

2023 Consumer Confidence Report

Water System Name: Varian Ranch Mutual Water Company Report Date: January 2024

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, 2023 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Varian Ranch Mutual Water Company a 2060 Varian Circle, Arroyo Grande, CA para asistirlo en español.

Type of water source(s) in use: Groundwater wells

Name & general location of source(s): Well 03 and Well 01. The wells are located near Orcutt Road and Varian Circle.

Drinking Water Source Assessment information: A source water assessment was conducted for Well 03 in November 2001. Authorization to use the restored Well 01 was received in October 2008. No contaminants have been detected in the water supply, however the source is considered most vulnerable to the following activities: Grazing

The most recent system inspection was performed in December, 2023, by SLO County Environmental Health Services.

All source assessment and SLO County inspection reports are available to customers at www.varianranch.org

Time and place of regularly scheduled board meetings for public participation: Water board meetings are typically conducted the 2nd Monday of the odd numbered months starting at 6:30 p.m. at the Varian Ranch community center.

For more information, contact: Rod Curb Phone: (805) 440-3831

TERMS USED IN THIS REPORT

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.

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.

Variances 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.

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 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 by-products 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 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.

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6 and 8 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	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
<i>E. coli</i>	0 (In the year)	0	(a)	0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform positive and either is <i>E.coli</i> -positive or system fails to take repeat samples following <i>E.coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E.coli</i> .					

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

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	08/18/21	10	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	08/18/21	10	0.400	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Specific information about Lead health concerns is provided on page 4.

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)	7/2023	38		none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	7/2023	320		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Any violation of an MCL or AL would be asterisked. Additional information regarding the violation, if any, will be 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
Arsenic (ppb) *** Well 1 Well 3	7/2023 7/2023	2.5 3.6		10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Barium (ppm)	7/2023	0.15		1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm) ****	7/2023	0.48		2	1	Erosion of natural deposits; discharge from fertilizer and aluminum factories; ****
Lead (ppb)	7/2023	1.0		AL = 15	0.2	Discharges from industrial manufacturers; erosion of natural deposits
Nickel (ppb)	7/2023	3.0		100	12	Erosion of natural deposits; discharge from metal factories
Nitrate as N (ppm) Well 1 Well 3	7/2023 7/2023	ND ND		10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	7/2023	7.1		50	30	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
HAA5 [Sum of 5 Haloacetic Acids] (ppb)	9/2023	1.2		60	NA	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	9/2023	4.5		80	NA	By-product of drinking water disinfection
Gross Alpha Particle Activity (pCi/L)	4/2023	14.1		15	(0)	Erosion of natural deposits
Uranium (pCi/L)	4/2020	7.4		20	0.43	Erosion of natural deposits

TABLE 5 – 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)	7/2023	84		500	NA	Runoff/leaching from natural deposits, seawater influence
Copper (ppm)	7/2023	0.0068		1	NA	Erosion of natural deposits; leaching from wood preservatives
Iron (ppb)	7/2023	ND		300	NA	Leaching from natural deposits; industrial wastes
Manganese (ppb)	7/2023	10		50	NA	Leaching from natural deposits
Sulfate (ppm)	7/2023	46		500	NA	Runoff/leaching from natural deposits; industrial wastes
Zinc (ppm)	7/2023	ND		5	NA	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance (microSiemens/cm)	7/2023	860		1600	NA	Substances that form ions when in water; seawater influence
Total Dissolved Solids TDS (ppm)	7/2023	530		1000	NA	Runoff/leaching from natural deposits
Turbidity (units)	7/2023	0.35		5	NA	Soil runoff
Color (units)	7/2023	ND		15	NA	Naturally-occurring organic materials

Any violation of an MCL or AL would be asterisked. Additional information regarding the violation, if any, will be provided later in this report.

*** Specific information about arsenic in the drinking water is provided on page 4.

**** Fluoride is not added to the water at Varian Ranch.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Hexavalent chromium (ppb)					
Well 1	8/2020	1.3		NA	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer. There is currently no MCL designated by U.S. EPA.
Well 3	9/2020	ND		NA	

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:

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. Varian Ranch 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. 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>. If you are concerned about lead in your water, you may wish to have your water tested. Contact the Varian Ranch Water System Specialist (805-440-3831) for more information on your options for testing your tap water for Lead and Copper.

Arsenic:

While Varian Ranch drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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

TABLE 7 – VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT

Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
None	No Violations			

For Water Systems Providing Groundwater as a Source of Drinking Water

**TABLE 8 – SAMPLING RESULTS SHOWING
FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES**

Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	0 (In the year)	monthly	0	(0)	Human and animal fecal waste
Enterococci	0 (In the year)	N/A	TT	N/A	Human and animal fecal waste
Coliphage	0 (In the year)	N/A	TT	N/A	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLE				
There were no positive fecal indicator results for the entire year 2023.				
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES				
There were no deficiencies for the entire year 2023.				
TABLE 9 - VIOLATION OF GROUNDWATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
None	No violations			

Summary Information for Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct zero (none) Level 1 assessment(s).

During the past year zero (none) Level 2 assessments were required to be completed for our water system.