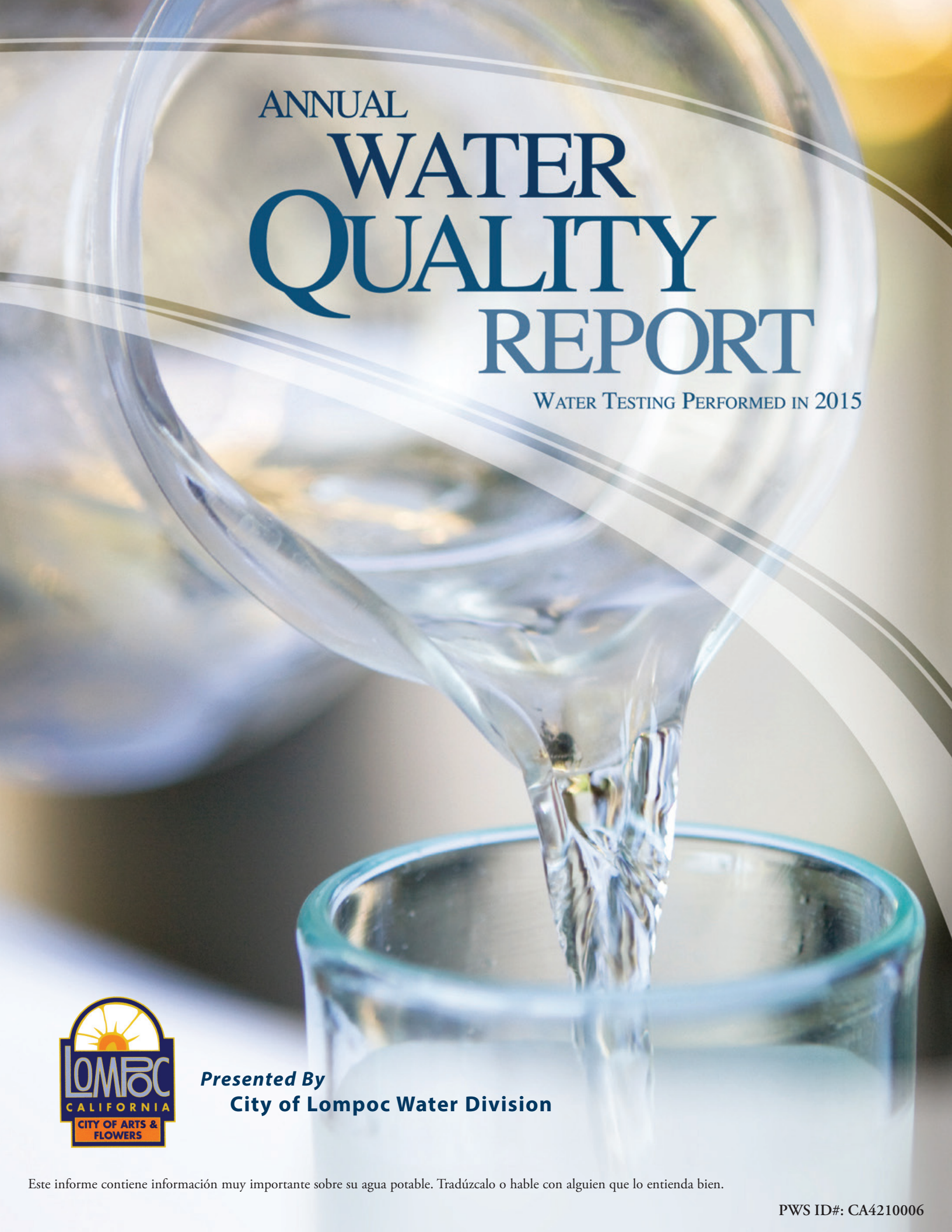

# ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2015

LOMPOC CALIFORNIA CITY OF ARTS & FLOWERS

***Presented By***

**City of Lompoc Water Division**

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

**PWS ID#: CA4210006**

## Meeting the Challenge

Once again we are proud to present our annual drinking water report, covering all drinking water testing performed between January 1 and December 31, 2015. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to your homes and businesses. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

## Community Participation

Included in the oversight of the Water Division are the City Council and Utility Commission.

The Lompoc City Council meets the first and third Tuesdays of each month, where public communication time is available. Meetings are held at 6:30 p.m. at 100 Civic Center Plaza, Lompoc City Hall, Council Chambers.

You are also invited to participate in the monthly Utility Commission meetings, held on the second Monday of the month, starting at 6 p.m. at 100 Civic Center Plaza, Lompoc City Hall, Council Chambers. Time for public communications is scheduled at the beginning of the meeting agenda.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

## Substances That Could Be in 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. 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 water poses a health risk.

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 can 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 by-products of industrial processes and petroleum production and that can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

**Radioactive Contaminants**, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 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 or at www.epa.gov/lead.

## Tip Top Tap

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

### Kitchen Sink and Drain

Hand washing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed-up water in which bacteria (e.g., pink and black slime) can grow and contaminate the sink area and faucet, causing a rotten egg odor. Disinfect and clean the sink and drain area regularly. Also, flush regularly with hot water.

### Faucets, Screens, and Aerators

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets and can collect particles like sediment and minerals resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis.

Check with your plumber if you find particles in the faucet screen as they could be pieces of plastic from the hot water heater dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet gasket with a higher-quality product. White scaling or hard deposits on faucets and shower heads may be caused by hard water or water with high levels of calcium carbonate. Clean these fixtures with vinegar or use water softening to reduce the calcium carbonate levels for the hot water system.

### Water Filtration and Treatment Devices

A smell of rotten eggs can be a sign of bacteria on the filters or in the treatment system. The system can also become clogged over time so regular filter replacement is important. (Remember to replace your refrigerator filter!)

## Source Water Assessment

Source water assessments of Lompoc City wells 1-9 were completed in 2001. They assess the delineated areas around our wells through which contaminants, if present, could migrate and reach our source water. They also include inventories of potential sources of contamination within the delineated areas, and a determination of the water supply's susceptibility to contamination by the identified potential sources. Information from these reports can be obtained by calling the Water Treatment Plant at (805) 736-1617.

A Groundwater Management Plan was completed in 2013 and is available on the City of Lompoc Web site at www1.cityoflompoc.com/utilities/water/lompocGWMPNOV13.pdf. This plan outlines objectives to maintain a sustainable, reliable, high-quality groundwater supply for the long term.

An Urban Water Management Plan was completed in 2010 and is available on the City of Lompoc website at www1.cityoflompoc.com/utilities/water/2010_LompocUWMP.pdf. This plan contains demographics, water supply sources, reliability planning, Demand Management Measures, a shortage contingency plan, a recycling plan, service reliability, and historical static water levels at the City wells.

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Mimi Erland, Water Treatment Plant Chemist, at (805) 736-1617, or visit our City of Lompoc Water Division Web site at http://www.cityoflompoc.com/utilities/water/.

## Where Does My Water Come From and How Is It Treated?

The City of Lompoc's source of supply is from ten groundwater wells. The annual production of clean drinking water for the City in 2015 was 1.4 billion gallons or 3.8 million gallons per day (MGD). The City uses a conventional treatment process to ensure the safety and quality of our drinking water. Constructed in 1964, the treatment process consists of disinfection, coagulation, flocculation, sedimentation, and filtration. With some enhancements and additions of filters, our production capability is approximately 10 MGD.

A few customers in Miguelito Canyon, including Santa Barbara County Miguelito Park, receive treated surface water from the Frick Springs treatment plant operated by the City of Lompoc. The water is collected from seven springs located in the upper hills of Miguelito Canyon and is treated using diatomaceous earth (DE) filtration and Chlorine disinfection. Frick Springs water treatment plant must comply with the Surface Water Treatment Rule (SWTR). The annual production for Frick Springs was 2.2 million gallons, with a daily average of 6,000 gallons.

## We're on the Web!

To view this Consumer Confidence Report online, please visit the following Web site:

http://www1.cityoflompoc.com/departments/utilities/2015ccr.pdf

Hard copies will be located at Lompoc City Hall, the Lompoc Library, and the Water Treatment Plant. If you would like a paper copy of the 2015 CCR mailed to your address, please call the Water Treatment Plant at (805) 736-1617.

## Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

**REGULATED SUBSTANCES**

| | | | | City of Lompoc Water Division | | Frick Springs | | | |
|---|---|---|---|---|---|---|---|---|---|
| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | PHG (MCLG) [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
| **Arsenic** (ppb) | 2015 | 10 | 0.004 | 5 | ND–5 | 4 | NA | No | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| **Barium** (ppm) | 2015 | 1 | 2 | 0.0307 | NA | 0.0777 | NA | No | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits |
| **Cadmium** (ppb) | 2015 | 5 | 0.04 | ND | NA | 0.5 | NA | No | 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 |
| **Chlorine** (ppm) | 2015 | [4.0 (as Cl2)] | [4 (as Cl2)] | 1.58 as Total Cl2 | 1.21–1.58 | 1.39 (as Free Cl2) | 0.65–1.74 | No | Drinking water disinfectant added for treatment |
| **Chromium** (ppb) | 2015 | 50 | (100) | ND | NA | 1 | NA | No | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| **Fluoride**[1] (ppm) | 2015 | 2.0 | 1 | 0.3 | NA | 0.2 | NA | No | Erosion of natural deposits; discharge from fertilizer and aluminum factories |
| **Nickel** (ppb) | 2015 | 100 | 12 | 1 | NA | 4 | NA | No | Erosion of natural deposits; discharge from metal factories |
| **Nitrate [as nitrogen]** (ppm) | 2015 | 10 | 10 | 0.4 | ND–0.4 | ND | NA | No | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| **Selenium** (ppb) | 2015 | 50 | 30 | 3 | NA | 9 | NA | No | Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive) |

| Stage 2 Disinfection/Disinfection By-Products | | | | City of Lompoc Water Division | | Frick Springs | | | |
|---|---|---|---|---|---|---|---|---|---|
| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | PHG (MCLG) [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
| **Haloacetic Acids (HAAs)** (ppb) | 2015 | 60 | NA | ND | NA | 6 | NA | No | By-product of drinking water disinfection |
| **TTHMs [Total Trihalomethanes]** (ppb) | 2015 | 80 | NA | 2.0 | 1.4–2.0 | 44.7 | NA | No | By-product of drinking water disinfection |

**Tap water samples are collected every three years for lead and copper analyses with the cooperation of 31 homeowners throughout the community. Next sampling to take place summer of 2016**

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | PHG (MCLG) | AMOUNT DETECTED (90TH%TILE) | SITES ABOVE AL/TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|
| **Copper** (ppm) | 2013 | 1.3 | 0.3 | 0.153 | 0/31 | No | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| **Lead** (ppb) | 2013 | 15 | 0.2 | 1.4 | 0/31 | No | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |

## SECONDARY SUBSTANCES

| | | | | City of Lompoc Water Division | | Frick Springs | | | |
|---|---|---|---|---|---|---|---|---|---|
| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | SMCL | PHG (MCLG) | AMOUNT DETECTED | RANGE LOW-HIGH | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
| **Chloride** (ppm) | 2015 | 500 | NS | 127 | 92–171 | 57 | NA | No | Runoff/leaching from natural deposits; seawater influence |
| **Manganese** (ppb) | 2015 | 50 | NS | 2.8 | 0.6–2.8 | ND | NA | No | Leaching from natural deposits |
| **Specific Conductance** (µS/cm) | 2015 | 1,600 | NS | 1,283 | 1,147–1,479 | 930 | 896–953 | No | Substances that form ions when in water; seawater influence |
| **Sulfate** (ppm) | 2015 | 500 | NS | 420 | 370–505 | 79 | NA | No | Runoff/leaching from natural deposits; industrial wastes |
| **Total Dissolved Solids** (ppm) | 2015 | 1,000 | NS | 839 | 716–956 | 580 | NA | No | Runoff/leaching from natural deposits |
| **Turbidity**[2] (NTU) | 2015 | 5 | NS | 0.05 | 0.03–0.09 | 0.09 | 0.02–0.30 | No | Soil runoff |

## UNREGULATED SUBSTANCES

| | | City of Lompoc Water Division | | Frick Springs | | |
|---|---|---|---|---|---|---|
| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AMOUNT DETECTED | RANGE LOW-HIGH | AMOUNT DETECTED | RANGE LOW-HIGH | TYPICAL SOURCE |
| **Calcium** (ppm) | 2015 | 68 | 52–84 | 84 | NA | Runoff/leaching from natural sources |
| **pH** (Units) | 2015 | NA | 7.62–8.80 | NA | 7.40–7.72 | pH is raised to aid in treatment and help prevent pipe corrosion |
| **Sodium**[3] (ppm) | 2015 | 161 | 137–184 | 37 | NA | Sodium refers to the salt present in the water and is generally naturally occurring |

## UNREGULATED CONTAMINANT MONITORING RULE PART 3 (UCMR3)

| | | City of Lompoc Water Division | | Frick Springs | | Groundwater Sample Station #3 | | Surface Water Sample Station #1 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AMOUNT DETECTED | RANGE LOW-HIGH | AMOUNT DETECTED | RANGE LOW-HIGH | AMOUNT DETECTED | RANGE LOW-HIGH | AMOUNT DETECTED | RANGE LOW-HIGH | TYPICAL SOURCE |
| **Chlorate** (ppb) | 2013 | 295 | 250–340 | 155 | 130–190 | 300 | 260–340 | 168 | 130–200 | NA |
| **Chromium** (ppb) | 2013 | 0.43 | 0.32–0.53 | 1 | ND–1 | 0.36 | 0.27–0.45 | ND | NA | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| **Chromium VI [Hexavalent Chromium]** (ppb) | 2013 | 0.36 | 0.30–0.41 | 0.027 | ND–0.044 | 0.32 | 0.31–0.32 | 0.040 | 0.032–0.051 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
| **Molybdenum** (ppb) | 2013 | 19 | 18–20 | 39 | 36–42 | 19 | 18–19 | 42 | 39–43 | NA |
| **Strontium** (ppb) | 2013 | 525 | 510–540 | 148 | 140–160 | 490 | 440–540 | 160 | 150–170 | NA |
| **Vanadium**[4] (ppb) | 2013 | 0.41 | 0.36–0.46 | 16[5] | NA[5] | 0.41 | 0.34–0.47 | 14 | 12–15 | Naturally occurring |

[1] Our treatment process does not add Fluoride.

[2] Turbidity is a measure of the cloudiness of the water. We monitor it because high levels can interfere with disinfection and provide a medium for microbial growth. These organisms may include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

[3] Our disinfection and softening processes add sodium to the drinking water. Consumers on sodium-restricted diets may wish to consult with their physicians.

[4] The babies of some pregnant women who drink water containing Vanadium in excess of the 50 ppb notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

[5] Sampled in 2015.

## Definitions

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

**µS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

**MCL (Maximum Contaminant Level):** 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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

**MCLG (Maximum Contaminant Level Goal):** 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. EPA.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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.

**NA:** Not applicable

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NS:** No standard

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**PDWS (Primary Drinking Water Standard):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**PHG (Public Health Goal):** 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 EPA.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).