

Timber Lakes Water Special Service District

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2017 Annual Drinking Water Quality \ Report Timber Lakes Water SSD

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are springs; they are Lone Pine 1 and 2, 3,4,5,6, Cove East and West, and Look Out Mountain. Lone pine 3, 4, 5, and 6 were turned into the system in 2010.

Timber Lakes Water SSD has a Drinking Water Source Protection Plan that is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. It has been determined that we have a low susceptible level to potential sources of contamination, such as septic tanks, roads, homes etc. If you have any questions regarding source protection, contact our office to review our source protection plan. Our sources are in remote locations, and there are no known potential contamination sources in the protection zones, so we consider our source to have a low susceptibility to potential contamination events.

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first. If you'd like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

I'm pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report, please contact Jody Defa at 435-654-0125 or Eric Franson or Vince Hogge with Franson Engineering at 801-756-0309. We want our valued customer to be informed about their water utility. If you want to learn more, our monthly meetings are held on the third Tuesday of each month at 6:00 P.M. at the Wasatch County building at 25 North Main in Heber City, Utah.

Timber Lakes Water routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2017. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

ND/Low - High - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Maximum Contaminant Level (MCL) - The “Maximum Allowed” (MCL) is 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 “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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.

Date- Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates may seem outdated.

Waivers (W)- Because some chemicals are not used or stored in areas around drinking water sources, some water systems have been given waivers that exempt them from having to take certain chemical samples, these waivers are also tied to Drinking Water Source Protection Plans.

TEST RESULTS							
Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria	N		N/A	0	Presence of coliform bacteria in 5% of monthly samples	2017	Naturally present in the environment
Fecal coliform and <i>E.coli</i>	N		N/A	0	If a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	2017	Human and animal fecal waste
Turbidity for Ground Water	N		NTU	N/A	5	2017	Soil runoff
Turbidity for Surface Water	N		NTU	N/A	0.5 in at least 95% of the samples and must never exceed 5.0	2011	Soil Runoff (highest single measurement & the lowest monthly percentage of samples meeting the turbidity limits)

TEST RESULTS

Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
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Inorganic Contaminants

Antimony	N	ND	ppb	6	6	2011	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	N	.0005	ppb	0	10	2011	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	.43-.101	ppb	2000	2000	2011	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	N	ND	ppb	4	4	2011	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium	N	ND	ppb	5	5	2011	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium	N	ND	ppb	100	100	2011	Discharge from steel and pulp mills; erosion of natural deposits
Copper a. 90% results # of sites that exceed the AL	N	a..0042 b.0	ppb	1300	AL=1300	2011	Corrosion of household plumbing systems; erosion of natural deposits
Cyanide	N	ND	ppb	200	200	2011	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
b. Fluoride	N	ND	ppb	4000	4000	2011	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead a. 90% results # of sites that exceed the AL	N	a. 5.9 b.0	ppb	0	AL=delete	2015	Corrosion of household plumbing systems, erosion of natural deposits
Mercury (inorganic)	N	ND	ppb	2	2	2011	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
b. Nickel	N	ND	Ppb	10000	10000	2017	
Nitrate (as Nitrogen)	N	.0004-.0006	ppb	10000	10000	2017	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen)	N	W	ppb	1000	1000	2011	Runoff from fertilizer use; leaching from septic tanks,

TEST RESULTS

Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
							sewage; erosion of natural deposits
Selenium	N	ND	ppb	50	50	2017	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	3.9-4.9	ppm	None set by EPA	None set by EPA	2017	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
Sulfate	N	124-154	ppm	1000	1000	2017	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
TDS (Total Dissolved solids)	N		ppm	2000	2000	2017	Erosion of natural deposits
Thallium	N	ND	ppb	1	2	2017	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Disinfection By-products							
TTHM [Total trihalomethanes]	N	6.8	ppb	0	80	2017	By-product of drinking water disinfection
Haloacetic Acids	N	6.2	ppb	0	60	2017	By-product of drinking water disinfection
Chlorine	N	.5	ppb	4000	4000	2014	Water additive used to control microbes
Radioactive Contaminants							
Alpha emitters	N	-.5 to 2	pCi/1	0	15	2015	Erosion of natural deposits
Radium 228	N	.015-1	pCi/1	0	5	2015	Erosion of natural deposits
Volatile Organic Contaminants							
Benzene	N						
Carbon tetrachloride	N	ND	ppm	0	5	2017	Discharge from chemical plants and other industrial activities
Chlorobenzene	N	ND	ppb	0	5	2017	Discharge from chemical plants and other industrial activities
o-Dichlorobenzene	N	ND	ppb	100	100	2017	Discharge from chemical and agricultural chemical factories
p-Dichlorobenzene	N	ND	ppb	600	600	2017	Discharge from industrial chemical factories
1,2 - Dichloromethane	N	ND	ppb	75	75	2017	Discharge from industrial chemical factories

TEST RESULTS

Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
chloroethylene	N	ND	ppb	0	5	2017	Discharge from industrial chemical factories
cis-1,2-dichloroethylene	N	ND	ppb	7	7	2017	Discharge from industrial chemical factories
trans - 1,2 - Dichloroethylene	N	ND	ppb	70	70	2017	Discharge from industrial chemical factories
Dichloromethane	N	ND	ppb	100	100	2017	Discharge from industrial chemical factories
1,2-Dichloropropane	N	ND	ppb	0	5	2017	Discharge from pharmaceutical and chemical factories
Ethylbenzene	N	ND	ppb	0	5	2017	Discharge from industrial chemical factories
Styrene	N	ND	ppb	700	700	2017	Discharge from petroleum refineries
Tetrachloroethylene	N	ND	ppb	100	100	2017	Discharge from rubber and plastic factories; leaching from landfills
1,2,4 -Trichlorobenzene	N	ND	ppb	0	5	2017	Discharge from factories and dry cleaners.

In addition to the sampling outlined above, we have also sampled for (31 Synthetic Organic Contaminants, Radiological Contaminants and 1 Unregulated Contaminant including Pesticides). These additional chemicals were not detected.

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. Timber Lakes Water 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 or at <http://www.epa.gov/safewater/lead>.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring, or manmade. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of

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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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 from their health care providers about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We at Timber Lakes Water SSD work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

