**Lake Francis Mutual Water Company**
**2017 Water Quality Consumer Confidence Report**
**Public Water System Number 5800805**

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

For additional information concerning your drinking water, contact **Terry Patton at 530 692-1082** or **Kevin Timms at 530 870 2471**

Water for the Lake Francis Mutual water Co originates from a groundwater well-known as Well#5. 2 back-up wells not currently being used are #3, #4

**DEFINITIONS OF SOME OF THE 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 technologically, and economically feasible.

**Primary Drinking Water Standards (PDWS):** MCLs for Contaminants that affect health along with their monitoring and reporting requirements, and surface 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.

**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 Federal Environmental Protection Agency (USEPA).

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**pCi/L:** picocuries per liter (a measure of radiation)

**ppb:** parts per billion or micrograms per liter

**ppm:** parts per million or milligrams per liter

**nd**: non detectable at testing limit

**TDS:** Total Dissolved Solids

**MICROBIOLOGICAL WATER QUALITY:**

Testing for bacteriological Contaminants in the distribution system is required by State regulations. This testing is done regularly to verify that the water system is free from coliform bacteria. The minimum number of tests required per month is one. In our distribution system, we test the water once per month for coliform bacteria. The highest number of samples found to contain coliform bacteria during any one month was **one**

**LEAD & COPPER TESTING RESULTS:**

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, components associated with service lines and home plumbing. Lake Francis Mutual Water Co 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 exposure by flushing your tap for 30 seconds to 2 minutes before using for dinking or cooking. If you are concerned about lead you may wish to have your water tested More info on lead in drinking water can be found at http://www.epa.gov/safewater.lead.The table below summarizes the most recent sampling for lead and copper.

| | Year | Number of samples collected | # of above AL | 90th Percentile Result (ppb) | AL | MCLG |
|---|---|---|---|---|---|---|
| Lead | 2016 | 5 | 0 | 0.484 | 15 | |
| Copper | 2016 | 5 | 0 | 33.4 | 1300 | |

**DETECTED CONTAMINANTS IN OUR WATER:**

The following table gives a list of all detected chemicals in our water during the most recent sampling. Please note that not all sampling is required annually so in some cases our results are more than one year old. These values are expressed in ppm unless otherwise stated.

| Chemical Detected | Source | Year Tested | Level Detected | MCL | PHG | Origin |
|---|---|---|---|---|---|---|
| TDS | Well 5 | 2016 | 260 ppm | 1000 | None | Naturally occurring |
| Chloride | Well 5 | 2016 | 12.7 ppm | 500 | None | Naturally occurring |
| Hardness | Well 5 | 2016 | 140ppm | None | None | Naturally occurring |
| Sodium | Well 5 | 2016 | 55 ppm | None | None | Naturally occurring |
| Color | Well 5 | 2016 | 8 units | 15 | None | Naturally occurring organic matter |
| Specific Conductance | Well 5 | 2016 | 490 us/cm | 1600 | None | Substances that form ions when in water; seawater influence |
| Iron | Well 5 | 2017 | 276 ppb | 300 | None | Erosion & leaching of natural deposits |
| Sulfate | Well 5 | 2016 | 63.7 ppm | 500 | None | Runoff/leaching from natural deposits; industrial wastes |
| Gross Alpha | Well 5 | 2010 | 0.492 pCi/l | 15 | None | Decay of natural and man-made deposits |
| Arsenic | Well 5 | 2017 | 14.5 ppb | 10 | 0.004 | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| Beryllium | Well 5 | 2012 | 2.1 ppb | 4 | 1 | Discharge from metal refineries; coal burning factories; and electrical aerospace; and defense industries |
| Cadmium | Well 5 | 2012 | 3.8 ppb | 5 | 0.04 | Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories; and metal refineries; runoff from waste batteries and paints |
| Chromium (Total) | Well 5 | 2012 | 10 ppb | 50 | 100 | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| Barium | Well 5 | 2015 | 9.9 ppb | 1000 | 2000 | Discharge of oily drilling wastes and from the metal refineries, erosion & leaching of natural deposits |
| Fluoride | Well 5 | 2015 | 0.262 ppm | 2000 | 1000 | Erosion & leaching of natural deposits |
| Selenium | Well 5 | 2015 | 0.98 ppb | 0.05 ppm | 0.005 ppm | Erosion & Leaching of natural deposits |
| Nitrates | Well 4 | 2017 | Non-detect | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; Erosion & leaching of natural deposits |
| Arsenic | Well 4 | 2017 | 0.39 ppb | 10 | 0.004 | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| Arsenic | Blended | 2017 | 5.97 ppb | 10 | 0.004 | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| Chromium 6 | Well 4 | 2016 | 0.015 ppb | 10 | 10 | Erosion of natural deposits |
| Turbidity | Well 5 | 2016 | 2.6 NTU | 5 | None | Erosion & leaching of natural deposits |
| Odor | Well 5 | 2016 | 8.0 TON | 15 | None | Naturally occurring organic mterial |
| Manganese | Well 5 | 2016 | 13 ppb | 50 | None | Erosion of natural deposits |
| Sodium | Well 4 | 2017 | 29 ppm | None | None | Naturally occurring |
| Sulfate | Well 4 | 2017 | 66.5 ppm | 500 | None | Runoff/leaching from natural deposits; industrial wastes |
| Chloride | Well 4 | 2017 | 14.1 ppm | 500 | None | Naturally occurring |
| Fluoride | Well 4 | 2017 | 0.170 ppm | 2000 | 1000 | Erosion & leaching of natural deposits |
| Gross Alpha | Well 4 | 2017 | 2.31 pCi/l | 15 | None | Decay of natural and man-made deposits |
| Radium 228 | Well 4 | 2017 | <0.825 pCi/l | 15 | None | Decay of natural and man-made deposits |
| Color | Well 4 | 2017 | 1 units | 15 | None | Naturally occurring organic matter |
| Hardness | Well 4 | 2017 | 190 ppm | None | None | Naturally occurring |
| TDS | Well 4 | 2017 | 350 ppm | 1000 | None | Naturally occurring |
| Specific Conductance | Well 4 | 2017 | 470 us/cm | 1600 | None | Substances that form ions when in water; seawater influence |
| Barium | Well 4 | 2017 | 9.5 ppb | 1000 | 2000 | Discharge of oily drilling wastes and from metal refineries, Erosion & leaching of natural deposits |
| Copper | Well 4 | 2017 | 2.4 ppb | 1.0 ppm | | Internal corrosion of household plumbing systems: erosion of natural deposits: leaching from wood preservatives |
| Nickel | Well 4 | 2017 | 0.74 ppb | 0.1 ppm | | Erosion of natural deposits: discharge from metal factories |
| Selenium | Well 4 | 2017 | 0.45 ppb | 0.05 ppm | | Discharge from Petroleum, glass, and metal refineries: erosion of natural deposits: discharge from mines and chemical manufactures; runoff from livestock lots (feed additive) |
| Zinc | Well 4 | 2017 | 9.8 ppb | 5.0 ppm | | Runoff/leaching from natural deposits: industrial wastes |

**GENERAL INFORMATION ON DRINKING WATER:**

All 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 at 1-800-426-4791.

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, which 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, which 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, which 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. Environmental Protection Agency (USEPA) and the State Department of Health Services (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

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 individuals, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The

USEPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Arsenic:

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

**SOURCE WATER ASSESSMENT:**

A source water assessment was completed in 2001 for the well serving Lake Francis Mutual Water Co. The sources are considered most vulnerable to the following activities not associated with any detected contaminants:

Low-density septic systems (All Wells)

A copy of the complete assessment may be viewed at:

Yuba County Environmental Health

915 8th Street Suite 123

Marysville CA 95901

**VIOLATION INFORMATION:**

Lake Francis Mutual Water Co violated the MCL for Iron in 2013. The MCL was set to protect you against unpleasant aesthetic effects(e.g., color, taste, and odor) and the staining of plumbing and fixtures and clothing while washing. The high Iron levels are due to leaching of natural deposits. The system will be conducting quarterly testing in 2014 to help determine the most appropriate type of treatment. Lake Francis Mutual water violated MCL for Arsenic. Well#4 & Well#5 water is blended together at well site to lower Arsenic levels to meet MCL

**ADDITIONAL INFORMATION:**