



ANNUAL
WATER
QUALITY
REPORT

Water testing performed in 2008



TUOLUMNE UTILITIES
DISTRICT



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

Meeting the Challenge

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1 to December 31, 2008. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. Staff is continually researching and evaluating new drinking water treatment and delivery technologies in an effort to provide the most cost-effective, efficient processes and equipment to ensure consistent delivery of the highest quality water in compliance with all regulations. As new challenges to drinking water safety emerge, 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.

For more information about this report, or any questions relating to your drinking water, please call Brenda Seldon, Water Superintendent, at (209) 532-5536, extension 554.

Where Does My Water Come From?

The most important factor in water quality is its source. There are two sources of supply from which Tuolumne Utilities District (District or TUD) receives its water: surface water, that originates from rainfall and runoff from snowpack in the Sierra Nevada Mountains, and groundwater wells. The District is comprised of 18 water service areas, 14 surface water treatment plants, and 31 active wells.

Approximately 96 percent of TUD's annual water needs are met with surface water; the other 4 percent is met with groundwater either as a primary source or a backup source. East Sonora, Mono Village, and the Cuesta Center-Lambert Lakes Well Systems receive supplemental surface water from the Sonora-Jamestown System.

An assessment of the drinking water sources for all TUD water systems was completed in 2002-2003. A copy of the complete assessment of each system may be viewed at the Department of Health Services Water Field Operations Branch, Merced District Office, 265 W. Bullard Ave., Suite 101, Fresno, California 93704.

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.

Community Participation

You are invited to attend our regularly scheduled Board meetings held on the second and fourth Tuesday of each month, beginning at 7:00 p.m. in the Tuolumne Utilities District boardroom, at 18885 Nugget Boulevard, Sonora, California. Current information is available on our website www.tudwater.com. The Board meetings can be viewed live on our website and in our meeting archives.

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.



How much water is lost to a dripping faucet?

Dripping faucets waste a precious resource and cost you money. As an example, if you have a faucet that drips 60 times a minute, this adds up to over 3 gallons each day or 1,225 gallons each year.

How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

What makes water hard?

If substantial amounts of either calcium or magnesium, both nontoxic minerals, are present in drinking water, the water is said to be hard. Hard water does not dissolve soap readily, so making lather for washing and cleaning is difficult. Conversely, water containing little calcium or magnesium is called soft water.

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.

Monitoring For *Cryptosporidium*

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Monitoring has been required at eight of our treatment facilities; four have shown the presence of *Cryptosporidium*. We are continuing to monitor these sources and will take action accordingly, i.e., more treatment and/or more disinfection. 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 doctor 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.



REGULATED SUBSTANCES											
				Apple Valley	Big Hill	Cedar Ridge	Columbia/Gibbs	Crystal Falls	Cuesta Center/ Lambert Lakes		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2006	1	0.6	ND	ND ¹	ND ¹	ND ¹	ND ¹	ND	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2006	10	0.004	ND	ND ¹	ND ¹	ND ¹	ND ¹	ND	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine (ppm)	2008	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.3 (0.75–1.6)	1.6 (1.4–1.7)	1.4 (1.3–1.5)	1.5 (1.4–1.7)	1.7 (1.6–1.9)	1.2 (0.7–1.5)	No	Drinking water disinfectant added for treatment
Control of DBP precursors [TOC] (Units)	2008	TT	NA	NA	1.3 (1–2.2)	1.1 (0.5–1.9)	1.2 (0.7–1.6)	1.3 (0.9–2)	NA	No	Various natural and man-made sources
Gross Alpha Particle Activity (pCi/L)	2005	15	(0)	ND	ND	ND	ND	6 (ND–34)	5.6 (3.3–8.8) ¹	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2008	60	NA	3.8	35 (24–40)	21 (15–25)	31 (15–52)	27 (15–35)	20 (11–31)	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2008	45	45	3 (2.8–3.1)	ND	ND	ND	ND	15 (11–25)	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	5.3	43 (27–63)	25 (14–36)	48 (34–65)	34 (19–50)	40 (30–50)	No	By-product of drinking water chlorination
Turbidity (NTU)	2008	TT	NA	NA	0.23	0.28	0.26	0.5	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2008	TT	NA	NA	100	100	100	98.6	NA	No	Soil runoff

REGULATED SUBSTANCES											
				East Sonora	Mono Village	Monte Grande	Peaceful Pines	Phoenix Lake	Ponderosa		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2006	1	0.6	ND	ND ¹	ND ¹	ND	ND	ND ¹	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2006	10	0.004	ND	ND ¹	ND ¹	ND	3	ND ¹	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine (ppm)	2008	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.2 (0.45–1.6)	1.1 (0.5–1.4)	1.6 (1.2–1.9)	0.85 (0.15–1.4)	1.2 (0.7–1.8)	1.7 (1.4–1.9)	No	Drinking water disinfectant added for treatment
Control of DBP precursors [TOC] (Units)	2008	TT	NA	NA	1.4 (1.2–1.6)	1.6 (1.1–2.5)	NA	NA	1.2 (0.7–2.0)	No	Various natural and man-made sources
Gross Alpha Particle Activity (pCi/L)	2005	15	(0)	3.4 (3.1–3.7) ¹	4 (2–8) ¹	ND	ND	2.6 (1.4–4.4)	ND	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2008	60	NA	30 (20–36)	33 (22–50)	32 (21–48)	ND	5	26 (18–34)	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2008	45	45	10	ND	1.2	ND	ND	ND	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	49 (44–55)	50 (46–69)	39 (25–48)	3	9.4	30 (20–38)	No	By-product of drinking water chlorination
Turbidity (NTU)	2008	TT	NA	NA	0.20	0.9	NA	NA	0.3	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2008	TT	NA	NA	100	97.3	NA	NA	100	No	Soil runoff

REGULATED SUBSTANCES																	
				Scenic View	Sonora/ Jamestown	Tuolumne	Upper Basin	Willow Springs	Curtis Creek	Wards Ferry							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	VIOLATION	TYPICAL SOURCE					
Aluminum (ppm)	2006	1	0.6	ND ¹	ND ¹	ND ¹	ND ¹	0.09 (ND–0.18) ¹	ND ²	ND ²	No	Erosion of natural deposits; residue from some surface water treatment processes					
Arsenic (ppb)	2006	10	0.004	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ²	ND ²	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes					
Chlorine (ppm)	2008	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.8 (1.5–2.1)	1.6 (1.4–2.3)	1.4 (1.2–1.7)	1.7 (1.6–1.9)	1.7 (1.6–1.9)	0.23 (ND–0.59)	0.22 (0.06–0.47)	No	Drinking water disinfectant added for treatment					
Control of DBP precursors [TOC] (Units)	2008	TT	NA	1.3 (0.8–1.9)	1.5 (0.9–2.1)	1.4 (1–2.1)	1.3 (0.9–2.2)	1.3 (1–1.8)	NA	NA	No	Various natural and man-made sources					
Gross Alpha Particle Activity (pCi/L)	2005	15	(0)	9 (0.4–16.9) ¹	ND	ND	ND ³	ND	ND	2.1 (0.4–4.7) ⁴	No	Erosion of natural deposits					
Haloacetic Acids (ppb)	2008	60	NA	19 (1.2–22)	24 (14–39)	22 (10–25)	35 (19–48)	27 (15–35)	ND	ND	No	By-product of drinking water disinfection					
Nitrate [as nitrate] (ppm)	2008	45	45	11 (ND–24)	ND	ND	ND	ND	1 (ND–2)	9	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits					
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	23 (15–58)	53 (38–70)	43 (27–57)	43 (30–51)	34 (19–50)	ND (ND–11)	3 (1.4–3)	No	By-product of drinking water chlorination					
Turbidity (NTU)	2008	TT	NA	0.25	0.21	0.23	0.3	0.2	NA	NA	No	Soil runoff					
Turbidity (Lowest monthly percent of samples meeting limit)	2008	TT	NA	100	100	100	100	100	NA	NA	No	Soil runoff					
Tap water samples were collected for lead and copper analyses from sample sites throughout the community																	
				Apple Valley		Big Hill		Cedar Ridge		Columbia/Gibbs		Crystal Falls		Cuesta Center/Lambert Lakes			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2008	1.3	0.3	0.66	0/5	0.1	0/20	0.07	0/10	0.07	0/20	0.07 ²	0/22 ²	0.8	0/5	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2008	15	2	2.5	0/5	8	0/20	2.5	0/10	6.1	0/20	7.3 ²	0/22 ²	5	0/5	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Tap water samples were collected for lead and copper analyses from sample sites throughout the community																	
				East Sonora		Mono Village		Monte Grande		Peaceful Pines		Phoenix Lake		Ponderosa			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	RESULT	SITES ABOVE AL/ TOTAL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2008	1.3	0.3	0.3	0/5	0.01 ²	0/10 ²	0.2	0/10	0.07	0/5	0.2	0/5	0.1 ³	0/20 ³	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2008	15	2	2.5	0/5	4 ²	0/10 ²	2.5	0/10	2.5	0/5	7	0/5	2.5 ³	0/20 ³	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

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

				Scenic View	Sonora/Jamestown	Tuolumne	Upper Basin	Willow Springs	Curtis Creek	Wards Ferry									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG	RESULT	SITES ABOVE AL/TOTAL	RESULT	SITES ABOVE AL/TOTAL	RESULT	SITES ABOVE AL/TOTAL	RESULT	SITES ABOVE AL/TOTAL	RESULT	SITES ABOVE AL/TOTAL	RESULT	SITES ABOVE AL/TOTAL	VIOLATION	TYPICAL SOURCE		
Copper (ppm)	2008	1.3	0.3	0.4 ³	0/10 ³	0.08 ²	0/40 ²	0.03 ³	0/10 ³	0.1	0/10	0.07 ²	0/22 ²	0.2 ²	0/10 ²	1.1	0/5	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2008	15	2	2.5 ³	0/10 ³	2.5 ²	0/40 ²	0 ³	0/10 ³	14	0/10	7.3 ²	0/22 ²	2.5 ²	0/10 ²	2.5	0/5	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES												
				Apple Valley	Big Hill	Cedar Ridge	Columbia/Gibbs	Crystal Falls	Cuesta Center/Lambert Lakes			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	EXCEEDANCE	TYPICAL SOURCE	
Aluminum (ppb)	2006	200	NS	ND	ND ¹	ND ¹	ND ¹	ND ¹	ND	No	Erosion of natural deposits; residual from some surface water treatment processes	
Iron (ppb)	2006	300	NS	ND	ND ¹	600 (ND–1200) ¹	245 (ND–490) ¹	512 (ND–2000)	140 (ND–230)	Yes ⁵	Leaching from natural deposits; industrial wastes	
Manganese (ppb)	2006	50	NS	ND	ND ¹	70 (ND–140) ¹	14 (ND–28) ¹	119 (ND–300)	18 (ND–31)	Yes ⁵	Leaching from natural deposits	
Sulfate (ppm)	2006	500	NS	8 (5–11)	ND ¹	3.5 (ND–7) ¹	4 (ND–8) ¹	8.6 (ND–21)	6 (ND–13)	No	Runoff/leaching from natural deposits; industrial wastes	
Zinc (ppm)	2006	5.0	NS	ND	0.41 ¹	0.1 (ND–0.2) ¹	0.22 (0.17–0.27) ¹	0.1 (ND–0.29)	0.5 (ND–1.9)	No	Runoff/leaching from natural deposits; industrial wastes	

SECONDARY SUBSTANCES												
				East Sonora	Mono Village	Monte Grande	Peaceful Pines	Phoenix Lake	Ponderosa			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	EXCEEDANCE	TYPICAL SOURCE	
Aluminum (ppb)	2006	200	NS	ND	ND ¹	ND ¹	ND	ND	ND ¹	No	Erosion of natural deposits; residual from some surface water treatment processes	
Iron (ppb)	2006	300	NS	ND ¹	ND ¹	ND ¹	ND	ND ¹	ND ¹	Yes ⁵	Leaching from natural deposits; industrial wastes	
Manganese (ppb)	2006	50	NS	ND	ND ¹	ND ¹	63	ND ¹	ND ¹	Yes ⁵	Leaching from natural deposits	
Sulfate (ppm)	2006	500	NS	10	4.8 (ND–11) ¹	ND ¹	4	4	ND ¹	No	Runoff/leaching from natural deposits; industrial wastes	
Zinc (ppm)	2006	5.0	NS	ND	ND ¹	0.18 ¹	ND	ND	0.5 ¹	No	Runoff/leaching from natural deposits; industrial wastes	

SECONDARY SUBSTANCES												
				Scenic View	Sonora/Jamestown	Tuolumne	Upper Basin	Willow Springs	Curtis Creek	Wards Ferry		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	EXCEEDANCE	TYPICAL SOURCE
Aluminum (ppb)	2006	200	NS	ND ¹	ND ¹	ND ¹	ND ¹	90 (ND–180) ¹	ND ²	ND ²	No	Erosion of natural deposits; residual from some surface water treatment processes
Iron (ppb)	2006	300	NS	ND ¹	ND ¹	ND ¹	114 (ND–240) ¹	175 (ND–350) ¹	335 (200–470) ²	ND ²	Yes ⁵	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2006	50	NS	15 (ND–58) ¹	0.02 ¹	ND ¹	64 (ND–194) ¹	155 (ND–310) ¹	375 (320–430) ²	ND ²	Yes ⁵	Leaching from natural deposits
Sulfate (ppm)	2006	500	NS	21 (ND–49) ¹	ND ¹	ND ¹	6 (ND–14) ¹	46 (ND–92) ¹	24 (14–34) ²	2.6 ²	No	Runoff/leaching from natural deposits; industrial wastes
Zinc (ppm)	2006	5.0	NS	0.5 (ND–1.6) ¹	0.5 ¹	0.3 ¹	0.1 (ND–0.3) ¹	0.03 (ND–0.05) ¹	ND ²	ND ²	No	Runoff/leaching from natural deposits; industrial wastes

OTHER UNREGULATED SUBSTANCES

	Apple Valley	Big Hill	Cedar Ridge	Columbia/Gibbs	Crystal Falls	Cuesta Center/Lambert Lakes	East Sonora	Mono Village	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	
Hardness (ppm)	2006	145 (120–170)	9 ¹	60 (9.5–110) ¹	145 (10–280)	73 (10–160) ¹	103 (20–160)	75 (20–130)	54 (14–94) ¹
Sodium (ppm)	2006	13.5 (13–14)	4 ¹	4.8 (3.8–5.7) ¹	6.7 (6.3–7) ¹	12.5 (4.9–29) ¹	11.6 (6.7–17)	9.4 (6.7–12)	6.5 (2–11) ¹

OTHER UNREGULATED SUBSTANCES

	Monte Grande	Peaceful Pines	Phoenix Lake	Ponderosa	Scenic View	Sonora/Jamestown	Tuolumne	Upper Basin	Willow Springs	Curtis Creek	Wards Ferry	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	RESULT (RANGE)	
Hardness (ppm)	2006	12 ¹	73	260	11 ¹	130 (11–300) ¹	16 ¹	11 ¹	51 (10–91) ¹	76 (11–140)	195 (140–250) ²	140 ²
Sodium (ppm)	2006	5 ¹	15	16	4.7 ¹	8.9 (6.3–15) ¹	5.6 ¹	4.3 ¹	8.5 (5.8–9.9) ¹	19.6 (5.2–34) ¹	12 (11–12) ²	9.3 ²

¹ Sampled in 2008.

² Sampled in 2007.

³ Sampled in 2006.

⁴ Sampled in 2002.

⁵ Iron and manganese were detected at levels exceeding the established state secondary MCL (SMCL), which was set to protect against unpleasant aesthetic effects such as color, taste, odor, and staining of plumbing fixtures (e.g., tubs and sinks) and of clothing during laundering. There are no adverse health effects expected with this exceedance.

Sampling Results

The Tuolumne Utilities District routinely monitors for contaminants in your drinking water in accordance with Federal and State laws. Unless otherwise indicated, the results contained in this report are for the monitoring period of January 1, 2008, through December 31, 2008.

This report contains results from laboratory testing, excluding contaminants that were not detected or that were detected at a level below the State's detection level for purposes of reporting (DLR). This information has been compiled in tables on the following pages to show what these contaminants were.

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.

Definitions

AL (Regulatory 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. 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 level of a disinfectant added for water treatment that may not be exceeded at the customer'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 U.S. EPA.

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).

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

