KEYES CSD
P.O. BOX 699
Keyes, California 95328

Keyes Community Services District
2017 Consumer Confidence Report

Este Informe contiene informaction muy importante sobre suy agua potable. Traduzcalo o hable con alguien que to entienda bien.

We are pleased to present to you this year`s Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is 4 groundwater wells. Well 7 is located at the south end of Hatch Park, Well 8 at 5536 9th Street, Well 9 at 5400 block of Faith Home Road and Well 10 at 4741 Lucinda Avenue.

We have a source water assessment plan available from our office that provides more information such as potential sources of contamination.

CONTACT INFORMATION:

If you have any questions about this report or concerning your water utility, please contact Michael Jones/Maintenance Supervisor at (209) 668-8341. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings.

Meeting Location: Keyes CSD Board Room 5601 7th Street
Meeting Time: 1:00 PM. Every 4th Tuesday of the month

Keyes Community Services District routinely monitors for constituents in your drinking water according to Federal and State laws. The source 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 it dissolves naturally occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity. Contaminates 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 storm water 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 storm water runoff, and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by products of industrial processes and petroleum production, and can also come from gas stations, agricultural application and septic systems. Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

It is important to remember that the presence of these constituents does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as a person 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 EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800) 426-4791)

DEFINITIONS:

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we`ve provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - (mandatory language) The `Maximum Allowed` (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - (mandatory language) The `Goal`(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - (mandatory language) 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) - (mandatory language) 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.

The following tables 1-8 show the results of our monitoring for the period January 1st to December 31, 2017

Table 1 - Sampling Results of Coliform Bacteria

Contaminant	Violation	Your Water	Range of Detection	MCL	MCLG	Typical Source
Microorganisms						
Total Coliforms (including fecal coliform and E. Coli) Collection Dates: 01/17/2017-12/14/2017	N	0	0-0	More than 1 sample in a month with a detection	0	Naturally present in the environment

Table 2 - Results of Lead and Copper

Substance	Number of samples collected	90th percentile level detected	No. sites exceeding Action Level (AL)	Action Level (AL)	PHG	Typical Source(s) when found in Drinking Water
Inorganic Chemicals						
Lead (ppb) Collection Date: 08/19/2015		<0.007	0	AL=15	0	Corrosion of household plumbing systems, erosion of natural deposits
Unregulated Contaminants						
Copper (ppm) Collection Date: 08/19/2015		<0.051	0	AL=1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 3 - Results of Sodium and Hardness

Contaminant	Violation	Your Water	Range of Detection	MCL	MCLG	Typical Source(s) when found in Drinking Water
Secondary/GP						
Sodium (ppm) Collection Dates: 10/20/2015-03/21/2017	N	31	28-35.0	None	None	Salt present in the water and is generally naturally occurring.
Total Hardness (ppm) (CaCO3) Collection Dates: 10/20/2015-03/21/2017	N	183.5	133.0-205.2	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring.

Table 4 - Primary Drinking Water Standards

Substance	Violation	Your Water	Range of Detection	MCL	PHG (MCLG)	Typical Source(s) when found in Drinking Water
Inorganic Chemicals						
Arsenic (ppb) Collection Dates: 10/20/2015-10/19/2017	Y	13	6.3-19.0	10	0.004	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Chromium VI (ppb) Collection Dates: 08/18/2014-10/17/2017	N	6.4	5.4-6.9		0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Fluoride (ppm) Collection Dates: 10/20/2015-03/21/2017	N	<0.1	<0.1-0.1	2.0	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate+Nitrite (ppb) Collection Dates: 10/20/2015-04/18/2017	N	2,007	0.88-8023	10000		Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate/Nitrite						
Nitrate (ppm) (measured as Nitrogen) Collection Dates: 01/17/2017-	N	7.2	1.4-9.9	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

12/14/2017

Table 5 - Secondary Drinking Water Standards

Substance	Violation	Your Water	Range of Detections	MCL	MCLG	Typical Source(s) when found in Drinking Water
Secondary/GP						
Chloride Collection Dates: 10/20/2015-03/21/2017	N	9.7	7.8-11.1	500	N/A	Runoff and leaching from natural deposits; seawater influence.
Specific Conductance (E.C.) Collection Dates: 10/20/2015-03/21/2017	N	313	263-384	1600	N/A	Runoff and leaching from natural deposits; seawater influence.
Sulfate Collection Dates: 10/20/2015-03/21/2017	N	8.4	4.3-13.2	500	N/A	Substances that form ions when in water; industrial wastes
Total Dissolved Solids (Total Filterable Residue @ 180 C (TDS)) Collection Dates: 10/20/2015-03/21/2017	N	232	156-283	1000	N/A	Runoff and leaching from natural deposits.
Turbidity Collection Dates: 10/20/2015-03/21/2017	N	0.21	0.09-0.30	TT	n/a	Soil runoff

Table 6- Detection of Unregulated Contaminants

Substance	Violation	Your Water	Range of Detection	Notification Level	PHG	Typical Source
Unregulated Contaminants						
1,2,3-Trichloropropane (ppt) Collection Dates: 01/17/2017-10/17/2017	N	43	7-92	NL = 5	0.7	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent, byproduct during the production of other compounds and pesticides.

Table 7 - Results for Disinfectant Byproducts

Substance	Violation	Your Water	Range of Detection	MCL	PHG	Typical Source
Disinfection Byproducts						
Haloacetic acids (HAA5) Collection Date: 07/18/2017	N	<2.0	<2.0-<2.0	60	0	By-product of drinking water disinfection
Total Trihalomethanes (ppb) (TTHMs) Collection Date: 07/18/2017	N	0.54	0.54-0.54	80	n/a	By-product of drinking water chlorination

Table 8- Results for Chlorine Residuals

Substance	Violation	Your Water	Range of Detections	MRDL	MRDLG	Typical Source
Disinfectant Residual						
Chlorine Residual (ppm) (Chlorine - Free) Collection Dates: 01/17/2017-12/12/2017	N	0.36	0.09-0.62	MRDL = 4	MRDLG = 4	Drinking water disinfectant added for treatment.

EXPLANATIONS:

MCL' s are set at very stringent levels. The MCL's are set such that out of every 10,000 or 1,000,000 people (depends upon how the MCL was developed) drinking 2 liters of water every day for a lifetime, only 1 of those people may experience the described health effect.

Effective January 23, 2006, the federal arsenic MCL is 10ppb. Wells 8, 9, and 10 have exceeded the 10 ppb. Quarterly monitoring of the well water is required at these wells. Keyes CSD must provide public notification regarding the exceedance. The most recent public notification was mailed to our customers on May 29, 2018 and posted at the Keyes Community Services District Office.

123 TCP Became a Regulated Contaminant on 12/14/2017. Testing for 2017 was done prior to it becoming a regulated contaminant.

HEALTH EFFECTS:

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer.

Some people drinking water containing trihalomethanes more than the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Nitrate in drinking water at levels above the 10ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Nitrates; As a pre-caution we always notify physicians and health care providers in this area, if there ever is a higher than normal level of nitrates in the water supply

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. Keyes Community Services District is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing component's. 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 or at http://www.epa.gov/safewater/lead

3 Schools requested lead sampling be conducted in 2018; Keyes Elementary School, Keyes to Learning Charter School, & Spratling Middle School. Sampling was completed in April.

Some people who use water containing 123-TCP more than the notification level over many years may have an increased risk of getting cancer, based on studies in laboratory animals.

Please call our office if you have questions. We at Keyes Community Services District work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.