4232 Las Virgenes Road Calabasas, CA 91302

2012 LVMWD Water Quality Report

LEARN ABOUT THE QUALITY AND RELIABILITY OF THE WATER THAT IS DELIVERED TO YOUR HOME, SCHOOL, OR BUSINESS!



Las Virgenes Municipal Water District 2012 Consumer Confidence Report Published June 2013



Dear Customer,

I am happy to report that once again Las Virgenes Municipal Water District's (LVMWD) water met or surpassed all state and federal standards for drinking water quality.

All water is not the same. LVMWD doesn't have local sources of drinking water; we must import 100% of the water we serve to you from Northern California. LVMWD purchases water from Metropolitan Water District of Southern California (MWD), who acquires it from the California Department of Water Resources (DWR).

The water LVMWD serves is great right from the tap. In fact, tap water is tested more than anything else we consume; it is monitored, tested, treated and tested again for over 120 constituents before it reaches your home or business. State and federal laws require all water providers to send you this annual water quality / consumer confidence report that shows the results of those tests.

I invite you to take a journey with our mascot, Little Drop, to learn more about your water. To stay current on water topics, you can also follow Little Drop on Facebook at Facebook.com/LVMWD

Sincerely,

David W. Paleur

David W. Pedersen, P. E. General Manager

An important message from the United States Environmental Protection Agency (USEPA)

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.

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 by-products 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.

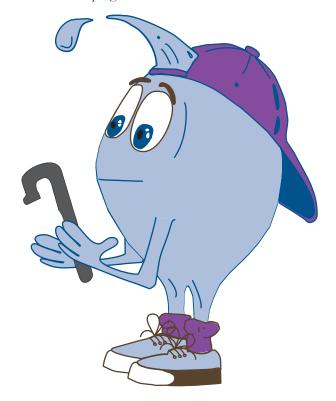


In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

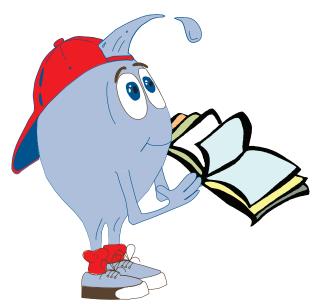
Avoiding Lead Exposure

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. LVMWD 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 www.epa.gov/safewater/lead



Conservation

Did you know that the average U. S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? LVMWD customers use almost twice that much! Conserving water is easy; there are many low-cost and no-cost ways that will make a big difference - try one today!



- •Take short showers shortening your shower to 5-minutes can save 5 15 gallons of water depending on the flow of the showerhead.
- •Shut off water while brushing your teeth, washing your hair or shaving and save up to 500 gallons a month.
- •Use a water-efficient showerhead. They are inexpensive, easy to install, and can save up to 750 gallons a month
- •Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month. Consider a new water-efficient clothes washer.
- •Water plants only when necessary.
- •Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If the dye seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- •Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- •Teach your children about water conservation to ensure a future generation uses water wisely. Make it a family effort to reduce your next water bill!

FOR MORE INFORMATION

To learn more about water, read the bi-monthly newsletter, The Current Flow, available in your bill or online at www.LVMWD.com. Sign-up for e-Notification and receive it electronically, automatically. Or come to our Board meetings, the 2nd and 4th Tuesday of each month at 5 p.m. at 4232 Las Virgenes Road in Calabasas.

If you want to speak with someone, contact Carol Palma, Customer Service Manager, at 818-251-2200 or e-mail Customer_Service@LVMWD.com

PROTECTING SOURCE WATER

Protection of drinking water is everyone's responsibility.

- Eliminate excess use of lawn and garden fertilizers and pesticides they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public wastewater system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Use EPA's Adopt Your
 Watershed to locate groups near you, or visit the Watershed Information Network's "How to Start a Watershed Team."
- To find a drop off location or learn more about the program, go to www.nodrugsdownthedrain.org/ NoDrugs/

Additional Information About Drinking Water Safety and Standards

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

Office of Drinking Water 601 N. 7th St. Sacramento, CA 94234-7320 http://www.cdph.ca.gov/certlic/drinkingwater/Pages/default.aspx

U.S. Environmental Protection Agency (USEPA)

Office of Ground and Drinking Water 401 M. St., SW Washington, DC 20460 www.epa.gov/safewater/

USEPA SAFE DRINKING WATER HOTLINE

(800) 426-4791 http://www.epa.gov/safewater/standards.html

U.S. CENTER FOR DISEASE CONTROL AND PREVENTION

1600 Clifton Road Atlanta, GA 30333 (800) 311-3435 www.cdc.gov

Malibu Creek State Park

HEALTH ADVISORY FOR PERSONS WITH WEAKENED IMMUNE SYSTEMS

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).

Information about fluoride in drinking water can be found at www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx



WATER QUALITY THE SAME IN ANY LANGUAGE

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Chinese

这份报告中有些重要的信息, 讲到关于您所在社区的水的品质。请您找人翻译一下,或者 请能看得懂这份报告的朋友给 您解释一下。

Japanese

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

Spanish

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

Fars

تمبتو انید این اطلاعه ترا بزید انگلیسی اطلاعه نهمهی اجم به "ب" شمیدتی است. اگر ابر ای شمه به قدر سی ترجمه کند. این اطلاعیه شمل بخو انید لمق از کسی که مینو اندید ری بگیر بدته طالب ر



How did we do in 2012? Water Quality Report (based on data collected in 2012)

Primary Standards apply to constituents that may be unhealthy at certain levels. They are measured in terms of Maximum Contaminant Levels (MCLs) established by the California Department of Public Health. If water contains a contaminant level above the primary MCL, the safety of the water cannot be assured. None of the tests for water served to LVMWD's customers exceeded the MCLs.

Parameter	Units	State / Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Jensen Plant	LVM	IWD		Major Sources in Drinking Water	
CLARITY											
Combined Filter Effluent Turbidity	NTU	TT=1	NA	NA	Highest	0.06	0.2	27	Soil rune	off	
Combined Finer Emident Furbidity	%	TT (a)	I IVA	INA	% ≤ 0.3	100	10	00	Con run	511	
MICROBIOLOGICAL		1				·			,		
Total Coliform Bacteria (b)	%	5.0	(0)	NA -	Range	ND - 0.5	ND -	1.08	Naturall	y present in the environment	
			(*)	,	Average	0.1	0.	.1		,,	
Heterotrophic Plate Count (HPC) (c) CFU/mL		TT	NA	NA	Range	TT	Т	T	Naturall	y present in the environment	
					Average	TT	Т	T			
INORGANIC CHEMICALS	<u> </u>	l .	l e		_	T	1		Ī		
Aluminum (d)	ppb	1,000	600	50	Range	60 - 110				from water treatment process; of natural deposits	
					Highest RAA	83		8	01001011	on natural apposite	
Fluoride (e) Treatment-related	ppm	2.0	1	0.1	Range	0.7 - 0.8	0.6 -			of natural deposits; dditive that promotes strong teeth	
RADIOLOGICALS					Average	0.8		. 1		· ·	
INADIOLOGICALS					Range	ND - 4	ND	- 12			
Gross Beta Particle Activity (f)	pCi/L	50	(0)	4	Average	ND - 4	IND 4		Decay o	of natural and man-made deposits	
			<u> </u>		Range	ND - 2	N				
Uranium	pCi/L	20	0.43	1	Average	1	N N		Erosion	of natural deposits	
DISINFECTION BY-PRODUCTS	L DISINFE	TANT RES	SIDUALS.	AND DIS					SORS ((a)	
					Range	8.0 - 19				<u> </u>	
Total Trihalomethanes (TTHM) (h)	ppb	80	NA	1.0	Average	11	18		By-prod	uct of drinking water chlorination	
Haloacetic Acids (five) (HAA5) (i)	ppb	60	NA		Range	1.1 - 3.2	. ND	- 15			
				1.0	Average	2.2	4.	.8	By-prod	uct of drinking water chlorination	
					Range	1.5 - 2.8	ND -	- 2.8			
Total Chlorine Residual	ppm	[4.0]	[4.0]	NA	Highest RAA	2.3	1.	.8	- Drinking	water disinfectant added for treatment	
5		40			Range	3.7 - 6.9) N	A	5		
Bromate (j)	ppb	10	0.1	1.0	Highest RAA	5.2	N	NΑ	By-product of drinking water ozonation		
DDD Dragurages Control (TOC)			NIA	0.20	Range	TT	Т	Т	Various	noticed and man made courses	
DBP Precursors Control (TOC)	ppm	TT	NA	0.30	Average	TT	Т	Т	Various natural and man-made sources		
SECONDARY STANDARDSA	esthetic St	andards									
Aluminum (d)	ppb	200	600	50	Range	60 - 110	ND.	- 97	Residue from water treatment process;		
, naminam (a)	ρρυ	200	000		Highest RAA	83	5	58		deposits erosion	
Chloride	ppm	500	NA NA	NA -	Range	50 - 63	50 -	- 92		eaching from natural deposits;	
Official	PP				Average	56	7-	4	seawate	er influence	
Color	Units 15		NA	NA	Range	1 - 2	ND	- 5	Naturally-occurring organic materials		
					Average	2	N	D			
Odor Threshold	TON	3	NA	1 -	Range	2			Naturally-occurring organic materials		
					Average	2		1			
Specific Conductance	μS/cm	1,600	NA	NA -	Range	400 - 500	-		Substances that form ions in water;		
			NA		Average	440		30	seawater influence		
		500		0.5	Range	46 - 50	_	48 - 62		Runoff/leaching from natural deposits; industrial wastes	
			NA		Average	48		240 - 330		Runoff/leaching from natural deposits; seawater influence	
Total Dissolved Solids (TDS)	ppm	1,000		NA	Range	240 - 280 260	_				
				0.1	Average Range	ND - 0.1		285 ND - 1			
Turbidity (a)	NTU	5	NA		Average	ND - 0.1	N		Soil run	off	
Parameter Year Sampled	Units	AL	PHG (MCLG) [MRDLG]	State DL	QOth	# Sites Sampled	# Sites Over AL	Exc	ceeded AL Y/N	Major Sources in Drinking Water	
INORGANIC CHEMICALS										House pines internal correction; erection of	

Parameter	Year Sampled	Units	AL	PHG (MCLG) [MRDLG]	State DLR	90th Percentile	# Sites Sampled	# Sites Over AL	Exceeded AL Y/N	Major Sources in Drinking Water
INORGANIC CHEMIC	ALS									
Lead (m)	2011	ppb	15	0.2	5	7.3	30	0	I IXI I	House pipes internal corrosion; erosion of natural deposits
Copper (m)	2011	ppb	1300	300	50	110	30	0	I IXI I	House pipes internal corrosion; erosion of natural deposits



Las Virgenes Reservoir, located in the hills above Westlake Village, holds 9,500 acre-feet (an acre-foot equals 325,851 gallons) of water purchased from MWD. This water is for emergencies and as a supplemental supply during the warmer months. To learn more about this reservoir, please join us on a quarterly tour - register on line at www.LVMWD.com / Your Water / Quarterly Facility Tours

How to read these tables

The tables look complicated but they are not. The tables contain complex measurements and terminology but with a bit of patience and time on your part, you will learn a lot of valuable information about the water delivered to your tap. While the information in these tables is important, what

you don't see is also significant. Water agencies are required to report contaminants that are detected; none

were found at levels considered to be unsafe or unhealthy. Testing results are presented for the Jensen Water Treatment Plant operated by MWD and for LVMWD's water delivery system. If you have any questions or need

clarification, please call us at 818-251-2200, or contact any of the agencies listed in this report under "Additional Information."





Parameter	Units	State / Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Jensen Plant	LVMWD	Major Sources in Drinking Water
OTHER PARAMETERS								
MICROBIOLOGICAL								
HPC (c)	CFU/mL	TT	NA	NA -	Range	ND	ND - 660	Naturally present in the environment
TH 0 (c)	OI O/IIIL	''			Median	ND	2	Treaturally present in the environment
CHEMICAL								
Alkalinity	ppm	NA NA	NA NA	NA	Range	72 - 93	74 - 110	
Airainity	ррііі	INA	IVA	INA	Average	79	94	
Boron	ppb	NL = 1.000	NA	100	Range	170	NA	Runoff/leaching from natural deposits; industrial wastes
Bolon	ррь	142 - 1,000	INA	100	Average	170	NA	Transmitted material deposits, industrial wastes
Calcium	ppm	NA NA	NA NA	NA	Range	23 - 24	23 - 34	_
Calcium	ррііі	INA	IVA	IVA	Average	24	28	
Chlorate	ppb	NL = 800	NA	20	Range	ND	NA	By-product of drinking water chlorination; industrial
	ррь				Range	ND - 80	NA	processes
Corrosivity (k)	AI	NA NA	NA	NA	Range	11.9 - 12.0	NA	Elemental balance in water; affected by temperature,
(as Aggressiveness Index)		INA	INA	INA	Average	12.0	NA	other factors
orrosivity (I)	SI	NA	NA	NA	Range	0.19 - 0.22	0.11 - 0.54	Elemental balance in water; affected by temperature,
(as Saturation Index)	31	INA	INA	INA	Average	0.20	0.28	other factors
	nnm	NA NA	NA NA	NA	Range	98 - 110	100 - 150	
Hardness	ppm	INA	INA	INA	Average	100	128	
Magnagium	nnm	NA	NA	NA	Range	11	11 - 17	
Magnesium	ppm	INA	INA	INA	Average	11	14	
рН	pН	NA	NA	NA	Range	7.9 - 8.4	7.0 - 8.8	
	Units				Average	8.3	8.2	
Potassium	nnm	NA	NA	NA	Range	2.3 - 2.5	NA	
Fotassium	ppm				Average	2.4	NA	
Sodium	nnm	NA	NA	NA	Range	43 - 53	43 - 74	
	ppm	INA	INA	INA	Average	48	62	
тос	nnm	TT	NA	0.30	Range	1.7 - 2.1	2.2 - 3.7	Various natural and man-made sources
	ppm				Highest RAA	1.9	2.9	various fiatulal and man-made sources
N-Nitrosodimethylamine	nnt	NL = 10	3	2				By-product of drinking water chloramination; industrial
(NDMA)	ppt	INL = 10			Range	ND - 2.0	NA	processes

ABBREVIATIONS AND FOOTNOTES

Abbreviations and Terms ~ Definitions and explanations to help you understand the charts						
AI	Aggressiveness Index					
AL	Action Level					
CDPH	California Department of Public Health					
CFU	Colony-Forming Units					
DBP	Disinfection By-Products					
DLR	Detection Limits for purposes of Reporting					
MCL	Maximum Contaminant Level					
MCLG	Maximum Contaminant Level Goal					
MRDL	Maximum Residual Disinfectant Level					
MRDLG	Maximum Residual Disinfectant Level Goal					
N	Nitrogen					
NA	Not Applicable					
ND	Not Detected					
NL	Notification Level					
NTU	Nephelometric Turbidity Units					
pCi/L	picoCuries per Liter					
PHG	Public Health Goal					
ppb	parts per billion or micrograms per liter (µg/L)					
ppm	parts per million or milligrams per liter (mg/L)					
ppt	parts per trillion or nanograms per liter (ng/L)					
RAA	Running Annual Average; highest RAA is the highest of all Running Annual Averages calculated as average of all the samples collected within a 12-month period					
SI	Saturation Index (Langelier)					
TOC	Total Organic Carbon					
TON	Threshold Odor Number					
TT	Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water					
μS/cm	microSiemen per centimeter; or micromho per centimeter (µmho/cm)					

Foot	notes
(a)	For the Jensen plant, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. For the Westlake plant, the turbidity level of the filtered water shall be less than or equal to 0.5 NTU in 95% of the measurements taken each month and shall not exceed 5.0 NTU at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The averages and ranges of turbidity shown in the Secondary standards were based on the treatment plant effluent.
(b)	Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all the treatment plants. In 2012, 1171 samples were analyzed. The MCL was not violated.
(c)	All MWD distribution system samples collected had detectable total chlorine residuals and no HPC was required. HPC reporting level is 1 CFU/mL.
(d)	Aluminum has both primary and secondary standards.
(e)	Metropolitan was in compliance with all provisions of the State's Fluoridation System Requirements.
(f)	CDPH considers 50 pCi/L to be the level of concern for beta particles; the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ.
(g)	Metropolitan was in compliance with all provisions of the Stage 1 and Stage 2 Disinfectants and Disinfection By-Products Rules (D/DBPR). Stage 2 D/DBPR monitoring began in the 2nd quarter of 2012. Compliance was based on the RAA.
(h)	Metropolitan's reporting level is 0.5 ppb for each of the trihalomethanes (bromodichloromethane, bromoform, chloroform, and dibromochloromethane) which is lower than the state DLR of 1.0 ppb.
(i)	State DLR is 1.0 ppb for each of the following: dichloroacetic acid, trichloroacetic acid, monobromo-acetic acid, and dibromoacetic acid; and 2.0 ppb for monochloroacetic acid.
(j)	Metropolitan used EPA method 326.0 which has a state DLR of 1.0 ppb. Compliance was based on the RAA.
(k)	Al <10.0 = Highly aggressive and very corrosive water Al >12.0 = Non-aggressive water Al (10.0 - 11.9) = Moderately aggressive water
(I)	Positive SI index = non-corrosive; tendency to precipitate and/or deposit scale on pipes Negative SI index = corrosive; tendency to dissolve calcium carbonate
(m)	Thirty (30) households were sampled in 2011 to determine the 90th percentile and none exceeded the action level.