



Los Angeles
Department of
Water & Power

KEELER YARD

2020 DRINKING WATER QUALITY REPORT

The 2020 Drinking Water Quality Report for Keeler Yard system was prepared by the Los Angeles Department of Water and Power (LADWP). This annual Drinking Water Quality Report (also known as a Consumer Confidence Report) is required by the California State Water Resources Control Board, Division of Drinking Water (SWRCB-DDW) and is prepared in accordance with their guidelines. The report gives information about drinking water at the Keeler Yard during the 2020 calendar year. Only those constituents that were detected are listed. This report shows the results of our monitoring for the period of January 1 - December 31, 2020 and may include earlier monitoring data.

Summary

The water provided to the Keeler Yard meets all the state and federal drinking water requirements. Only the following substances with primary standards were detected at low levels in the water supplied to Keeler Yard system: arsenic, chlorine residual, copper, fluoride, gross alpha, haloacetic acids, lead, total trihalomethane, turbidity and uranium. LADWP received a citation for missed monitoring of Disinfection Byproducts (DBPs) at Keeler Yard. Disinfection by-product samples were taken in August 2020, instead of September 2020. Therefore, we could not be sure of the quality of our drinking water during that time. The results of the samples met compliance even though they were collected in advance of the required sampling month. LADWP addressed all the citation requirements and the facility is in compliance.

For more information on these constituents, please refer to the Table 1: Primary Drinking Water Substances Detected in the water. The presence of these constituents in the water does not indicate that the water poses a health risk. The SWRCB-DDW allows us 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 water quality, are more than one year old.

Este informe contiene información muy importante sobre su agua potable.

Tradúzcalo o hable con alguien que lo entienda bien.

WHERE DOES MY WATER COME FROM?

The term “source water” describes where LADWP obtains the water you drink. All drinking water, tap or bottled, comes from either surface water or groundwater sources. Surface water sources include rivers, lakes, streams, ponds, or reservoirs. Groundwater sources are springs or wells.

Keeler Yard is a non-transient, non-community water system that receives water from the Los Angeles Aqueduct System and the Lower Owens River. The water from these sources is treated, filtered, and disinfected with chlorine before distribution to the facilities within Keeler Yard.

WHY IS DRINKING WATER MONITORED AND TREATED?

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.

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 at 800-426-4791.

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water system. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Contaminants that may be present in source waters include:

- Microbial contaminants such as viruses and bacteria, which 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 storm water run-off, and residential uses.
- Organic chemicals contaminants including synthetic and volatile organics that are by-products of industrial processes and petroleum production, and can come from gas stations, urban storm water run-off, agricultural application, and septic systems.
- Radioactive contaminants which can be naturally occurring or be a result of oil and gas production and mining activities.

TERMS USED IN THIS REPORT

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

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 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 USEPA.

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.

Notification Levels (NL) - State: Health-based advisory levels established by DDW for chemicals in drinking water that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

Public Health Goal (PHG) - State: 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.

Primary Drinking Water Standard (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.

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

MONITORING OF REGULATED CONSTITUENTS

There are over 110 regulated constituents (or contaminants). We monitor for each constituent at varying frequencies based on the type of constituent and the type of source water. For example, groundwater sources are generally sampled once every three years. Those constituents that pose acute risk require more frequent monitoring. Nitrate sampling is required quarterly, and bacteriological sampling is required monthly. Since most constituents are not detected in our water, only those constituents that are detected are listed in the tables.

Health Advisory for People with Weakened Immune Systems

Although LADWP treats its water to meet drinking water standards, some people may be more vulnerable to constituents 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 individuals 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 USEPA at www.epa.gov/safewater.

Disinfection Byproducts (Total Trihalomethanes and Haloacetic Acids)

Total trihalomethanes and haloacetic acids are byproducts of the disinfection process. The most

recent analytical results show that levels of both contaminants are well below their respective MCLs.

Some people who drink water containing haloacetic acids and/or trihalomethanes in excess of the MCL over many years may have an increased risk of getting cancer. Liver, kidney, or central nervous system problems may also be experienced with long term consumption of water containing trihalomethanes in excess of the MCL.

The SWRCB-DDW issued a citation for Disinfection byproducts monitoring violation to the Keeler Yard. LADWP collected samples in August 2020 instead of September 2020. In response to the citation, all required documents were submitted and action items were completed.

Arsenic

The current EPA standard for Arsenic in drinking water is 10 ppb. The California Office of Environmental Health Hazard Assessment (OEHHA) adopted a PHG of 0.004 ppb in April 2004. In November 2008, CDPH adopted the U. S. EPA Arsenic standard as the new State drinking water standard for Arsenic. Arsenic compliance is based on a running annual average. The running annual average (RAA) was not exceeded, and the annual average of arsenic was 3.7 mg/L ppb in 2020.

Lead in Drinking Water

Lead and Copper Rule (LCR) sampling was conducted in September of 2018. The 90th percentile values for lead and copper at Keeler were below the Action Levels for both constituents. This data, as well as other water quality data, are shown in tables on the following pages. Residential tap water sampling, as required by the Lead and Copper Rule (LCR), will be conducted in 2021.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels may be higher at one home than at other homes in the community as a result of materials used in each home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before consuming water. More information is available from the EPA Safe Drinking Water Hotline at 800-426-4791, or at <https://www.epa.gov/lead>.

Turbidity

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites such as *Cryptosporidium* and *Giardia* that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Unregulated Constituents

There are constituents found in drinking water that are not yet regulated. Some of these “unregulated constituents” are monitored because they could be

candidates for future regulations or are of interest to our consumers.

Source Water Assessment

In 2020, LADWP completed the 2020 assessment of the Owens Valley and Mono Basin watersheds that supply the Los Angeles Aqueduct. These sources are most vulnerable to geothermal activities that release naturally occurring arsenic into creeks that feed the Owens River. Other activities that impact water quality in these watersheds are livestock grazing, wildlife, and unauthorized public use of storage reservoirs. The impact to water quality from these activities is deemed to be minimal. Regular monitoring for *Cryptosporidium* and *Giardia* indicates that their presence is infrequent and at very low levels.

KEELER YARD – 2020 CALENDAR YEAR

TABLE 1 - Health-based Primary Drinking Water Substances Detected

Constituents/ Contaminants	Major Source in Drinking Water	Units	MEETS PRIMARY STANDARD?	State Primary Standard (MCL) or [MRDL]	State PHG or Federal [MRDLG] or (MCLG)	Keeler Yard Water Quality	
						Range	Average
Arsenic	Natural hot springs; erosion of natural deposits	µg/L	YES	10	0.004	0-8.2	3.70
Chlorine Residual	Disinfectant	mg/L	YES	[4]	[4]	1.13-2.97	2.10
Copper (at the tap) ^a	Internal corrosion of household water plumbing systems	µg/L	YES	AL=1300	300	Number of samples exceeding AL= 0 in 5	90 th Percentile value= 568
Fluoride	Erosion of natural deposits	mg/L	YES	2	1	--	0.97
Gross Alpha	Erosion of natural deposits	pCi/L	YES	15	(0)	--	4.4
Haloacetic Acids [HAA5]	Byproduct of drinking water disinfection, compliance based a running annual average	µg/L	YES	60	none	--	26.3
Lead (at the tap) ^a	Internal corrosion of household water plumbing systems	µg/L	YES	AL=15	0.2	Number of samples exceeding AL= 0 in 5	90 th Percentile value= 4.0
Total Trihalomethane [TTHM]	Byproduct of drinking water disinfection, compliance based a running annual average	µg/L	YES	80	none	-	51.3
Turbidity ^b	Soil runoff	NTU	YES	TT	TT	100%	0.15
Uranium	Erosion of natural deposits	pCi/L	YES	20	0.43	--	1.2

TABLE 2 - Aesthetic-Based Secondary Drinking Water Substances Detected

Constituents / Contaminants	Major Source in Drinking Water	Units	MEETS SECONDARY STANDARD?	Secondary MCL	Keeler Yard Water Quality	
					Range	Average
Chloride	Runoff/leaching from natural deposits	mg/L	YES	500	--	17.2
Color	Naturally-occurring organic materials	Units	NO	15	7-35	21
Odor	Naturally-occurring organic materials	Units	YES	3	1-4	2.2
pH	Natural constituents	Units	YES	6.5 - 8.5	7.1-8	7.56
Specific Conductance	Natural constituents	µS/cm	YES	1600	350-731	549
Total Dissolved Solids (TDS)	Runoff/leaching from natural deposits	mg/L	YES	1000	--	265
Turbidity	Soil runoff	NTU	YES	5	0.29-1.41	0.55

TABLE 3 - Unregulated Drinking Water Substances Detected

Constituents/Contaminants	Major Source in Drinking Water	Units	Level Detected
Alkalinity, Bicarbonate	Natural constituent	mg/L	181
Boron (NL = 1000)	Erosion of natural deposit	mg/L	715
Magnesium	Natural constituent	mg/L	8.47
Sodium	Natural constituent	mg/L	54

Footnotes:

- At-the-tap monitoring was conducted September 2018 as required by the Lead and Copper Rule. Keeler Yard in compliance since the 90th percentile concentration was below the action levels for each contaminant.
- Turbidity is a measure of the cloudiness of the water and is a good indicator of water quality and filtration performance. The Primary Drinking Water Standard for turbidity at the treatment plant is less than or equal to 0.3 NTU in at least 95% of the measurements taken in any month, and must not exceed 1.0 NTU at any time. High turbidity can hinder the effectiveness of disinfectants and can harbor pathogens. The reporting requirement for treatment plant turbidity is to report the highest single measurement in the calendar year and the lowest monthly percentage of measurements less than or equal to 0.3 NTU. Turbidity is monitored at 15-minute intervals all year round.

Abbreviations for Tables

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

µg/L micrograms per liter or parts per billion (ppb)

NTU Nephelometric Turbidity Units: Turbidity is a measure of the cloudiness of the water. It is a good indicator of waterquality. High turbidity can hinder the effectiveness of disinfectants.

pCi/L picoCuries per Liter (a unit of radioactivity)

µS/cm micro Siemens per centimeter

GENERAL INFORMATION

This annual Drinking Water Quality Report (also known as a Consumer Confidence Report) is required by the California State Water Resources Control Board, Division of Drinking Water (SWRCB-DDW) and is prepared in accordance with their guidelines.

LADWP, the largest municipal utility in the nation, was established more than 100 years ago. The utility now provides a reliable and safe water and electric supply to the City's more than 4 million residents and businesses. LADWP is governed by a five-member Board of Water and Power Commissioners, appointed by the Mayor and confirmed by the City Council. The Board meets regularly on the second and fourth Tuesdays of each month at 10:00 a.m.

Meetings are held at: **Los Angeles Department of Water and Power**

111 North Hope Street, Room 1555H

Los Angeles, CA 90012-2694

The meeting agenda is available to the public on the Thursday prior to the week of the meeting. You can access the Board agenda at www.ladwp.com/board or by calling (213) 367-1351. For general information about LADWP, call (800) 342-5397 or visit www.ladwp.com.

For questions regarding information in this report or the Source Water Assessment, please contact Michael Mercado at (213) 367-0395, or via email at michael.mercado@ladwp.com.