

# WATER QUALITY REPORT: 2023 Rancho Pauma Mutual Water Co.

*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, 2023 and may include earlier monitoring data.*

**Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Rancho Pauma Mutual Water Company a (760) 615-4050 para asistirlo en español.**

**Type of water sources in use:** RPMWC relies on local groundwater.

**Name & location of source:** RPMWC receives all of its water from 6 domestic wells.

**Drinking Water Source Assessment information:** The Drinking Water Source Assessment was last completed in 2021. A copy of the complete assessment is available for review at the RPMWC office located at 33129 Cole Grade Road, Pauma Valley, CA 92061.

**Time and place of regularly scheduled board meetings:** Board meetings are held every month in the company's boardroom, located at 33129 Cole Grade Road, Pauma Valley, CA. Meetings are open to the shareholders.

**For more information, contact:** Amber Watkins, Administrative Manager, phone: (760) 615-4050.

## 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 (U.S. EPA).

**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 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.

**Nephelometric Turbidity Units (NTU):** A measure of the suspended material in water.

**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.

**Variations and Exemptions:** Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**ND:** not detectable at testing limit

**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 (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/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 storm water 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water 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**, 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.

**Tables 1,2,3,4,5,6 & 7 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 COLIFORM BACTERIA					
Microbiological Contaminants (completed if bacteria detected)	Highest No. of detection ns	No. of Months in violation	MCL	MCLG	Typical Source of Bacteria
E. coli (Federal Revised Total Coliform Rule)	(In a year)  0	0	Routine and repeat samples are total coliform-positive, and either is E. coli-positive, or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.	0	Human and animal fecal waste

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION LEAD AND COPPER**

<b>Lead and Copper</b> (Tested every 6 months. Data is from 2023)	<b>Sample Date</b>	<b>No. of samples collected</b>	<b>90<sup>th</sup> percentile level detected</b>	<b>No. of sites exceeding Action Level</b>	<b>Action Level</b>	<b>PHG</b>	<b>Typical Source of Contaminant</b>
Lead (ug/L)	2/2023	20	2.9	1	15	0.2	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
	9/2023	20	1.3	0			
Copper (mg/L)	2/2023	20	1.2	2	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	9/2023	20	1.1	2			

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample date</b>	<b>Level Detected (average)</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Sodium (mg/L)	2023	61	ND – 66	NA	NA	Salt present in the water is generally naturally occurring
Hardness (mg/L)	2023	296	ND – 460	NA	NA	Sum of polyvalent cations present in the water, generally magnesium and calcium are naturally occurring

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample date</b>	<b>Level Detected (average)</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Gross Alpha (pCi/L)	2023	2.2	N/A	15	(0)	Erosion of natural deposits
Aluminum (ug/L)	2023	207.8	ND – 500.0	1000	600	Erosion of natural deposits; residual from some surface water treatment processes
Barium (ug/L)	2023	110	N/A	1000	2000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (mg/L)	2023	0.18	0.16 - 0.20	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as N) (mg/L)	2023	3.2	0.81 – 5.6	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ug/L)	2023	6.1	5.2 – 6.7	50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufactures; runoff from livestock lots (feed additive)

Nickel (ug/L)	2023	25.3	22.0 - 30.0	100	12	Erosion of natural deposits; discharge from metal factories
Uranium (pCi/L)	2022	2.85	2.78 - 2.91	20	1	Erosion of natural deposits
Chlorine (ppm)	2021	1.39	1.28 - 1.54	4	(4)	Drinking water disinfectant added for treatment
TTHMs (Total Trihalomethanes) (ppb)	2023	16	N/A	80	NA	Byproduct of drinking water disinfection
HAA5 (Haloacetic Acids) (ppb)	2023	0	N/A	60	NA	Byproduct of drinking water disinfection

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample date</b>	<b>Level Detected (average)</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG</b>	<b>Typical Source of Contaminant</b>
Total Dissolved Solids (mg/L)	2023	530	400 - 770	1000	NA	Runoff/leaching from natural deposits
Chloride (mg/L)	2023	99	80 - 130	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	2023	130	71 - 240	500	NA	Runoff/leaching from natural deposits; industrial wastes
Aluminum (ug/L)	2023	207.8	ND - 500.0	200	600	Erosion of natural deposits; residual from some surface water treatment processes
Turbidity (NTU)	2023	2.72	0.44 - 5.0	5	NA	Soil runoff
Specific Conductance (uS/cm)	2023	866	650 - 1300	1600	NA	Substances that form ions when in water; seawater influence

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample date</b>	<b>Level Detected (average)</b>	<b>Range of Detections</b>	<b>Notification Level</b>	<b>Health Effects Language</b>
Hexavalent Chromium (mg/L)	2017	1.2	ND - 3.8	10	Naturally occurring element found in rocks, animals, plants, soil and volcanic dust and gases

### **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. Rancho Pauma Mutual Water Company 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 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>.

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infants blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.