

2018 Consumer Confidence Report

Water System Name: **KNIGHTS LANDING COMMUNITY
SERVICE DISTRICT (CA 5710004)**

Report Date: **JUNE 24, 2019**

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, 2018 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse [KNIGHTS LANDING COMMUNITY SERVICE DISTRICT] a [530-662-1755] para asistirlo en español.

Type of water source(s) in use: **TWO (2) GROUND WATER WELLS**

Name & general location of source(s): **THIRD STREET WELL LOCATED ON THE SOUTH SIDE OF THIRD STREET EAST OF HIGHWAY 113; RAILROAD STREET WELL LOCATED IN THE SOUTHEAST CORNER OF THE SCHOOL YARD. (CURRENTLY THE RIDGE CUT WELL IS OUT OF SERVICE.)**

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: **TODD C. TOMMERAASON** Phone: **(530)662-1755**

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.

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.

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)	0	0	0 positive monthly samples	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	0	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	0	Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	0	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) 5 samples taken at school in 2018	02/15/18	5	ND	0	15	0.2	1	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	07/27/16	10	0.094	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)	02/29/16	75	62 – 75	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	02/29/16	160	130 – 160	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 Street Well)	02/15/18 05/16/18 08/07/18 11/07/18	14	11 – 14	10	0.0004	Erosion of natural deposits, runoff from orchards, runoff from glass & electronics production wastes.
ug/L Arsenic (Railroad Street Well)	02/15/18 08/07/18 11/07/18	5.2	4.7 – 5.2	10	0.0004	Erosion of natural deposits, runoff from orchards, runoff from glass & electronics production wastes.
mg/L Barium	02/29/16	0.11	ND – 0.11	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits.
mg/L Chlorine	Continuous	2.20	0.23- 2.20	4	4	Drinking water disinfectant added for treatment.
ug/L Ethylene dibromide (EDB)	02/15/18 05/16/18 08/07/18 11/07/18	ND	ND – ND	0.050	0.010	Discharge from petroleum refineries; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching from grain and fruit crops.
mg/L Fluoride	02/29/16	0.20	0.19- 0.20	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
NTU Turbidity	02/29/16	0.81	ND – 0.81	TT	N/A	Soil Runoff.
ug/L Total Trihalomethanes (TTHMs)	08/07/18	1.6	1.6	80	N/A	By-Product of drinking water chlorination.
ug/L Haloacetic acids (HAA5)	08/07/18	ND	ND	60	N/A	By-Product of drinking water chlorination.
pCi/L Gross Alpha	02/22/11	10.9	3.53 – 10.9	15	0	Erosion of natural deposits.
pCi/L Uranium	02/22/11	6.83	6.83	20	0.43	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	02/29/16	39	29 - 39	500	N/A	Runoff/leaching from natural deposits; seawater influence.
ug/L Iron (3 rd St Well)	02/15/18 05/16/18 08/07/18 11/07/18	180	130 – 180	300	N/A	Leaching from natural deposits; industrial wastes.
ug/L Manganese* (3 rd St Well)	02/15/18 05/16/18 08/07/18 11/07/18	130	98 – 130	50	N/A	Leaching from natural deposits.
pH Units pH	02/29/16 04/26/16	7.98	7.68 -7.98			
mg/L TDS	02/29/16	360	320 - 360	1000	N/A	Runoff/leaching from natural deposits.
mg/L Sulfate	02/29/16	23	14 - 23	500	N/A	Runoff/leaching from natural deposits; industrial wastes.
umho/cm Specific Conductance	02/29/16	650	570 - 650	1600	N/A	Substances that form ions when Ions water.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
mg/L Boron	02/29/16	1.1	1.1 – 1.0	1.0	Boron exposures resulted in decreased fetal weight (developmental defects) in newborn rats.
ug/L Vanadium	02/29/16	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. **KNIGHTS LANDING COMMUNITY SERVICE DISTRICT (CA 5710004)** 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>.

Arsenic: For systems that detect arsenic above 5 ppb, but below or equal to 10 ppb, the following language is Required.

While your drinking water meets the Federal and State Standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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
Arsenic (Third Street Well)	The average for the year was 12 ug/l at the Third Street Well which was above the MCL of 10 ug/l.		The Third Street Well has been put into standby mode and 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.
Manganese (Third Street Well)	The average for the year was 110 ug/l which is above the MCL of 50 ug/l.		The Third Street Well has been put into standby mode and is not being used.	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 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	Monthly	0	(0)	Human and animal fecal waste
Enterococci	Not Tested		TT	N/A	Human and animal fecal waste
Coliphage	Not Tested		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				
NONE				
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES				
NONE				
VIOLATION OF GROUNDWATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
NONE				