

2022 Consumer Confidence Report

Enza Zaden Research

June 30, 2023

Water System Information

- *Type, Name, and General Location of Water Source(s) in Use:* Enza Zaden Research is served by one (1) groundwater well located on the property
- *Drinking Water Source Assessment Information:* An Assessment was conducted in March 2012. Well 02 is considered the most vulnerable to agricultural/rural drainage. The Assessment can be viewed by contacting SWRCB-DDW Monterey District, at 831-655-6939.
- *For More Information, Contact:* MCSI Water Systems Management at (831) 659-5360

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.

Important Information About This Report Language in Spanish:

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

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.
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)
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, 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 Detection for 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)	10/2019	5	ND	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10/2019	5	0.349	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 (Reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	10/2021	165	--	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	10/2021	681	--	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 - Source

Chemical or Constituent (Reporting units)	Sample Date	Level Detected (Average)	Range of Detections	MCL [MRDL]	PHG (MCLG)	Typical Source of Contaminant
Arsenic (µg/L)	10/2021	5.3	--	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Aluminum (mg/L)	10/2022	(0.246)	0.061 – 0.625	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Fluoride, ppm	10/2021	0.3	--	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	03/2020	3.37	--	15	(0)	Erosion of natural deposits
Nitrate (mg/L)	2022	(6.71)	0.8 – 10.8	10 (as N)	10 (as N)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Total Radium for NTNC (pCi/L)	03/2014	0.036	--	5	NA	Erosion of natural deposits
Uranium (pCi/L)	03/2014	3	--	20	0.43	Erosion of natural deposits

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

Chemical or Constituent (Reporting units)	Sample Date	Level Detected (Average)	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
TTHMs [Total Trihalomethanes] (µg/L)	08/2022	50	--	80	NA	Byproduct of drinking water disinfection
HAA5 [Sum of 5 Haloacetic Acids] (µg/L)	08/2022	14	--	60	NA	Byproduct of drinking water disinfection
*Chlorine residuals (mg/L)	2022	(0.84)	0.34 – 1.64	[4.0 (as Cl ₂)]	[4.0 (as Cl ₂)]	Drinking water disinfectant added for treatment
*Chlorine residuals are taken in the field in conjunction with the bacteriological sampling						

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

Chemical or Constituent (Reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (µg/L)	10/2021	612	--	200	NA	Erosion of natural deposits; residual from some surface water treatment process
Chloride (mg/L)	10/2021	161	--	500	NA	Runoff/leaching from natural deposits; seawater influence
*Color (Units)	05/2017	30	--	15	NA	Naturally-occurring organic materials
*Iron (µg/L)	10/2021	**738	--	300	NA	Leaching from natural deposits; industrial wastes
*Manganese (µg/L)	10/2021	**61	--	50	NA	Leaching from natural deposits
Odor (Units)	05/2017	1	--	3	NA	Naturally-occurring organic materials
Specific Conductance (µS/cm)	10/2021	**1781	--	1600	NA	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	10/2021	344	--	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids [TDS] (mg/L)	10/2021	**1170	--	1000	NA	Runoff/leaching from natural deposits
*Turbidity (Units)	10/2021	4.7	--	5	NA	Soil runoff

Table 5. Detection of Unregulated Contaminants

Chemical or Constituent (Units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Boron (mg/L)	10/2021	0.760	--	1	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.

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. Enza Zaden Research 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 or Monitoring and Reporting Requirement

- **Nitrate Levels above 10ppm –Nitrate MCL Violation, Citation 02_05_20C_007**
 - 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 infant's 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.
 - Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.
 - Enza Zaden Research Compliance Plan includes a Nitrate Removal system that is scheduled for completion by October 2023
- Color, Iron, and Manganese are secondary drinking water standard contaminants and are set to protect you against unpleasant aesthetic effects such as color, taste, odor, and the staining of plumbing fixtures, and clothing while washing. These are not health (Primary) constituents.
- Manganese was over MCL of 50 µg/L but under the notification level of 500 µg/L. The notification level for manganese is used to protect consumers from neurological effects. High levels of manganese in people have been shown to result in effects on the nervous system.
- Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. 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.