

2022 Consumer Confidence Report

Water System Information

Water System Name: Jarvis Mutual Water Company

Report Date: 06/28/2023

Type of Water Source in Use: Well

Name and General Location of Source: Santa Cruz County Parcel # 3100-011-31

Drinking Water Source Assessment Information: None

Time and Place of Regularly Scheduled Board Meetings for Public Participation: In May every year at 2711 Branciforte Drive, Santa Cruz, California 95065 (Exact Date & Time to be determined and announced)

For More Information, Contact: Mark Burgeles Phone: (831) 429-8062

About This Report

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.

Terms Used in This Report

Term	Definition
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 <i>E. coli</i> 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).

Term	Definition
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)

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

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

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
<i>E. coli</i>	(In the year) 0	0	(a)	0	Human and animal fecal waste
Total Coliform Bacteria	2*	2	(a)	0	Naturally present in the environment

(a) 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*.

Table 2. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	08/17/2021	5	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	08/17/2021	5	0.460	0	1.3	0.3	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)	01/04/2017	11	None	None	None	Salt present in the water and is generally naturally occurring

Hardness (ppm)	01/04/2017	310	None	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
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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 (mg/L)	01/06/2020	0.017	None	1.0	20	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (Total) (ug/L)	01/06/2020	0.76	None	50.0	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Nitrate (as N) (mg/L)	01/06/2022	0.2	None	10.0	10.0	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion from natural deposits
Nitrate + Nitrite (as N) (mg/L)	01/06/2020	0.16	None	10.0	10.0	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Fluoride (mg/L)	01/16/2020	0.15	None	2.0	1.0	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Radiation Gross Alpha (pci/L)	03/2019	1.63	None	15.0	0	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 (mg/L)	01/04/2017	13	None	500		Runoff / leaching from natural deposits; seawater influence
Iron (ug/L)	01/04/2017	230	None	300		Runoff / Leaching from natural deposits
Sulfate (mg/L)	01/04/2017	30	None	500		Runoff / leaching from natural deposits; Industrial wastes
Total Dissolved Solids (mg/L)	01/04/2017	370	None	1000		Runoff / leaching from natural deposits

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
NONE					

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. Jarvis 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. [Optional: 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>.

State Revised Total Coliform Rule (RTCR): [Enter Additional Information Described in Instructions for SWS CCR Document]

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 Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
MCL (Maximum Contamination Level)	A routine monthly sample was taken from 320 Rider Ridge Road sampling spigot on 07/05/2022. Sample was found positive for Coliform Bacteria A repeat sampling on 07/06/2022 was positive at multiple sites as well as the	71 Days	A Level 1 Assessment was conducted. Special (non - regulatory, investigative) sampling was initiated in different locations through - out the distribution system. Notifications were sent out to all water users alerting them to	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

	<p>initial site, 320 Rider Ridge Road. Positive detections of Coliform were also found at 330 Rider Ridge Road & 2308 Jarvis Road.</p> <p>Positive samples on both days put our water system in violation of the MCL. *</p>		<p>the mitigation process and of the periodic treatment of the water system.</p> <p>Suspect areas were identified when a special sample tested positive for Coliforms in the WATER TANK.</p> <p>The Well and the Tank Supply Pipe were therefore sampled and tested.</p> <p>The results were negative for the well and positive for the supply pipe.</p> <p>The decision was made to replace an old repair on the 2 "supply pipe (between well and tank) with 18 feet of new PVC pipe.</p> <p>System was treated after the repair.</p> <p>Follow-up special sampling at tank showed negative readings.</p> <p>Due to special sampling & testing in the weeks later (10/13/2022), it was discovered that Rider Ridge Road area had two coliform positive readings when other areas of the water system were negative.</p>	<p>water distribution system.</p> <p>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 to identify problems and to correct any problems that were found.</p>
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			<p>The cause was due to a broken union fitting on the service line near the water meter.</p> <p>The property owner had to repair the fitting several times.</p> <p>Once repaired, the dead-end hydrant in close proximity to his service connection was opened and flushed.</p> <p>Water system was treated.</p> <p>Subsequent Routine tests were negative and continues to be negative as of this date (06/29/2023).</p>	
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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>	(In the year) 0		0	(0)	Human and animal fecal waste
Enterococci	(In the year) 0		TT	N/A	Human and animal fecal waste
Coliphage	(In the year) 0		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: NONE

Special Notice for Uncorrected Significant Deficiencies: NONE

Table 9. Violation of Groundwater TT: NONE

For Systems Providing Surface Water as a Source of Drinking Water: N/A

Table 10. Sampling Results Showing Treatment of Surface Water Sources: N/A

Summary Information for Operating Under a Variance or Exemption: N/A

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 one Level 1 Assessment. One Level 1 Assessment was completed. In addition, we were required to take one corrective action and we completed one of these actions.

Level 2 Assessment Requirement Due to an *E. coli* MCL Violation: Not required