

2022 Consumer Confidence Report

Los Madrones Mutual Water Company

June 4, 2023

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 to December 31, 2022 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse MCSI Water Systems Management a (831) 659-5360 para asistirlo en español.

Type of Water Source in Use, Name, Location: The water system has two groundwater wells located on San Juan Canyon Rd.

Drinking Water Source Assessment Information: A source water assessment was conducted for Well 01 of the Los Madrones Mutual Water Company in 2001. Well 01 is considered most vulnerable to low density septic systems. A source water assessment was conducted for Well 02 of Los Madrones Mutual Water in 2014. Well 02 is considered most vulnerable to low density septic systems, wells, storm drain discharge points, surface water-streams and transportation corridors-roads/streets.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: Annually announced by mail.

For More Information, Contact: MCSI Water Systems Management, (831) 659-5360

Terms Used in This Report

Term	Definition
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 (U.S. EPA).
Maximum Residual Disinfectant Level (MRDL)	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.
Maximum Residual Disinfectant Level Goal (MRDLG)	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.
Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
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.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.
ND	Not detectable at testing limit.

Term	Definition
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or milligrams per liter (µg/L)
ppt	parts per trillion or nanograms per liter (ng/L)
pCi/L	picocuries per liter (a measure of radiation)

Sources of Drinking Water and Contaminants that May Be Present in Source 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.

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.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Tables 1, 2, 3, 3B, 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 State Board 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. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Table 1. Sampling Results Showing the Detection of Lead and Copper

Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	9/22/2020	5	5	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Copper (ppm)	9/22/2020	5	0.295	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 2. Sampling Results for Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected (AVG)	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2021, 2022	(57.5)	54 – 61	None	None	Salt present in the water and is generally naturally-occurring
Hardness (ppm)	2021, 2022	(455)	431 – 479	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally-occurring

Table 3. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected (AVG)	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Arsenic (ppb)	2021, 2022	(1)	ND – 2	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (ppm)	2021, 2022	(0.7)	0.5 – 0.9	2.0	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2021, 2022	(4.36)	4.25 – 4.47	15	(0)	Erosion of natural deposits
Uranium (pCi/L)	2021, 2022	(3.35)	2.5 – 4.2	20	0.43	Erosion of natural deposits

Table 3B. Detection of Contaminants with a Primary Drinking Water Standard - Distribution

Chemical or Constituent (and reporting units)	Sample Date	Level Detected (AVG)	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
TTHMs [Total Trihalomethanes] (ppb)	9/2022	4	--	80	N/A	Byproduct of drinking water disinfection
HAA5 [Sum of Haloacetic Acids] (ppb)	9/2022	3	--	60	N/A	Byproduct of drinking water disinfection
Chlorine (ppb)	2022	(0.82)	0.08 – 2.5	[MRDL =4 (as Cl ₂)]	[MRDL=4 (as Cl ₂)]	Drinking water disinfectant added for treatment

Table 4. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2021, 2022	(67.1)	58.4 – 75.8	500	NA	Runoff/leaching from natural deposits; seawater influence
Color (units)	2021, 2022	(20)*	15 - 25*	15	NA	Naturally-occurring organic materials
Iron (ppb) - Sources	2022	(1836)*	1330* - 2450*	300	NA	Leaching from natural deposits; industrial wastes
Iron (ppb) - Blended	2022	(147)	ND – 307*	300	NA	Leaching from natural deposits; industrial wastes
Manganese (ppb) - Sources	2022	(101)*	24 – 254*	50	NA	Leaching from natural deposits
Manganese (ppb) - Blended	2022	(2.0)	ND - 19	50	NA	Leaching from natural deposits
Specific Conductance (µS/cm)	2021, 2022	1041	1017 – 1065	1600	NA	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2021, 2022	(154)	115 – 193	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2021, 2022	(654)	648 – 660	1000	NA	Runoff/leaching from natural deposits
Turbidity (Units)	2021, 2022	(6.25)*	5.2* – 7.3*	5	NA	Soil runoff
+ Secondary MCLs do not have PHGs or MCLGs because secondary MCLs are set to protect the aesthetics of water and PHGs and MCLGs are based on health concerns						

Table 5. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Bromide	12/2019	0.1	--	N/A	N/A

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 U.S. 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. 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. U.S. 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 Safe Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language: 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. Los Madrones MWC is 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.

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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

- Iron, and Manganese are ongoing SMCL exceedances. The water system tests both wells and tanks quarterly. The Mid-Tank and Upper Tank are used to monitoring blending. One of the eight iron samples exceeded the MCL with an annual average of 147 ppb. All of the blended manganese samples were well below the MCL.
- Color exceeded the SMCL during 2022. This is a secondary drinking water contaminant and is set to protect you against unpleasant aesthetic effects. This is not health (primary) constituent.
- Turbidity is an ongoing exceedance due to the elevated levels of iron, and manganese. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.