed or inactivated: Percentage of viruses/bacteria killed or inactivated by treatment method

CFU/ml: Colony Forming Units per milliliter

NA: Not Applicable

ND: Not Detected

NR: Not Required, but recommended

## WATER QUALITY DATA TABLE

The table to the right lists all of the drinking water contaminants that we detected that are applicable for the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

## ADDITIONAL CONTAMINANTS

In an effort to insure the safest water possible the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants only the ones listed to the right were found in your water.

**IS MY WATER SAFE?** Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The South Tahoe Public Utility District vigilantly safeguards its water supplies and, once again, we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.

**DO I NEED TO TAKE SPECIAL PRECAUTIONS?** 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. EPA/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 USEPA's Safe Water Drinking Hotline (800-426-4791).

**WHERE DOES MY WATER COME FROM?** The District's service area is organized into 16 pressure zones serving over 2.4 billion gallons annually from 14 active drinking water wells to over 14,000 homes and businesses. All our drinking water is pumped from underground aquifers. No water is taken from Lake Tahoe or any other surface water source.

## SOURCE WATER ASSESSMENT AND ITS AVAILABILITY

The District has an ongoing drinking water source development program to seek additional drinking water well locations. Due to the volume of the average annual Sierra snowpack and Lake Tahoe itself, our aquifer has a significant recharge capability. The District continues to work diligently to protect and maintain this precious natural resource.

## WHY ARE THERE CONTAMINANTS IN MY 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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. 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 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, 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 be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Dept. of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

CONTAMINANTS	MCLG/PHG OR MRDLG	MCL OR MRDL OR NL	AVG	RANGE LOW	HIGH	SAMPLE DATE	VIOLATION	TYPICAL SOURCE
<b>INORGANIC CONTAMINANTS</b>								
Arsenic (ppb)	0	50	4.9	ND	17.4	2006	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Fluoride (ppm)	1	2	0.13	ND	0.32	2006	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.27	0.01	0.90	2006	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppb)	NA	MPL	13.8	5.1	32.0	2006	No	Erosion of natural deposits; Leaching
<b>RADIOACTIVE CONTAMINANTS</b>								
Gross Alpha (pCi/L), minus Uranium		15	4.01	1.65	10.83	2005-06	No	Erosion of natural deposits
Uranium (pCi/L)	0.5	20	4.75	ND	13.34	2005-06	No	Erosion of natural deposits
Radium-226 (pCi/L)	0.05		0.29	0.09	0.67	2005-06	No	Erosion of natural deposits
Radium-228 (pCi/L)	0.019		0.83	0.30	1.73	2005-06	No	Erosion of natural deposits
Radium-226+Radium-228 (pCi/L)		5	1.12	0.56	2.10	2005-06	No	Erosion of natural deposits
<b>VOLATILE ORGANIC CONTAMINANTS</b>								
MTBE [Methyl Tert Butyl Ether] (ppb)	5	13	ND	ND	0.40	2006	No	Leaking underground fuel storage tanks
THMs [Total Trihalomethanes] (ppb)	NA	80	1.7	ND	6.3	2006	No	By-product of drinking water disinfection
PCE [Tetrachloroethylene]	0.06	5	ND	ND	1.0	2006	No	Discharge from factories, dry cleaners, and auto shops
<b>MICROBIOLOGICAL CONTAMINANTS</b>								
Total Coliforms (% Positive each month)		5	0.1	0	1.2	2006	No	
<i>E. Coli</i> (% Positive)		0	0	0	0	2006	No	
Heterotrophic Plate Count or HPC (CFU)		NA	0.6	ND	9.7	2006	No	
Turbidity (NTU) The TT limit is 5 NTU for the highest single measurement. Your water was 0.16.						2006	No	Soil runoff

CONTAMINANTS	MCLG/PHG	AL	AVG	SAMPLE DATE	# SAMPLES EXCEEDING AL	EXCEEDS AL	TYPICAL SOURCE
Lead - action level at consumer taps (ppb)	0	15	15.8	2005	5	No	Corosion of household plumbing systems; Erosion of natural deposits
Copper - action level at consumer taps (ppb)	1.3	1.3	0.24	2005	3	No	Internal corosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

CONTAMINANT	STATE MCL	AVG	VIOLATION	EXPLANATION AND COMMENT
Acetylaldehyde	NA	4.5 ug/L	No	By-product of MTBE treatment
Alkalinity, Total	NA	50 mg/L	No	Erosion of natural deposits
Bromide	NA	0.015 mg/L	No	Erosion of natural deposits
Calcium	NA	12 mg/L	No	Erosion of natural deposits
Carbon Dioxide, Free	NA	6.8 mg/L	No	Naturally occurring
Chlorine Residual, Free	4 mg/L	0.42 mg/L	No	By-product of disinfection process
Dissolved Solids, Total	500 mg/L	95 mg/L	No	Erosion of natural deposits
Electrical Conductivity	NA	144	No	Erosion of natural deposits
Formaldehyde	NA	21 ug/L	No	Byproduct of MTBE treatment
Hardness	NA	42.1 mg/L	No	Erosion of natural deposits
Iron	NA	37.1 ug/L	No	Erosion of natural deposits
Magnesium	NA	2.4 mg/L	No	Erosion of natural deposits
Organic Carbon, Total	NA	0.32 mg/L	No	
orthoPhosphate, as P	NA	0.03 mg/L	No	Erosion of natural deposits
pH	NA	7.98 Units	No	Erosion of natural deposits
Phosphorus, Total	NA	0.04 mg/L	No	Erosion of natural deposits
Potassium	NA	1.4 mg/L	No	Erosion of natural deposits
Radon	NA	1,262 pCi/L	No	
Sulfate	NA	3.52 mg/L	No	Erosion of natural deposits
Zinc	5000 ug/L	10.2 ug/L	No	Erosion of natural deposits

## IMPORTANT DRINKING WATER DEFINITIONS

### 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.

### 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.

### PDWS: Primary Drinking Water Standards:

MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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

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

### MRDLG: Maximum Residual Disinfection 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.

### 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.

### MNR: Monitored Not Regulated

**MPL: Maximum Permissible Level** as determined by the state of California

**HOW CAN I GET INVOLVED?** The information contained in the Consumer Confidence Report may not answer all the questions you may have about the quality of the South Tahoe Public Utility District's drinking water supply. The District welcomes public participation in developing water quality and quantity policy. For more information, please call the District Information Office at 530-544-6474 extension 6208. If you would like more detailed scientific information, please call the District Laboratory at 530-544-6474 extension 6231, or check our website at [www.stpud.us](http://www.stpud.us)

The District is governed by an elected five-member Board of Directors. Board meetings are held on the first and third Thursday of each month at 2:00 p.m. at the Customer Service Facility located at 1275 Meadow Crest Drive. All meetings are open to the public and the District encourages our customers to attend and become involved in the policy making process.

**RESULTS OF RADON MONITORING** 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 or call EPA's Radon Hotline (800-SOS-RADON).

**RESULTS OF VOLUNTARY MONITORING** See data sheets.

**REGARDING ARSENIC** Arsenic is a naturally occurring substance that is sometimes found at very low levels in drinking water, primarily groundwater. The U.S. Environmental Protection Agency (EPA) was required by the Safe Drinking Water Act Amendments of 1996 to finalize a new drinking water standard for arsenic in 2001 based on good scientific information and data.

In September 2001, EPA adopted a new arsenic standard, or maximum contaminant level (MCL), of 0.010 milligrams per liter or 10 parts per billion. This new standard went into effect on January 23, 2006. Water utilities are not immediately declared out of compliance or in violation of the new regulation. The federal regulation requires that water systems monitor for arsenic during the first 1-3 years to determine their official compliance levels. Once the monitoring is complete, a compliance determination is made. The District is currently monitoring the affected wells.

Since the California Department of Health Services (DHS) remains at the prior MCL of 50 ppb, the federal standard of 10 ppb is now in effect in California. DHS is helping EPA to implement the federal standard, but EPA is in charge of enforcing it. Once California finalizes its standard, DHS will resume enforcement duties as well.

Of the District's fourteen active drinking water wells, three exceed the new standard. Of those three wells, two have been disconnected from the water distribution system, however they could be placed into temporary service in an emergency, such as fire. The remaining well is generally utilized only during the summer months.

The District anticipates completion of this treatment project by late 2009, and would then be in compliance with the federal standard. This compliance plan is being reviewed by the California DHS and the District anticipates approval in the near future.