

2015 Consumer Confidence Report

Water System Name: Stallion Springs CSD Report Date: August 2016

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, 2015 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Groundwater from seven (7) wells

Name & location of source(s): CV #1, CV #2, Leisure, Y-23, P-17, Buckpasser , and Bold Venture Wells

Drinking Water Source Assessment information: Available at the Stallion Springs CSD office for review.

Time and place of regularly scheduled board meetings for public participation: Meetings are held the third Tuesday of each month at: 27800 Stallion Springs Drive, Tehachapi, CA @ 6:00 p.m.

For more information, contact: Assistant General Mgr. Mike Grant Phone: 661-822-3268

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 (USEPA).

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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

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: Department permission 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 (ug/L)

ppt: parts per trillion or nanograms per liter (ng/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 USEPA and the state Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

The attached tables 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 Department 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.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	mclg	Typical Source of Bacteria
Total Coliform Bacteria*	(In a mo.) <u>3</u>	1	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) <u>0</u>	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) Sample Date: 9/16/2015	10	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) Sample Date: 9/16/2015	10	0.27	0	1.3	0.17	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	Typical Source of Contaminant
Sodium (ppm)	2015	80.5	66-95	none	none	Generally found in ground & surface water
Hardness (ppm)	2015	75	10-140	none	none	Generally found in ground & surface water

*Any violation of an MCL or AL is marked with an asterisk. Additional information regarding the violation is provided later in this report.

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
Uranium (pCi/L)	2010	1.65	ND-4.64	15	(0)	Erosion of natural deposits
Gross Alpha (pCi/L)	2012	ND	ND	15	(0)	Erosion of natural deposits
Arsenic (ppb)	2015	2.65	2.1-3.2	10	0.004	Erosion of natural deposits
Radium 228	2015	ND	ND	5	(0)	Erosion of natural deposits
Chlorine	Daily	0.5	0.2-2.0	4	4	Drinking water disinfectant added for treatment
Fluoride (ppm)	2015	0.44	0.16-0.72	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as NO ₃ (ppm)	2015	26.41	ND-47	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate as N (ppm)	2015	5.62	0.15-12	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite (ppm)	2015	0.065	ND-0.13	1	1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2015	ND	ND	50	50	Erosion of natural deposits
Perchlorate (ppb)	2015	2.64	ND-8.9	6	6	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2015	59.5	19-100	500	N/A	Runoff from natural deposits
Iron (ppb)	2015	ND	ND	300	N/A	Leaching from natural deposits
Color (units)	2015	1.0	1.0	15	N/A	Naturally occurring organic material
Odor (units)	2015	ND	ND	3	N/A	Runoff/leaching from natural deposits
Sulfate (ppm)	2015	42.5	21-64	500	N/A	Runoff/leaching from natural deposits
Total Dissolved Solids (ppm)	2015	315	200-430	1000	N/A	Runoff/leaching from natural deposits
Turbidity (NTU units)	2015	0.15	0.11-0.19	5	N/A	Soil runoff
Specific Conductance (uS/cm)	2015	476	290-662	1600	N/A	Substances that form ions when in water; seawater influence

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 6 – STAGE 2 DETECTION OF DISINFECTANTS/DISINFECTION BYPRODUCT RULE MONITORING						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Total Trihalomethanes (TTHMs) (ppb)	2015	5.3	5.3	80	N/A	Byproduct of drinking water disinfection
Haloacetic Acids (5) (HAA5) (ppb)	2015	2.5	2.5	60	N/A	Byproduct of drinking water disinfection

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
Total Coliform Rule	Our water system failed the drinking water standard for total coliform during July 2015. We believe the failure was due to a very low chlorine residual in the storage tank that supplies that part of our system.	Month of July	We are implementing a dosage schedule for this tank to ensure we maintain at least a .25 mg chlorine residual in the system.	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other; potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

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 USEPA'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. 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 (1-800-426-4791).

FOOTNOTES:

Lead: 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. Stallion Springs CSD 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 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/safewater/lead>.

Infants and young children are typically more vulnerable to lead in drinking water than the general population.

Chlorine: some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.”

Nitrate: in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant’s blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Perchlorate: has been shown to interfere with uptake of iodide by the thyroid gland, and to thereby reduce the production of thyroid hormones, leading to adverse effects associated with inadequate hormone levels. Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.

Why are the term’s “ppm” and “ppb” Important?

The terms refer to exposure standards and guidelines created to protect the public from harmful substances that can cause serious health effects. Exposure standards and guidelines are created from risk assessments that include dose response, exposure and hazard identification assessments. The following comparisons and information may be helpful:
1 standard atmosphere of water (1 liter of pure water at 4 degrees Celsius) weights 1,000,000 mg or one (1) kilogram (2.2 lbs.); 1 liter = 1.06 quarts.
One ppb = 1 inch in 16,000 miles; 1 cent in \$10 million; 1 second in 32 years; one drop in an Olympic swimming pool.
One ppm = 1 inch in 16 miles; 1 minute in 2 years; 1 cent in \$10,000; one drop in 55 gallons.