Melody Woods Water Company 2007 Consumer Confidence Report

We test our 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, 2007.

...if you read nothing else in this report, please, at least read page 9. Thanks. –Don Louv, President

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:	Well Water					
Name & location of source(s):	Well #3, located just off Summit Road, West of Melody Lane					
Drinking Water Source Assessment information:		Performed by the State in March 2002.				
		For details of that report, call Don Louv (408) 353-3193.				
Time and place of regularly sche	duled board	Quarterly meetings are held on the 2 nd Tuesday of the month, in				
meetings for public participation:		Board member's homes.				

For more information, contact: Don Louv, Pres. Phone:

(408) 353-3193

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 and 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 that a water system must follow.

Variances 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.

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 byproducts 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 USEPA 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.

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.

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL		MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) <u>0</u>	0	More than 1 sam with a detection	ple in a month	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) $\underline{0}$	0	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 fecal waste
TABLE 2	- SAMPLIN	G RESULT	IS SHOWING	THE DETEC	CTION OF	F 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)	5	5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natura deposits
Copper (ppm)	5	0.615	0	1.3	0.17	Internal corrosion of household water 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 NA ppm	03/14/07	18.4	n/a	none	none	enerally found in ground & surface water			
Hardness (as CaCO3) ppm	03/14/07	266	n/a	none	none	enerally found in ground & surface water			
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			
Aluminum (Al) ppm	3/14/07	ND	n/a	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes			
Antimony ppb	3/14/07	ND	n/a	6	20	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder			
Arsenic ppb	3/14/07	ND	n/a	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes			
Barium (Ba) ppm	3/14/07	ND	n/a	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits			
Beryllium ppb	3/14/07	ND	n/a	4	1	Discharge from metal refineries, coal- burning factories, and electrical, aerospace, and defense industries			
Cadmium (Cd) ppb	3/14/07	ND	n/a	5	0.04	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints			
Chromium (total) ppb	3/14/07	ND	n/a	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits			
Copper (Cu) ppb	3/14/07	ND	n/a	AL=1.3	0.17	Internal corrosion of household plumbin systems; erosion of natural deposits; leaching from wood preservatives			
Lead (Pb) ppb	3/14/07	ND	n/a	AL=15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits			
Mercury (Hg) ppb	3/14/07	ND	n/a	2	1.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland			
Nickel ppb	3/14/07	ND	n/a	100	12	Erosion of natural deposits; discharge from metal factories			
Selenium (Se) ppb	3/14/07	ND	n/a	50	(50)	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)			
Thallium ppb	3/14/07	ND	n/a	2	0.1	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories			

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG)	Typical Source of Contaminant
					[MRDLG]	
Fluoride (F) mg/L	03/14/07	0.1	n/a	2	1	Erosion of Natural Deposits
Haloacetic Acids (HAA5) µg/L	08/29/06	1.4	n/a	60	n/a	Chlorination by-product
Total Trihalomethanes (TTHM) µg/L	08/29/06	4.4	n/a	80	n/a	Chlorination by-product
Benzene µg/L	08/07/06	<0.5	n/a	1	n/a	
Carbon tetrachloride µg/L	08/07/06	<0.5	n/a	.5	n/a	
1,2 dichlorobenzene (o-DCB) µg/L	08/07/06	<0.5	n/a	600	n/a	
1,4-dichlorobenzene (p-DCB) μg/L	08/07/06	<0.5	n/a	5	n/a	
1,1-dichloroethane (1,1-DCA) µg/L	08/07/06	<0.5	n/a	5	n/a	
1,2-dichloroethane (1,1-DCA) μg/L	08/07/06	<0.5	n/a	.5	n/a	
1,1-dichloroethylene (1,1-DCE) μg/L	08/07/06	<0.5	n/a	6	n/a	
Cis-1,2-dichloroethylene μg/L	08/07/06	<0.5	n/a	6	n/a	
Trans-1,2-dichloroethylene μg/L	08/07/06	<0.5	n/a	10	n/a	
Dichloromethane (Meth Chlor) µg/L	08/07/06	<0.5	n/a	5	n/a	
1,2-Dichloropropane µg/L	08/07/06	<0.5	n/a	5	n/a	
Total 1,3-Dichloropropene µg/L	08/07/06	<0.5	n/a	5	n/a	
Ethyl benzene µg/L	08/07/06	<0.5	n/a	300	n/a	
Methyl Tert-butyl ether (MTBE) µg/L	9/30/07	<0.5	n/a	5	n/a	
Monochlorobenzene (Chlorobenzene) µg/L	08/07/06	<0.5	n/a	70	n/a	
Styrene µg/L	08/07/06	<0.5	n/a	100	n/a	

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
1,1,2,2-Tetrachloroethane μg/L	08/07/06	<0.5	n/a	1	n/a	
Tetrachloroethylene (PCE) µg/L	08/07/06	<0.5	n/a	5	n/a	
Toluene µg/L	08/07/06	<0.5	n/a	150	n/a	
1,2,4-Trichlorobenzene µg/L	08/07/06	<0.5	n/a	5	n/a	
1,1,1-Trichloroethane (1,1,1-TCA) μg/L	08/07/06	<0.5	n/a	200	n/a	
1,1,2-Trichloroethane (1,1,2-TCA) μg/L	08/07/06	<0.5	n/a	5	n/a	
Trichloroethylene (TCE) μg/L	08/07/06	<0.5	n/a	5	n/a	
Trichlorofluoromethane (Freon 11) µg/L	08/07/06	<5.0	n/a	150	n/a	
Trichlorotrifluoroethane (Freon113) µg/L	08/07/06	<10.0	n/a	1200	n/a	
Vinyl Chloride (VC) µg/L	08/07/06	<0.5	n/a	0.5	n/a	
Total Xylenes (m,p & o) µg/L	08/07/06	<0.5	n/a	1750	n/a	
Atrazine µg/L	02/23/06 08/07/06	<0.5	All <0.5	1	n/a	
Simazine (Princep) µg/L	02/23/06 08/07/06	<1.0	All <1.0	4	n/a	
2,4-D μg/L	02/23/06 08/07/06	<10.0	All <10.0	70	n/a	
Gross Alpha pCi/L	08/07/06	<3.0	n/a	15	n/a	
Radium 228 pCi/L	02/13/06 05/10/06	<0.5	<0.5 - <1.0	1	n/a	

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Iron (Fe) μg/L	9/30/07	470 *	440-500	300	n/a	Leaching from natural deposits
Manganese (Mn) µg/L	9/30/07	1065 *	970-1150	50	n/a	Leaching from natural deposits
Nitrate (as NO3) mg/L	08/13/07	ND	n/a	45	n/a	Wastewater runoff
Nitrite (as Nitrogen) mg/L	4/19/05	ND	n/a	1	n/a	Wastewater runoff
Sulfate (SO4) ppm	3/14/07	66.7	n/a	500	n/a	Runoff/Leaching of Natural Deposits industrial waste
Silver (Ag) ppb	3/14/07	ND	n/a	100	n/a	Industrial discharges
Zinc (Zn) ppm	3/14/07	ND	n/a	5	n/a	Runoff/leaching from natural deposits; industrial wastes
Chloride (Cl) ppm	3/14/07	18.3	n/a	500	n/a	Runoff/leaching of natural deposits
Turbidity units	03/14/07	10.1 *	n/a	5	n/a	Soil Runoff/Oxidation precipitants
Specific conductance micromhos	03/14/07	620	n/a	1600	n/a	Substances that form ions in water; seawater influence
Total dissolved solids mg/L	03/14/07	322	n/a	1000	n/a	Runoff/Leaching from natural deposits
Color units	03/14/07	5	n/a	15	n/a	Naturally occurring organic materials
Odor units	03/14/07	1	n/a	3	n/a	Naturally occurring organic materials
Foaming Agents (MBAS) ppb	03/14/07	ND	n/a	500	n/a	Municipal and industrial waste discharges

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS								
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects Language				
PH	3/14/07	7.0	n/a					
Total Alkalinity (as CaCO3) mg/L	3/14/07	206	n/a					
Calcium (Ca) mg/L	3/14/07	81.6	n/a					
Magnesium (Mg) mg/L	3/14/07	15.1	n/a					
Hydroide (OH) mg/L	3/14/07	0	n/a					
Carbonate (CO3) mg/L	3/14/07	0	n/a					
Bicarbonate (HCO3) mg/L	3/14/07	206	n/a					
Bromodichloromethane µg/L	08/07/06	<1.0	n/a					
Bromodichloromethane µg/L	08/07/06	<1.0	n/a					
Bromoform µg/L	08/07/06	<1.0	n/a					
Chroloform Trichloromethane) μg/L	08/07/06	<1.0	n/a					
Chromium VI (hexavalent) µg/L	03/14/07	ND	n/a					
Dibromochloromethane µg/L	08/07/06	<1.0	n/a					
Tert-Amyl-Methyl Ether µg/L	08/07/06	<3.0	n/a					
Bromobenzene µg/L	08/07/06	<0.5	n/a					
Bromochloromethane µg/L	08/07/06	<0.5	n/a					
Bromomthane Methyl Bromide) μg/L	08/07/06	<0.5	n/a					
n-Butylbenzene µg/L	08/07/06	<0.5	n/a					
Sec-Butylbenzene µg/L	08/07/06	<0.5	n/a					
Γert-Butylbenzene μg/L	08/07/06	<0.5	n/a					
Chloroethane µg/L	08/07/06	<0.5	n/a					
Chloromethane (Methyl Chloride) μg/L	08/07/06	<0.5	n/a					
2-Chlorotoluene µg/L	08/07/06	<0.5	n/a					

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS (CONTINUED)								
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects Language				
4-Chlorotoluene µg/L	08/07/06	<0.5	n/a					
Dibromomethane µg/L	08/07/06	<0.5	n/a					
1,3-Dichlorobenzene (m-DCB) μg/L	08/07/06	<0.5	n/a					
Dichlorodiflouromethane (Freon 12) µg/L	08/07/06	<0.5	n/a					
1,3-Dichloropropane µg/L	08/07/06	<0.5	n/a					
2,2-Dichloropropane µg/L	08/07/06	<0.5	n/a					
1,1-Dichloropropane µg/L	08/07/06	<0.5	n/a					
Diisopropyl Ether (DIPE) µg/L	08/07/06	<3.0	n/a					
Ethyl-tert-Butyl-Ether (ETBE) μg/L	08/07/06	<3.0	n/a					
Hexachlorobutadiene µg/L	08/07/06	<0.5	n/a					
Isopropylbenzen (Cumene) μg/L	08/07/06	<0.5	n/a					
p-Isopropyltoluene µg/L	08/07/06	<0.5	n/a					
Naphthalene µg/L	08/07/06	<0.5	n/a					
n-Propylbenzene µg/L	08/07/06	<0.5	n/a					
1,1,1,2-Tertrachloroethane $\mu g/L$	08/07/06	<0.5	n/a					
1,2,3-Trichlorobenzene µg/L	08/07/06	<0.5	n/a					
1,2,4-Trimethylbenzene µg/L	08/07/06	<0.5	n/a					
1,3,5-Trimethylbenzene µg/L	08/07/06	<0.5	n/a					
Methyl ethyl ketone (Butanone) μg/L	08/07/06	<5.0	n/a					
Methyl isobutyl ketone (MIBK) µg/L	08/07/06	<5.0	n/a					

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

Manganese & Iron MCL violations:

The manganese in our water has been measured at levels of 1.06 mg/L. The iron in our water has been measured at levels of 0.4 mg/L. The Secondary MCLs (Maximum Contaminant Levels) for Manganese and Iron are 0.05 mg/L and 0.3 mg/L respectively, levels that were chosen to protect consumers from both aesthetic and health issues.

The state has issued an order of compliance, therefore, during the next year we must complete the process of identifying an appropriate treatment plant technology, finding a supplier and installation contractor, finding a suitable location, building out the plant and commencing operation the manganese & iron filtration to bring us back into compliance with this secondary MCLs. The new treatment plant must be operational prior to May 30, 2009, and must reduce our manganese and iron levels to less than 50 ug/L and 300 ug/L, respectively. A copy of the Compliance Order (No. 02-17-08CO-001) is available at www.MelodyWoods.com.

The manganese and iron in our water may also be an aesthetic problem since it can make our water look dirty and can cause staining of clothing or plumbing fixtures.

Since our water measures above 0.05 mg/L, we are required to notify our customers of the potential health risks of consuming very large amounts of Manganese. In addition, we are working closely with the California Department of Public Health in researching different treatment techniques to reduce Manganese levels in the water supplied to you.

More information regarding Manganese can be found on the State of California, Department of Public Health website: (excerpt below)

http://ww2.cdph.ca.gov/certlic/drinkingwater/Pages/Manganese.aspx

Manganese is a required nutrient. A healthful diet provides adequate manganese for good nutrition. Typical dietary intake of about 1-10 mg manganese per day appears adequate for daily needs, according to ATSDR (2000).

However, manganese at very high levels can pose a neurotoxic risk (ATSDR, 2000; US EPA, 1996). For example, neurologic damage (mental and emotional disturbances, as well as difficulty in moving—a syndrome of effects referred to as "manganism") has been reported to be permanent among manganese miners exposed to high levels of airborne manganese for long periods of time. Lower chronic exposures in the workplace resulted in decrements in certain motor skills, balance and coordination, as well as increased memory loss, anxiety, and sleeplessness (ATSDR, 2000). US EPA (1996), in developing an oral reference dose for manganese based on dietary intake, mentions an epidemiological study in Greece that showed an increase in neurologic effects such as weakness and fatigue, disturbances in gait, and neuromuscular effects, in people whose drinking water contained 1.6 to 2.3 mg/L. Uncertainties about the levels of dietary manganese and the amount of drinking water consumed did not enable US EPA to use these data for risk assessment purposes.

Turbidity MCL violation:

Turbidity was found at levels that exceed the secondary MCL of 5 units. It too has an MCL that was set to protect you against unpleasant aesthetic effects such as color, taste, and odor. The high turbidity levels come from the leaching of natural deposits.

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 US EPA's Safe Drinking Water Hotline (1-800-426-4791).

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 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).

This report, and reports from previous years, are available at **www.MelodyWoods.com**

Remember, Melody Woods Water Company is a volunteer-operated, community water system. Your participation is encouraged and appreciated Thanks.

Don Louv, President and Treatment Operator Russ Lee, Distribution Operator Dale Pennington, Treasurer Donna Dunton, Secretary

> Prepared by Don Louv Pres., Melody Woods Water Co. don@melodywoods.com June 2008

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