2019 Consumer Confidence Report

Water System Name: Mariana Ranchos County Water District Report Date: June 29, 2020

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, 2019 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Mariana Ranchos County Water District a 9600 Manzanita Street, Apple Valley, Ca 92308 (760) 247-9405 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Mariana Ranchos County Water District以获得

中文的帮助: 9600 Manzanita Street, Apple Valley, Ca 92308 (760) 247-9405

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Mariana Ranchos County Water District 9600 Manzanita Street, Apple Valley, Ca 92308 o tumawag sa (760) 247-9405 para matulungan sa wikang Tagalog.

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Mariana Ranchos County Water District tại 9600 Manzanita Street, Apple Valley, Ca 92308 (760) 247-9405 để được hỗ trợ giúp bằng tiếng Việt.

Tsab ntawy no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Mariana Ranchos County Water District ntawm 9600 Manzanita Street, Apple Valley, Ca 92308 (760) 247-9405 rau kev pab hauv lus Askiv.

Type of water source(s) in use: 2 Deep Water Wells Name & general location of source(s): Well #1 – 9473 Manzanita Street and Well #2 – 9600 Manzanita Street, Apple Valley California 92308

Drinking Water Source Assessment information: The District conducted a source water assessment on July 26,1999. Copies may be obtained in the District office. The activities most vulnerable to the Mariana Ranchos CWD system are septic systems, illegal activities, unauthorized dumping and private wells.

Time and place of regularly scheduled board meetings for public participation: Third Thursday each month at 9:30AM in the District's offices located at 9600 Manzanita Street, Apple Valley, California 92308

James M. Hansen Jr For more information, contact:

Phone: (760) 247-9405

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

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 ($\mu g/L$)

ppt: parts per trillion or nanograms per liter (ng/L)

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MRDLs for contaminants that affect health along with their
monitoring and reporting requirements, and water treatment**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 –	SAMPLIN	IG RE	SUL	FS SHOW	'ING THE DE'	TECTI	ON OF	COLIFORM B	ACTERIA
Microbiological Contaminants (complete if bacteria detected)	Highest N Detectio		No. of Months in Violation		MCL			MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	(In a more 0	nth)		0	1 positive monthly sample			0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the ye	ear)		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 ye	ear)		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	– SAMPL	ING R	ESU	LTS SHO	WING THE D	ETECT	ION O	F LEAD AND (COPPER
Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. Samj Colle	ples	90 th Percentile Level Detected	Exceeding	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	09/20/19	10)	ND	NONE	15	0.2		Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	09/20/19	10)	0.11	NONE	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural

				deposits;	leaching from
				wood pre	servatives

	TABLE 3	– SAMPLING I	RESULTS FOR	SODIUM A	AND HARD	NESS	
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant	
Sodium (ppm) 05/13/19		12.5	12-13	None	None	Salt present in the water and is generally naturally occurring	
Hardness (ppm)	05/13/19	65.5	65-66	None	None	Sum of polyvalent cations present is the water, generally magnesium an calcium, and are usually naturally occurring	
TABLE 4 – DET	TECTION	DF CONTAMIN	ANTS 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	
Nitrate (as Nitrate, NO3) (ppm)	05/13/19	0.6	0.52-0.68	45	45	Runoff and leaching from fertilizer use: leaching from septic tanks, sewage: erosion of natural deposits	
Fluoride (ppm)	05/13/19	0.35	0.35-0.36	2.0	1.0	Runoff/leaching from natural deposits; Industrial wastes	
TABLE 5 – DETH	ECTION OF	CONTAMINA	NTS WITH A <u>S</u>	ECONDAR	<u>Y</u> DRINKIN	G WATER STANDARD	
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant	
Sulfate (mg/L)	05/13/19	9.75	9.6-9.9	500	N/A	Runoff/leaching from natural deposits; Industrial wastes	
Chloride (mg/L	05/13/19	3.95	3.4-4.5	500	N/A	Runoff/leaching from natural deposits; Seawater influence	
Specific Conductance (uS)	05/13/19	175	170-180	1600	N/A	Substances that form ions in water; Seawater influence	
Total Dissolved Solids (mg/L)	05/13/19	109.5	99-120	1000	N/A	Runoff/leaching from natural deposits	
Odor Threshold (units)	05/13/19	1	1	3	N/A	Naturally occurring organic materials	
Turbidity (units)	05/13/19	1.45	0.2-2.7	5	N/A	Soil runoff	
	TABLE	6 – DETECTION	N OF UNREGU	LATED CO	ONTAMINA	NTS	
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level		Health Effects Language	
NONE	NONE	NONE		NONE		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. Immunocompromised 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. Mariana Ranchos County Water District 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.

Mariana Ranchos County Water District completed monthly Bacteriological testing during the 2019 reporting period.

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

Mariana Ranchos County Water District had no violations during the 2019 reporting period.

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 PHG (MCLG) [MRDL] [MRDLG]		Typical Source of Contaminant			
E. coli	(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 Groundwater TT

Mariana Ranchos County Water District had no violations during the 2019 reporting period.

Summary Information for Operating Under a Variance or Exemption

Mariana Ranchos County Water District had no variances or exemptions during the 2019 reporting period.

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

Mariana Ranchos County Water District had no requirements for Level 1 or 2 assessments during the 2019 reporting period.

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

Mariana Ranchos County Water District had no requirements for Level 2 assessments during the 2019 reporting period.