

2022 Consumer Confidence Report

Water System Information

Water System Name: Knights Landing Community Services District #5710004 **Report Date:** 06/20/2023

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, 2022 to December 31, 2022 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse [Enter Water System's Name] a [Enter Water System's Address or Phone Number] para asistirlo en español.

Type of Water Source(s) in Use: Three (3) groundwater wells.

Name and General Location of Source(s): Third Street Well site (standby well only is located on the south side of Third Street east of Highway 113. Railroad Street Well site is located on the Northwest corner of Railroad Street and Highway 116. Ridgecut Well site is located at the end of Locust Street.

Drinking Water Source Assessment Information: N/A

Time and Place of Regularly Scheduled Board Meetings for Public Participation: 3rd Tuesday of each month.

For More Information, Contact: Leo Refsland @ (530)908-2077

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).
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.
Variations 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>	0	0	0	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

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)	09/30/22	10	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	09/30/22	10	0.12	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)	03/24/22	130	69 – 130	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	03/24/22	390	77 – 390	None	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
ug/L Arsenic* (Third St. Well)	03/24/22	12	12	10	0.0004	Erosion of natural deposits, runoff from orchards, runoff from glass & electronics production wastes.
ug/L Arsenic (Railroad St. Well)	03/24/22	4.5	4.5	10	0.0004	Erosion of natural deposits, runoff from orchards, runoff from glass & electronics production wastes.
ug/L Arsenic (Ridgecut Well)	03/24/22	3.4	3.4	10	0.0004	Erosion of natural deposits, runoff from orchards, runoff from glass & electronics production wastes.
mg/L Barium	03/24/22 07/25/22	0.21	ND – 0.21	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits.
mg/L Chlorine	Continuous	0.91	0.08 – 0.91	4	4	Drinking water disinfectant added for treatment.
mg/L Nitrate (Railroad St. Well)	03/24/22	1.1	1.1	10	10	Runoff & leaching from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits.
ug/L Total Trihalomethanes (TTHMs)	06/30/22	6.7	2.9 – 6.7	80	N/A	By-Product of drinking water chlorination.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
ug/L Haloacetic acids (HAA5)	06/30/22	2.4	1.0 – 2.4	60	N/A	By-Product of drinking water disinfection.
pCi/L Uranium	07/25/22	3.72	3.72	20	0.43	Erosion of natural deposits.
pCi/L Gross Alpha	07/25/22	3.86	3.86	15	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
mg/L Chloride	03/24/22	190	19 – 190	500	N/A	Runoff/leaching from natural deposits; seawater influence.
ug/L Iron*	03/24/22 & 06/09/23	1,500	ND – 1,500	300	N/A	Leaching from natural deposits; industrial wastes.
ug/L Manganese*	03/24/22 & 06/09/23	590	ND – 590	50	N/A	Leaching from natural deposits.
pH Units pH	03/24/22	7.98	7.59 – 7.98			
mg/L TDS	03/24/22	830	340 – 830	1,000	N/A	Runoff/leaching from natural deposits.
mg/L Sulfate	03/24/22	100	11 – 100	500	N/A	Runoff/leaching from natural deposits; industrial wastes.
umho/cm Specific Conductance	03/24/22	1,200	460 – 1,200	1,600	N/A	Substances that form ions. When in water sea water influence.
NTU Turbidity	03/24/22 & 06/09/23	3.3	0.1 – 3.3	5	N/A	Soil runoff.

* See Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
mg/L Boron	03/24/22	4.9	1.9 – 4.9	1.0	Boron exposures resulted in decreased fetal weight (developmental defects) in newborn rats.
ug/L Vanadium	03/24/22	12	ND – 12	50	Vanadium exposure resulted in developmental and reproductive defects in 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. [Enter Water System's Name] 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): N/A

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

Primary Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Arsenic (Third St Well)	Samples in 2022 were above MCL.		The Third St. Well has been put into standby mode & is not being used.	Some people who drink water containing arsenic in excess of MCL over many years may experience skin damage or circulatory system problems and may have an increased risk of getting cancer.
Secondary Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Iron	Only Railroad St. Well tested above the MCL, all others were below the MCL.		The Ridgecut Well is the primary well with the Railroad St. Well used only as a backup. Quarterly testing has been initiated and this will continue to be monitored.	Iron was found at levels that exceed the secondary MCL of 300 ug/L. 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. The high iron levels are due to leaching of natural deposits.
Manganese	The Railroad St. Well and Third St. Well tested above the MCL while this constituent was not detected at the Ridgecut Well		The Railroad St. Well is used for backup only while the Third St. Well is in standby mode and not being used. Quarterly testing has been initiated and this will continue to be monitored.	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 of the nervous system.

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>	0	Monthly	0	(0)	Human and animal fecal waste
Enterococci	0	Monthly	TT	N/A	Human and animal fecal waste
Coliphage	0	Monthly	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: N/A

Special Notice for Uncorrected Significant Deficiencies: N/A

Table 9. Violation of Groundwater TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
N/A	N/A	N/A	N/A	N/A