Monte Vista Christian School – Water System

Consumer Confidence Report – 2023

Santa Cruz County Water System I.D. No. 4400754

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguen que lo entienda bien.

April 19, 2024

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, 2023 and may include earlier or later monitoring data.

The Monte Vista Christian School has its' own water system. The water system is classified as a "non-transient non-community" from January to September 2022. In October 2022, the water system classification was changed to "community" due to the amount of people who live on campus. As such, we are required to provide this Water Quality / Consumer Confidence Report to you, the water user. In 2023, water from the system was tested and compared to the EPA and State drinking water health standards.

This brochure reviews 2023's water quality, including details about where your water comes from, what it contains, and how it compares to State standards.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (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, person 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. USEPA / 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 (800-426-4791).

Your water comes from two water production wells sunk sufficiently underground near the center of the school campus. The water is pumped from this aquifer to a 200,000-gallon steel water storage tank that supplies potable water for domestic (drinking and washing), irrigation, and fire suppression (hydrants and sprinklers) use at the school. Three booster pumps and a hydropneumatic pressure tank provide pressure throughout the system. Please see the notes below regarding drinking water.

Sources of drinking water (both tap water and bottled water) include river, 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 before it is treated include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic system, 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 storm water runoff, and residential uses.
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.
- 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, agriculture application, and septic systems.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

WATER QUALITY DATA

The attached Tables 1, 2, and 3 list all the drinking water compounds (analytes) that the source well and water distribution system were tested for, the date of the tests, the results of the tests, and the Maximum Contaminant Level (MCL) for that analyte established by the US EPA or the state of California in parts per million (ppm). For comparison, 1-ppm is the equivalent of 1 second in 11.5 days. The presence of any compound in the water does not necessarily indicate that the water poses a health risk. The State requires monitoring for certain compounds less than once per year because the concentrations of these compounds are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Source water supplied to and distributed in the system met all EPA and State drinking water standards, except for the following instances:

- Iron was previously present in the source wells at levels exceeding the secondary MCL, but in 2022 and 2023 test results were under the secondary MCL. A secondary MCL is a limit that is not based on a health risk, but instead refers to aesthetic qualities in water. The iron MCL was set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. See Table 1 for details.

- Manganese was previously present in the source wells at levels exceeding the secondary MCL, but in 2022 and 2023 test results were under the secondary MCL. A secondary MCL is a limit that is not based on a health risk, but instead refers to aesthetic qualities in water. The manganese MCL was set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing.

- 1,2,3-TCP was detected in Well-4 at levels slightly above the MCL in August 2022. In August 2022, 1,2,3-TCP was not detected in the other well (Well-3). Water from both wells is mixed together in the water storage tank (prior to reaching end users), so we tested water from the storage tank six times throughout 2022 and 2023. 1,2,3-TCP was not detected in the water storage tank. In addition, we tested the Well-4 groundwater for 1,2,3-TCP five times throughout 2022 and 2023 (i.e., following the August 2022 exceedance), and 1,2,3-TCP was not detected for each of these tests. Some people who drink water containing 1,2,3-trichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

About Iron and Manganese: Iron and Manganese are naturally occurring minerals and are present in groundwater due to leaching from natural deposits. They are required nutrients in every person's diet and a healthful diet provides adequate iron and manganese for good

nutrition (US EPA, 2003). Iron and Manganese are regulated Secondary MCLs (see drinking water regulations) established to address issues of aesthetics (discoloration, taste, odor), not health concerns. At a concentration greater than 0.05 ppm, Manganese may make the water appear brown. At a concentration greater than 0.3 ppm, Iron may make the water appear a rust-color and may impart a metallic taste to it.

For more information on Iron and Manganese you may see the following references:

- WHO, 2004 (PDF), Iron in Drinking-water, Background document for development of WHO Guidelines for Drinking-water Quality, World Health Organization, 2004.
- WHO, 2004 (PDF), Manganese in Drinking-water, Background document for development of WHO Guidelines for Drinking-water Quality, World Health Organization, 2004.
    - See also: WHO, Chemical Hazards in Drinking Water - Manganese.
- US EPA, 2017, Secondary Drinking Water Standards Guidance for Nuisance Chemicals

The laboratory analytical results are summarized in the attached Tables 1 and 2.

Please direct any questions about the potable water system to:

Scott Leggett (Chief Operations Manager) at 480.285.8699

OR

Shawn Mixan (Certified Water Operator - Weber, Hayes and Associates) at 831.722.3580

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 *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)

Table 1: Summary of Old Well (-003) Analytical Results

Monte Vista Christian School, Watsonville, CA - Water System I.D. No. 4400754 (-003)

Analyte	Date Sampled	RESULT (ppm)	MCL (ppm)
SDWIS - INORGANICS			
Aluminum (Al)	1/26/21	0.029	0.2 [2] | 1
Antimony (Sb)	1/26/21	ND	0.006
Arsenic (As)	1/26/21	ND	0.01
	2/29/24		
Barium (Ba)	1/26/21	ND	1
Beryllium (Be)	1/26/21	ND	0.004
Boron (B)	1/26/21	0.11	*CA-AL: 1
Cadmium (Cd)	1/26/21	ND	0.005
Chromium (Cr)	1/26/21	0.0023	0.05
Cyanide (CN)	1/26/21	ND	0.15
Fluoride (F)	1/26/21	0.11	2.0
Lead (Pb)	1/26/21	ND	*AL: 0.015
Mercury (Hg)	1/26/21	ND	0.002
Nickel (Ni)	1/26/21	ND	0.1
Selenium (Se)	1/26/21	ND	0.05
Thallium (Tl)	1/26/21	ND	0.002
SDWIS - SECONDARY / GP			
Bicarbonate Alkalinity (as HCO3)	1/26/21	200	--
	2/29/24		
Carbonate Alkalinity (as CO3)	1/26/21	ND	--
	2/29/24		
Total Alkalinity (as $CaCO_3$)	1/26/21	160	--
	2/29/24	170	
Calcium (Ca)	1/26/21	27	--
	2/29/24	29	
Chloride (Cl)	1/26/21	15	500 [2]
	2/29/24	16	
Color (Co/Pt) (Units)	1/26/21	12	15 [2]
	2/29/24	ND	
Copper (Cu)	1/26/21	ND	*AL: 1.3 | 1.0 [2]
	2/29/24		
Foaming Agents MBAS (Surfactants)	1/26/21	ND	0.5 [2]
	2/29/24		

Table 1: Summary of Old Well (-003) Analytical Results

Monte Vista Christian School, Watsonville, CA - Water System I.D. No. 4400754 (-003)

Analyte	Date Sampled	RESULT (ppm)	MCL (ppm)
Hardness, Total (as $CaCO_3$)	1/26/21	180	--
	2/29/24		
Hydroxide	2/29/24	ND	--
Iron (Fe), total	12/12/17	ND	0.3 [2]
	1/26/21	1.5 **	
	12/29/23	ND	
	2/29/24	ND	
Magnesium (Mg)	1/26/21	27	--
	2/29/24		
Manganese (Mn)	12/12/17	ND	0.05 [2]
	1/26/21	0.096 **	
	12/29/23	ND	
	2/29/24	ND	
Odor T.O.N. (Threshold Number)	1/26/21	ND	3 [2]
	2/29/24		
pH value	1/26/21	7.6 pH	6.5 - 8.5 [2a]
	2/29/24		
Potassium (K)	1/26/21	1.6	--
Silver (Ag)	1/26/21	ND	0.1 [2]
	2/29/24		
Sodium (Na)	1/26/21	21	--
Specific Conductivity	1/26/21	420 µS/cm	1,600 µS/cm [2]
	2/29/24	470 µS/cm	
Sulfate (SO4)	1/26/21	33	500 [2]
	2/29/24	38	
Total Dissolved Solids	1/26/21	270	1,000 [2]
	2/29/24		
Turbidity (NTU)	1/26/21	11	5 [2]
	2/29/24	0.2	
Zinc (Zn)	1/26/21	0.079	5 [2]
	2/29/24	ND	
SDWIS - NITRATES			
Nitrate (as N)	1/27/22	3.4	10
	1/31/23	3.8	
	1/30/24	3.4	

Table 1: Summary of Old Well (-003) Analytical Results

Monte Vista Christian School, Watsonville, CA - Water System I.D. No. 4400754 (-003)

Analyte	Date Sampled	RESULT (ppm)	MCL (ppm)
Nitrite (as N)	1/26/21	ND	1
	1/30/24	ND	
Nitrate (as N) + Nitrite (as N)	1/27/22	15	10
	1/30/24	3.5	
OTHER			
Hexavalent Chromium (Cr+6)	12/29/14	0.00098	0.01 [a]
Perchlorate	11/30/23	ND	0.006
Synthetic Organic Compounds	11/30/23	All ND	varies
Volatile Organic Compounds	11/30/23	All ND	varies
	2/29/24	All ND	varies
1,2,3 TCP	4/11/18	ND	0.000005
	6/28/18	ND	
	9/20/18	0.000012	
	11/19/18	ND	
	2/27/19	ND	
	5/21/19	ND	
	8/14/19	ND	
	8/31/22	ND	
Gross Alpha	4/17/18	ND	15 pCi/L

All Data & MCLs QC'd on 4/12/24 by: R. Ciervo & Robyn (WHA)

NOTES:

Not all analytes are sampled every year. Most recent data is shown.

ppm = parts per million; which is equivalent to milligrams per liter (mg/L)

MCL = Maximum Contaminant Level. Primarily based on US Environmental Protection Agency (EPA) & California drinking water regulations

ND = Not Detected at or above the laboratory's Reporting Limit

2 = Secondary MCLs are set to protect the odor, taste, and appearance of drinking water and DO NOT affect health at that level

2a = EPA secondary drinking water standard

a = MCL is no longer in effect

*California (CA-NL) and/or EPA Action Levels (AL) are shown for analytes which do not have an MCL

** Indicates a secondary MCL exceedance. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water and DO NOT affect health at that level.

1,2,3-TCP = 1,2,3-Trichloropropane

pCi/L = picocuries per liter

NTU = Nephelometric Turbidity Units

Boron (B) = this analyte is not required per the SDWIS website

Table 2: Summary of New Well (-004) Analytical Results

Monte Vista Christian School, Watsonville, CA - Water System I.D. No. 4400754 (-004)

Analyte	Date Sampled	RESULT (ppm)	MCL (ppm)
SDWIS - INORGANICS			
Aluminum (Al)	8/31/22	ND	0.2 [2] | 1
Antimony (Sb)	8/31/22	ND	0.006
Arsenic (As)	4/29/22	ND	0.01
Barium (Ba)	8/31/22	ND	1
Beryllium (Be)	8/31/22	ND	0.004
Boron (B)	4/15/19	ND	*CA-AL: 1
Cadmium (Cd)	8/31/22	ND	0.005
Chromium (Cr)	8/31/22	0.0016	0.05
Cyanide (CN)	4/15/19	ND	0.15
Fluoride (F)	4/29/22	0.14	2.0
Lead (Pb)	4/15/19	ND	*AL: 0.015
Mercury (Hg)	8/31/22	ND	0.002
Nickel (Ni)	8/31/22	ND	0.1
Selenium (Se)	8/31/22	ND	0.05
Thallium (Tl)	8/31/22	ND	0.002
SDWIS - SECONDARY / GP			
Bicarbonate Alkalinity (as HCO3)	4/29/22	210	--
Carbonate Alkalinity (as CO3)	4/29/22	ND	--
Total Alkalinity (as CaCO3)	4/29/22	170	--
Calcium (Ca)	4/29/22	34	--
Chloride (Cl)	4/29/22	18	500 [2]
Color (Co/Pt) (Units)	4/29/22	ND	15 [2]
Copper (Cu)	4/29/22	ND	*AL: 1.3 | 1.0 [2]
Foaming Agents MBAS (Surfactants)	4/15/19	ND	0.5 [2]
Total Hardness (as CaCO3)	4/29/22	200	--
Iron (Fe), total	4/15/19	2	0.3 [2]
	5/3/19	0.41	
	4/29/22	0.088	
Magnesium (Mg)	4/29/22	28	--
Manganese (Mn)	4/15/19	0.2	0.05 [2]
	5/3/19	0.11	
	4/29/22	ND	
Odor T.O.N. (Threshold Number)	4/29/22	ND	3 [2]
pH value	4/29/22	7.2 pH units	6.5 - 8.5 [2a]

Table 2: Summary of New Well (-004) Analytical Results

Monte Vista Christian School, Watsonville, CA - Water System I.D. No. 4400754 (-004)

Analyte	Date Sampled	RESULT (ppm)	MCL (ppm)
Potasssium (K)	4/29/22	1.8	--
Silver (Ag)	4/15/19	ND	0.1 [2]
Sodium (Na)	4/29/22	25	--
Specific Conductivity	4/29/22	500 µS/cm	1,600 µS/cm [2]
Sulfate (SO4)	4/29/22	41	500 [2]
Total Dissolved Solids	4/29/22	300	1,000 [2]
Turbidity (NTU)	4/29/22	0.55	5 [2]
Zinc (Zn)	4/29/22	0.12	5 [2]
SDWIS - NITRATES			
Nitrate (as N)	4/29/22	3.2	10
	4/28/23	3.4	
	1/30/24	3.1	
Nitrite (as N)	4/29/22	ND	1
	1/30/24	ND	
Nitrate-N + Nitrite-N	4/29/22	3.2	10
	1/30/24	3.2	
OTHER			
Hexavalent Chromium (Cr+6)	--	--	0.01 [a]
Perchlorate	2/29/24	ND	0.006
Synthetic Organic Compounds (SOC)	6/30/22	All ND	varies
Volatile Organic Compounds (VOC)	9/29/22	All ND	varies
1,2,3 TCP	5/22/19	ND	0.000005
	9/17/19	ND	
	6/30/22	ND	
	8/31/22	0.0000071	
	11/29/22	ND	
	2/28/23	ND	
	5/31/23	ND	
	8/29/23	ND	
	11/30/23	ND	
Gross Alpha	9/29/22	1.74 ± 1.49 (2.65) pCi/L	15 pCi/L

All Data & MCLs QC'd on 4/12/24 by: R. Ciervo & Robyn (WHA)

Table 2: Summary of New Well (-004) Analytical Results

Monte Vista Christian School, Watsonville, CA - Water System I.D. No. 4400754 (-004)

Analyte	Date Sampled	RESULT (ppm)	MCL (ppm)

NOTES:

Not all analytes are sampled every year. Most recent data is shown.

ppm = parts per million; which is equivalent to milligrams per liter (mg/L)

MCL = Maximum Contaminant Level. Primarily based on US Environmental Protection Agency (EPA) & California drinking water regulations

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2a = EPA secondary drinking water standard

a = MCL is no longer in effect

*California (CA-NL) and/or EPA Action Levels (AL) are shown for analytes which do not have an MCL

** Indicates a secondary MCL exceedance. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water and DO NOT affect health at that level.

1,2,3-TCP = 1,2,3-Trichloropropane

pCi/L = picocuries per liter

NTU = Nephelometric Turbidity Units

Boron (B) = this analyte is not required per the SDWIS website

Analytical value exceeds the MCL

Table 3: Summary of Distribution System Analytical Results

Monte Vista Christian School, Watsonville, CA - Water System I.D. No. 4400754

Analyte	Date Sampled	RESULT (ppm)	MCL (ppm)
Bacteria			
Coliform	Jan to Dec 2023	Absent	if detected
E Coli	Jan - Dec 2023	Absent	if detected
Disinfection By-Products			
Total Trihalomethanes	--	--	0.80
Total HAA	--	--	0.60
Lead & Copper			
Lead	Sept 21 to 23, 2021	ND	AL: 0.015
Copper	Sept 21 to 23, 2021	ND to 1.1	AL: 1.3 | 1.0 [2]

All Data & MCLs QC'd on 4/12/24 by: R. Ciervo & Robyn (WHA)

NOTES:

ppm = parts per million; which is equivalent to milligrams per liter (mg/L)

MCL = Maximum Contaminant Level. Primarily based on US Environmental Protection Agency (EPA) & California drinking water regulations

ND = Not Detected at or above the laboratory's Reporting Limit

2 = Secondary MCLs are set to protect the odor, taste, and appearance of drinking water and DO NOT affect health at that level

AL = California (CA-NL) and/or EPA Action Levels (AL) are shown for analytes which do not have an MCL

* 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. More information is presented in the report text.