City of Lava Water System

Drinking Water Report

2016

Last year, we conducted the required tests for drinking water contaminants. More information on these compounds can be found in the table on page 2 of this report.

This brochure is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. For more information about your water, call 776-5820 and ask for Tony Hobson.

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. EPA/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 (800-426-4791) or http://www.epa.gov/safewater/hotline/.

Your water comes from eleven springs and two wells. The springs serve as the primary source of water and are located about two miles up Fish Creek. Well #1 is also located up Fish Creek. The water from the springs and well flow down the canyon and are gravity fed into two storage reservoirs (785,000 total gallons) located south of the city. The water then flows from the reservoir into the distribution system. Well #2 is located west of the city. It is used primarily in the summer months and pumps directly into distribution. There is a liquid chlorinator located at Well #1 that injects chlorine into the main line. Chlorination is used to keep the reservoir and distribution system clean and free from bacteriological growth.

The state has completed an assessment of our source water. A copy of the report is available at the City Office.

Our City Council meets on the second Thursday of every month at City Hall. Please feel free to participate in these meetings.

General Drinking Water Information

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=s Safe Drinking Water Hotline (800-426-4791) or http://www.epa.gov/safewater/hotline/.

The sources of all drinking water, not just ours, (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 contaminant**s,** such as salts and metals, 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 herbicide**s,** may come from a variety of sources such as agriculture and residential uses.
Radioactive contaminant**s,** which are naturally occurring.
Organic chemical contaminant**s,** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Water Quality Data

Terms and abbreviations used below:
Maximum Contaminant Level Goal (MCLG): the level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.
Maximum Contaminant Level (MCL): the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.
Action Level (AL): the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
n/a: not applicable**, nd**: not detectable at testing limit, **PPM**: parts per million or milligrams per liter, **PPB**: parts per billion or micrograms per liter, **pCi/l**: picocuries per liter (a measure of radiation)

Inorganic Contaminants	**MCL**	**MCLG**	**Range of Detection**	**Sample Date**	**Violation?**	**Typical Source of Contaminant**
Nitrate	10 PPM	10 PPM	ND-2.73m/l	07/21/16	No	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Fluoride	4 PPM	4 PPM	ND PPM	08/03/10	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Arsenic	10	10	ND – 0.001 PPB	12/13	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2 PPM	2 PPM	0.035-0.076 PM	08/03/10	No	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.

Organic Chemical Contaminants VOCs	MCL	MCLG	Range of Detection	Sample Date	Violation?	Typical Source of Contaminant
VOCs	NA	N/A	ND-3.87ug/L	11/07/16	No	Discharge from factories and dry cleaners

Organic Chemical Contaminants SOCs	MCL	MCLG	Range of Detection	Sample Date	Violation?	Typical Source of Contaminant
Dalapon (ppb)	200	0.1	ND	08/03/10	No	Runoff from herbicide used on right of ways
Dinoseb (ppb)	500	0.1	ND	08/03/10	No	Runoff from herbicide used on soybeans and vegetables
Pentachlorophenol (ppb)	1	0.08	ND	08/03/10	No	Discharge from wood preserving factories
Picloram (ppb)	500	0.1	ND	08/03/10	No	Herbicide runoff
2,4-D (ppb)	70	0.1	ND	08/03/10	No	Runoff from herbicide used on row crops
2,4,5-TP [Silvex](ppb)	50	0.1	ND	08/03/10	No	Residue of banned herbicide
Dicamba	N/A	0.1	ND	08/03/10	No	
2,4-DB	N/A	0.1	ND	08/03/10	No	

Disinfection By-Products	MCL	MCLG	Highest Level Detected	Sample Date	Violation?	Typical Source of Contaminant
Total Trihalomethanes	80 mg/L	N/A	ND ug/L	08/02/16	No	By-product of drinking water chlorination.
Haloacetic Acids	60 mg/L	0.001 mg/L	ND	08/02/16	No	By-product of drinking water disinfection.
Chlorine	MRDL= 4	N/A	.33	01/16-12/16	No	Water additive used to control microbes

Radionuclides	MCL	MCLG	Range of Detection	Sample Date	Violation?	Typical Source of Contaminant
Alpha Activity	15 pCi/l	0	2.39+/-1.50 pci/L	11/07/16	No	Erosion of natural deposits

Combined Uranium	50 ug/l		0.67 ug/l	11/07/16	No	Erosion of natural deposits
Beta Activity	4 mrem/yr	0	6.5 mrem/yr	6/10/03	No	Decay of natural and man made deposits
Lead/Copper	**Action Limit**	**MCLG**	**Range of Detection**	**Sample Date**	**Violation?**	**Typical Source of Contaminant**
Copper	1.3 PPM	1.3	0.008-0.128	9/29/14	No	Corrosion of pipes within the water system, erosion of natural mineral deposits
Lead	15 PPB	0	ND-0.013	9/29/14	No	Corrosion of pipes within the water system, erosion of natural mineral deposits

Bacteria	**MCL**	**MCLG**	**Our Water**	**Sample Date**	**Violation?**	**Typical Source of Contaminant**
Total Coliform	None Present	None Present	None Present	Monthly	No	Naturally present in the environment.