

2006 Consumer Confidence Report

Water System Name: **PALOMINO LAKES MUTUAL WATER COMPANY** Report Date: **6/28/2007**
DHS System Number: **4900570** Website: **www.palominolakes.org**

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2006.

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

Type of water source(s) in use: **ONE (1) GROUND WATER WELL**

Name & location of source(s): **WELL IS LOCATED APPROX. ¼ MILE EAST OF RUSSIAN RIVER
IN THE HANDEL VINEYARD - 27000 RIVER ROAD, CLOVERDALE,
CALIFORNIA (PLMWC SITE # 4)**

Drinking Water Source Assessment information: **SOURCE WATER ASSESMENT INFORMATION (DWSAP) ON FILE
- COPY BY REQUEST TO BOARD OF DIRECTORS**

Time and place of regularly scheduled board meetings for public participation: **BOARD MEETING SCHEDULE
AVAILABLE BY REQUEST - MAIL TO PO BOX 687, CLOVERDALE OR E-MAIL TO PLMWC BOARD - ADDRESSES ON WEBSITE**

For more information, contact: **LEE E. TOLBERT j-l_tolbert@comcast.net Phone: (707) 481-3475**

TERMS USED IN THIS REPORT:

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 (USEPA).

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.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): 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. Environmental Protection Agency.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

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

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

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.

Palomino Lakes Mutual Water Company

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*, which 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, which 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, USEPA and the state Department of Health Services (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.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detection:	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0 - NONE	0 - NONE	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0 - NONE	0 - NONE	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal waste

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	10	5 ppb	0 - NONE	15 ppb	2 ppb	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	10	0.86 ppm	0 - NONE	1.3 ppm	0.17 ppm	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	11/7/05	13 ppm	9 - 23 ppm	none	none	Generally found in ground and surface water
Hardness (ppm)	11/7/05	311 ppm	190 - 360ppm	none	none	Generally found in ground and surface water

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Barium (ppm)	11/7/05	0.23 ppm	0.1 - 0.23 ppm	1 ppm	2 (N/A)	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	11/7/05	0.1	0.01 - 0.12 ppm	2 ppm	1 (N/A)	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Asbestos (MFL)	12/3/01	< 0.20 MFL	<0.20 - 0.021 MFL	7 MFL	N/A (7)	Internal corrosion of asbestos cement water mains; erosion of natural deposits
Nitrite (ppm)	11/7/05	< 0.2 ppm	< 0.2 ppm	1 ppm	1 (N/A)	Runoff and leaching from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits
Nitrate (ppm)	11/7/05	2.3 ppm	1.8 - 2.3 ppm	45 ppm	45 (N/A)	Runoff and leaching from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits
Gross Alpha Radioactivity (pCi/L)	2/27/03	0.813 pCi/L	2.9 - 0.08 pCi/L	15 pCi/L	N/A (0)	Erosion of natural deposits
Benzene (ppb) (NOTE #1)	11/23/05	< 0.3 ppb	<0.3 to 0.3 ppb	1.0 ppb	0.15 ppb	Discharge from plastics, dyes and nylon factories; leaching from gas storage tanks and landfills
Ethylbenzene (ppb) (NOTE #1)	11/23/05	< 0.5 ppb	0.10 - 1.10 ppb	300 ppb	300 ppb (N/A)	Discharge from petroleum refineries; industrial chemical factories
Toluene (ppb) (NOTE #1)	11/23/05	< 0.3 ppb	ND - 0.73 ppb	150 ppb	150 ppb (N/A)	Discharge from petroleum and chemical factories; underground gas tank leaks
Xylenes - <i>total</i> (ppm) (NOTE #1)	11/23/05	< 0.0005 ppm	0.0001 - 0.0033 ppm	1.75 ppm	1.8 ppm (N/A)	Discharge from petroleum and chemical factories; fuel solvent
Ethylene Dibromide - EDB (ppt)	4/9/01	<.000002 ppt	< .000002 ppt	50 ppt	10 ppt (0)	Discharge from petroleum refineries; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching from grain and fruit crops
Methyl tert-Butyl Ether MTBE (ppb) (NOTE #1)	11/23/05	< 0.5 ppb	< 0.5 ppb	13 ppb	13 ppb	Leakage from underground gasoline storage tanks and pipelines

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	11/7/05	< 50.0 ppb	50.0 - 100.0 ppb	1000 ppb	N/A (N/A)	Erosion from natural deposits; residual from some water treatment processes
Color (units)	11/7/05	< 5.0 units	3.0 - 10.0 units	15 units	N/A (N/A)	Naturally-occurring organic materials
*Copper (ppb)	11/7/05	< 20 ppb	< 20 ppb to < 50 ppb	1000 ppb	N/A (N/A)	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood

						preservatives
Iron (ppb)	11/7/05	< 110 ppb	< 100 ppb to < 110 ppb	300 ppb	N/A (N/A)	Leaching from natural deposits; industrial wastes
Manganese (ppb)	11/7/05	< 20.0 ppb	< 20.0 - < 30.0 ppb	50 ppb	N/A (N/A)	Leaching from natural deposits
Odor (units)	11/7/05	< 1 unit	< 1 unit	3 Units	N/A (N/A)	Naturally-occurring organic materials
Silver (ppb)	11/7/05	< 10 ppb	<10 ppb	100 ppb	N/A (N/A)	Industrial discharges
Specific Conductance (micromhos)	11/7/05	590 micromh os	430 - 710 micromhos	?1600 micromh os	N/A (N/A)	Substances that form ions when in water; sea water influence
Sulfate (ppm)	11/7/05	31 ppm	14 - 33 ppm	500 ppm	N/A (N/A)	Runnoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids - TDS (ppm)	11/7/05	340 ppm	270 - 390 ppm	1000 ppm	N/A (N/A)	Runnoff/leaching from natural deposits
**Turbidity (NTU)	11/7/05	1.2 NTU	0.1 - 0.31 NTU	5 NTU	N/A (N/A)	Soil runoff
Zinc (ppm)	11/7/05	< 50 ppb	< 50 ppb	5000 ppb	N/A (N/A)	Runnoff/leaching from natural deposits; industrial wastes

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects Language
Boron (ppb) *	10/8/03	2.7 ppm *	1.0 ppm	Some men who drink water containing boron in excess of the notification level over many years may experience reproductive effects, based on studies in dogs.

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

**Turbidity (measured in NTU) is a measurement of the clarity of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Additional General Information on 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 the 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).

NOTE #1. *Benzene, ethylbenzene, MTBE, toluene, and xylene fell below the analysis apparatus detectible limit on the last sampling, but because of the adverse health risks associated with these chemicals, the PLMWC will continue to analyze and monitor lab results for these chemicals that indicate a health risk at a frequency higher than the DHS requires.*

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

PALOMINO LAKES MUTUAL WATER COMPANY FAILED TO MONITOR FOR NITRATE AS REQUIRED

OUR WATER SYSTEM VIOLATED A DRINKING WATER MONITORING REQUIREMENT. ALTHOUGH THIS IS NOT AN EMERGENCY, AS OUR CUSTOMERS, YOU HAVE THE RIGHT TO KNOW WHAT HAPPENED, WHAT YOU SHOULD DO, AND WHAT IS BEING DONE TO CORRECT THIS OVERSIGHT.

We are required to monitor your drinking water for nitrate on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. We did not monitor or test for nitrate in 2006 and therefore can not be sure of the quality of our drinking water during that time.

Typical sources of nitrate are runoff and leaching from fertilizer use; leaching from septic tanks and sewage; Erosion of natural deposits. Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

WHAT SHOULD YOU DO?

THERE IS NOTHING YOU NEED TO DO AT THIS TIME.

WHAT HAPPENED? WHAT IS BEING DONE?

WE BELIEVE NITRATE WAS SAMPLED AND ANALYZED LAST YEAR, BUT NEVER REPORTED TO THE STATE BY OUR LAB. WE ARE INVESTIGATING THIS OVERSIGHT WITH OUR LAB AT THIS TIME. NITRATE WAS SAMPLED ON JUNE 6, 2007. THE ANALYSIS RESULT WAS < 1 (less than one) mg/L WITH A PQL (practical quantitative limit) OF 2 (two) mg/L . THE MAXIMUM CONTAMINATION LEVEL FOR NITRATE SET BY THE STATE IS >45 (greater than forty-five) mg/L.

FOR MORE INFORMATION, PLEASE CONTACT LEE TOLBERT @ (707) 481-3475 OR WRITE TO:

**PLMWC
PO BOX 687
CLOVERDALE , CA 95425**