

2022 Consumer Confidence Report

Water System Name: Freemark Abbey Winery

Report Date: February 14, 2023

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, 2021 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Freemark Abbey Winery a 3022 St Helena Highway, St Helena, CA 94559 800-963-9698 para asistirlo en español.

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Freemark Abbey Winery 以获得中文的帮助: 3022 St Helena Highway, St Helena, CA 94559 800-963-9698

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Freemark Abbey Winery, 3022 St Helena Highway, St Helena, CA 94559 o tumawag sa 800-963-9698 para matulungan sa wikang Tagalog.

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Freemark Abbey Winery tại 3022 St Helena Highway, St Helena, CA 94559 800-963-9698 để được hỗ trợ giúp bằng tiếng Việt.

Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Freemark Abbey Winery ntawm 3022 St Helena Highway, St Helena, CA 94559 800-963-9698 rau kev pab hauv lus Askiv.

Type of water source(s) in use: Groundwater Wells (3)

Name & location of source(s): LPA Reported Primary Source(Abbey), Well #2(Vineyard), Well #3(Wilson). Abbey is located on the North West side of property. Vineyard is located on the south side of the property in the vineyard. Wilson is located ¾ of a mile south of the facility off of St Helena Hwy. Well #3(Wilson) was not in use in 2021.

Drinking Water Source Assessment information: Freemark Abbey, Heritage Systems, Inc., and NCEH

Time and place of regularly scheduled board meetings for public participation: Request meeting with Luke Henderson

For more information, contact: Luke Henderson

Phone: 707-591-6439

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.

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.

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.

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 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.

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, and 6 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 (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	(In a month)	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	(In the year)	0	(a)	0	Human and animal fecal waste

(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

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	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	10/21/22	5	ND	0	15	0.2		Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10/21/22	5	.685	0	1.3	0.3	Not applicable	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)	Well 1 Well 2 Well 3	7/17/12 5/22/14 12/10/18	38 14 36	NA	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	Well 1,2 Well 3	7/17/12 12/10/18	86.5 250	74-99	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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	
Turbidity (NTU)	Well 3	08/03/16	16	NA	TT	NA	Soil runoff
Gross Alpha (pCi/L)	Well 1 Well 2	07/13/21 07/13/21	2.31 0.309	0.309-2.31	15	0	Erosion of natural deposits
Aluminum (mg/L)	Well 2 Well 3	05/05/20 12/10/18	.180 .015	NA NA	1	.6	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ug/L)	Well 1,2 Well 3	05/05/20 12/10/18	27.4 14	6.8-48 NA	10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (mg/L)	Well 3	12/10/18	.069	NA	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (ug/L)	Well 1 Well 3	05/15/17 12/10/18	2.6 .51	.51-2.6	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (mg/L)	Well 1,2 Well 3	05/05/20 12/10/18	.16 .16	.15-.17 NA	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel (ug/L)	Well 3	12/10/18	3.2	NA	100	12	Erosion of natural deposits; discharge from metal factories
Nitrate (mg/L)	Well 2	05/13/21	0.93	NA	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; 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
Aluminum (mg/L)	Well 2 Well 3	05/05/20 12/10/18	.180 .015	NA NA	1	.6	Erosion of natural deposits; residue from some surface water treatment processes
Color (UNITS)	Well 3	08/03/16	90	NA	15	NA	Naturally-occurring organic materials
Iron (ug.L)	Well 3	12/10/18	28,000	NA	300	NA	Leaching from natural deposits; industrial wastes
Manganese (ug/L)	Well 1 Well 3	05/22/14 12/10/18	47 1800	47-1800	50	NA	Leaching from natural deposits
Turbidity (NTU)	Well 3	08/03/16	16	NA	TT	NA	Soil runoff

TDS (mg/L)	Well 3	08/03/16	300	NA	1,000	NA	Runoff/leaching from natural deposits
Specific Cond (uS/cm)	Well 3	08/03/16	490	NA	1,600	NA	Substances that form ions when in water; seawater influence
Chloride (mg/L)	Well 3	08/03/16	21	NA	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	Well 3	08/03/16	23	NA	500	NA	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Carbon, Total Well 1 (mg/L)	04/04/22	7.1	7.1	2	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.
Chromium, Hex Well 1	05/15/17	2.6	2.6	10	Eating or drinking Cr6 may be harmful to humans. Studies show that Cr6 in drinking water may cause an increased risk of stomach cancer and reproductive harm. Direct contact with Cr6 can cause allergic skin rashes in some people.

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. **Freemark Abbey Winery** 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>.

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

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
Turbidity	SCM from well 3 on 08/03/16 of 16 NTU	Continuous	Well #3(Wilson) not currently in use.	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
Arsenic	SCM on 12/10/18 of 14 ug/L	Continuous	Well #3(Wilson) not currently in use.	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.
Color	SCM on 08/03/16 of 90 color UNITS	Continuous	Well #3(Wilson) not currently in use.	Aesthetic
Iron	SCM on 12/10/18 of 28,000 ug/L	Continuous	Well #3(Wilson) not currently in use.	Aesthetic
Manganese at well 3	SCM on 12/10/18 of 1800	Continuous	Well #3(Wilson) not currently in use.	Manganese exposures resulted in neurological effects. High levels of manganese in people have been shown to result in adverse

				effects to the nervous system.

For Water Systems Providing Groundwater as a Source of Drinking Water

**TABLE 7 – 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	NA	0	(0)	Human and animal fecal waste
Enterococci	0	NA	TT	N/A	Human and animal fecal waste
Coliphage	0	NA	TT	N/A	Human and animal fecal waste

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

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLE				
Not Applicable				
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES				
Not Applicable				
VIOLATION OF GROUNDWATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language

Summary Information for Federal 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

During the past year we were required to conduct **0** Level 1 assessment(s). **0** Level 1 assessment(s) were completed. During the past year **0** Level 2 assessments were required to be completed for our water system. **0** Level 2 assessments were completed.

Level 2 Assessment Requirement Due to an *E. coli* MCL Violation

We were not required to complete a Level 2 assessment in 2021.