Lake Alpine Water Company

2013 Water Quality Report

Since 1964

This report shows the results of water monitoring for the period of January 1 - December 31, 2013.

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If you have questions about your water quality, service or the information contained in this report, please call us at 209-753-2409 Monday-Thursday from 9 am to 2 pm.

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. Lake Alpine Water Company *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 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 1-800-426-4791 or at http://www.epa.gov/safewater/lead.*

How are your payments distributed?

In addition to the fees we collect to keep the plant operating and the water flowing, there are fees that we collect and pass on to other entities.

PUC fees are based on 1.5% of the basic and metered water fees. These fees were established by the California State Legislature in 1982 to fund the regulation of public utilities by the California Public Utilities Commission. 100% of these surcharges collected by LAWC are paid to the CPUC.

SDWSRF fees are directed to retire the Safe Drinking Water State Revolving Fund. This low interest loan was issued to LAWC in 2004 to pay for the new treatment plant and building. 100% of these surcharges collected by LAWC are paid to the fiscal agent for the state's Department of Water Resources.

The service fees and metered water charges are used to pay for all operations and capital improvements to the treatment and distribution system. Here is a breakdown of how the fees are used:

20%	System operators
20%	Capital improvements
10%	Customer service & office management
8%	Government Fees and Taxes
7%	Electricity, fuel and vehicles
5%	Insurance
4%	Treatment chemicals and lab testing
3%	General Supplies
3%	Accountants & Consultants
1%	Directors fees

Improvements to the Lake Alpine Water System

- *Plant Upgrades and Maintenance* Remodeled the Bloods Ridge Pumphouse for easier operator access in the winter. Completed treatment plant building upgrades with energy saving insulation, siding, wiring and improved the attic for storage.
- *Water Quality Management* Multiple projects were started this summer to improve water quality and decrease disinfection byproducts. Sampling data will be analyzed by a consulting engineer and solutions will be implemented in 2014.
- *Distribution System* LAWC found and repaired or replaced 7 valves. Operators rerouted 4 service lines for meter boxes.
- *Tanks* Graded and improved the gravel road to the Bloods Ridge Tank. Master meters were installed on all distribution tanks to assist with leak detection. Removed the unused and hazardous wooden tank above Spring Cliff.
- *Meters* LAWC rebuilt 11 meter boxes with rodent-proof wiring, pre and post meter valves, insulation and sturdy box lids. Eight meter transmitters were moved to improve signal strength.
- *Bear Lake* Secured legal recreational use of the lake through Senate Bill 14. Rebuilt the foot bridge over the spillway. Began depth sampling to profile the lake's thermal strata.
- *Customer Service* LAWC responded to 7 pipe breaks at homes and assisted 5 customers with leak alerts and detection. LAWC enrolled in a voicemail system to immediately alert operators of emergency calls.

The water source for LAWC is the Bear Lake Reservoir contained by an earthen dam in the town of Bear Valley. A source assessment was completed in October 2000 and is available at the LAWC office for review.

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

TABLES 1, 2, 3– SAMPLING RESULTS SHOWING THE DETECTION OF CONTAMINANTS

Microbiological Contaminants	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0 (In a mo.)	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	0 (In a year)	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

Lead and Copper (and reporting units)	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	8.8.13-10.22.13	20	.012	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8.8.13-10.22.13	20	0.14	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	8.6.13	1.9		none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	8.6.13	23		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Chlorine (ppm)	12.31.13	0.66	0.2-2.16	4.0	4.0	Drinking water disinfectant added for treatment
Copper (ppm)	8.6.13	.026		Al=1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
HAA5-Haloacetic Acids (ppb)	10.5.13	* 64.5	47-110	60	NA	Byproduct of drinking water disinfection
TTHM-Total Trialomethane (ppb)	10.5.13	60	53-72	80	NA	By-product of drinking water disinfection

TABLE 5 - SECONDARY STANDARDS-AESHETIC STANDARDS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	*Typical Source of Contaminant*
Color (units)	1.2.13	16	<3-16	15		Naturally-occurring organic materials
Turbidity (NTU)	2.16.13	0.11	0.0.27-0.11	5.0		Soil runoff
Total Dissolved Solids (ppm)	10.23.13	171	46-171	1000		Runoff/leaching from natural deposits
Specific Conductance (µS/cm)	8.6.13	44.1		1600		Substances that form ions when in water; seawater influence
Iron (ppb)	1.2.13	36	<20-36	300		Leaching from natural deposits; industrial wastes
Manganese (ppb)	1.2.13	63	6.0-63	50		Leaching from natural deposits

TABLE 6 - UNREGULATED CONTAMINANTS - NONE DETECTED

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
Exceeded MCL for haloacetic acids	Samples on April 3, 2013 resulted in a Running Annual Average that was higher than the MCL	The spike in HAA occurred in April. July samples indicated a decrease to below MCL again.	Quarterly flushing and tank aeration	Some people who drink water containing halocetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique [(a)](Type of approved filtration technology used)	Membrane microfiltration system
Turbidity Performance Standards [(b)] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to __0.1__ NTU in 95% of measurements in a month. 2 – Not exceed __1.0___ NTU for more than eight consecutive hours. 3 – Not exceed __1.0__ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100 % All months met TPS#1
Highest single turbidity measurement during the year	0.110 NTU
Number of violations of any surface water treatment requirements	0

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

** Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided earlier in this report.*

Additional General Information on Drinking 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 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 (1-800-426-4791).

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. USEPA/Centers for Disease Control (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 (1-800-426-4791).

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 economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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 U.S. Environmental Protection Agency (USEPA).

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 Residual Disinfectant Level (MRDL): 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): 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.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

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

In order to ensure that tap water is safe to drink, the USEPA and the state Department of Public Health (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 provide the same protection for public health.

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.

Tables 1, 2, 3, 4, 5, 6, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows LAWC to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

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 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 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.