

2016 WATER QUALITY REPORT

The City of Kelso gets its water from a groundwater well

In 2016 the City of Kelso maintained water quality compliance and tested for all required substances. Starting with good water quality is only a small part of the picture. The valuable distribution assets (piping, valves, hydrants, reservoirs, pumping, meters and pressure stations) and their ongoing operation and maintenance are just as vital to the community and public health.

It is the Mission to: Plan, Prioritize, Construct, Operate and Maintain Public Infrastructure in order to provide continuous health and safety while positively impacting citizen's quality of life by efficiently and innovatively maximizing available resources within the city so that we provide high quality services for the public.

that was constructed in 1978. The well is located on the banks of the Cowlitz River and is determined by the Department of Health to be groundwater under the influence of surface water. This means we must treat our water to the higher surface water standards. **The City of Kelso Water Treatment Plant, starts with a high quality source water and further treats it. Our goal is to continue producing "optimal filtered water" 100% of the time.** The City of Kelso also supplies water to some, Beacon Hill Water & Sewer District customers in outlying parts of Kelso & to the Davis Terrace Water Association.

Get Involved: We encourage public interest in our community's decisions affecting drinking water. Your City Council meets the first and third Tuesday of each month in the Council Chambers, located in Kelso at 203 South Pacific, meetings start at 6:00 PM. Information about your water and other departments can also be found at the City's web page. <http://www.kelso.gov>. **El informe contiene informacion importante sobre la calidad del agua en su comunidad. Traduzcal o hable con alguien que lo entienda bien.**

YOUR WATER IS SAFE TO DRINK



Tips to Reduce Copper And Lead Levels that may leach from household 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. The City of Kelso 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 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 drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater/lead>." **30 Kelso residents were sampled in 2014, with great results for lead and copper.**

Use Water Wisely - Check out our web page for more water tips and our annual Water Use Efficiency Report - at <http://www.kelso.gov>

Indoor Water Conservation Tips:

- ◆ Fix leaky plumbing fixtures, faucets and appliances in the house.
- ◆ Run only full loads in the washing machine and dishwasher.
- ◆ Install water saving devices.
- ◆ Turn the water off while shaving and brushing your teeth.

Outdoor Water Conservation Tips:

- ◆ Sweep rather than hose down, sidewalks, driveways, and other impervious surfaces.
- ◆ Add organic matter such as a compost or peat moss to your soil to improve its ability to retain water.
- ◆ Water prudently only when necessary and in the morning or late evening when temperatures are cooler.
- ◆ Mow higher, longer grass holds soil moisture better than a shorter lawn.

Plant staff prepared this report. If you have any questions about water quality or would like additional information please call us at (360-577-1085)

Some people may be more vulnerable to contaminants in drinking water than is 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 systems 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 and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791). **The City of Kelso started a monthly cryptosporidium testing program on our untreated water starting in October of 2016 and will continue to test for the next 24 months.**

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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in water sources include microbes, pesticides, herbicides, organic or inorganic chemicals and radioactive materials. To ensure that tap water is safe to drink, EPA (Environmental Protection Agency) and/or the Washington State Board of Health prescribes regulations that limits the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and/or the Washington State Department of Agriculture regulations establish limits for contaminants in bottled 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the (EPA) **Safe Drinking Water Hotline (800-426-4791)**.

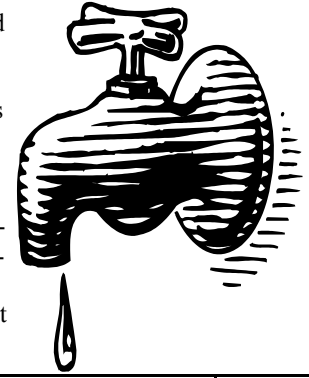
How to Read This Table: The chart in this report provides representative analytical results of water samples collected from our system over the last 5 years. **We are required to test for many other contaminants but we only list the ones that were detected.**

Maximum Contaminant Level (MCL): 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): The level of a contaminant in drinking water which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Action Level (AL): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. For lead and copper, the AL is at the 90th percentile, thus 90% of the samples must be below the AL.

ppm= parts per million, **ppb=** parts per billion, **pCi/l=** picocuries per liter (a measure of radiation), **NA=** Not applicable, **umhos/cm=**micromhos



| Contaminant | Date | Unit | MCL | MCLG | Detected | Major Sources of these Contaminants | Violation |
|--|--------------|-------------|-------------------|--------------|-------------------|---|-----------|
| EPA and State Primary Contaminates | | | | | | | |
| Nitrate | 2016 | ppm | 10 | 10 | 0.254 | Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits. | No |
| Beta | 4/12/16 | pCi/l | 50 | NA | 2.4 | Decay of natural and man-made deposits. | No |
| Radium 228 | 4/12/16 | pCi/l | 5 | NA | 0.58 | Erosion of natural deposits. | No |
| Lead / Homes | 2014 | ppb | AL=15 At 90% | 0 | 3 At 90% | Corrosion of household plumbing systems, erosion of natural deposits. | No |
| Copper/ Homes | 2014 | ppb | AL=1300 At 90% | NA | 317 At 90% | Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives. | No |
| Sodium | 2015 | ppm | NA | NA | 14.8 | Erosion of natural deposits. | No |
| Hardness | 2015 | ppm | NA | NA | 29.4 | Erosion of natural deposits. | No |
| Conductivity | 2015 | Um- hos/ | 700 | NA | 137 | Natural occurring | No |
| Chromium | 2014 | ppb | 100 | 100 | 29 | Geology natural weathering and industrial discharge. | No |
| EPA and State Secondary Contaminates | | | | | | | |
| Chlorine | 2016 | ppm | 4 | 4 | .6to 1.8 | (Range during Coliform sampling) Water additive used to control microbes. | No |
| Fluoride | 2016 Ave. | ppm | 2 | ave | 0.67 | (annual average) Water additive which promotes strong teeth, Erosion of natural deposits, discharge from fertilizer and aluminum factories. | No |
| Iron | 2014 | ppb | 300 | NA | 3.7 | (annual average) Geology, natural weathering. | No |
| Manganese | 2014 | ppb | 50 | NA | 2.5 | (annual average) Geology, natural weathering. | No |
| Disinfection Byproducts Monitoring | | | | | | | |
| TTHMs | 2016 | ppb | 80 | ave | 25.48 | By-product of drinking water chlorination. (sampled in distribution system quarterly) | No |
| HAA(5) | 2016 | ppb | 60 | ave | 17.03 | By-product of drinking water chlorination. (sampled in distribution system quarterly) | No |
| TOC average | 2016 | ppm | NA | 4 | 0.55 | Naturally present in the environment. | No |
| Unregulated EPA and State (Kelso participates in all required testing used for possible future regulations) | | | | | | | |
| Unregulated Contaminant | Date Tested | Unit | Min Detected | Max Detected | Ave De- tected | Major Sources for these Contaminants | |
| Silica | 2015 | ppm | NA | NA | 21 | Erosion of natural deposits. | No |
| Chloroform | 7/27/16 | ppb | NA | NA | 2.6 | By-product of drinking water chlorination. | NA |
| Bromodi- chloromethane | 7/23/12 | ppb | NA | NA | 0.77 | By-product of drinking water chlorination. | NA |
| Chromium-6 | 2014 | ppb | 0.09 min | 0.14 max | 0.12 ave | Geology natural weathering and industrial discharge. | NA |
| Strontium | 2015 | ppb | 34.9 min | 36.9 max | 37.4 ave | Geology natural weathering and industrial discharge. | NA |
| Vanadium | 2014 | ppb | 0.29 min | 0.42 max | 0.37 ave | Geology natural weathering and industrial discharge. | NA |
| Chlorate | 2015 | ppb | 54.9 min | 407 max | 241 ave | Geology natural weathering and industrial discharge. | NA |

Turbidity: is a measure of water clarity and can greatly influence public health on surface water systems. Kelso has received the, **Washington State Office of Drinking Water -Treatment Optimization Program, “Gold Certificate of Achievement”** (2006 through 2015) for voluntarily maintaining higher filtered water turbidity standards combined with no other system violations. We now have 10 continuous years of optimization!

The bottom line.... The City of Kelso.... Continues to provide safe drinking water to its Customers!

