2015 Consumer Confidence Report

Water System Name:	City of Cloverdale Water Dept.	Report Date:	June 2016
	quality for many constituents as required boot or the period of January 1 - December 31, 2	•	•
Este informe contiene in entienda bien.	formación muy importante sobre su agu	ıa potable. Tradúzo	alo ó hable con alguien que lo
Type of water source(s) in	use: Wells, Ground water under the infl	uence of surface water	•
· ·	of source(s): _Wells #3, #6, #7, #8, #11, #. First St., Cloverdale, CA 95425	13 and #14 are located	at or near the Water
Drinking Water Source As	sessment information: Dated September	2007 and additions up	to February 2015 are
	Cloverdale Blvd. and the Treatment Plant,	490 E. First St. Please	e call the number listed
below for more informatio	n.		
	y scheduled board meetings for public partiing Arts Center, City Council meetings.	cipation: 2 nd and 4 th	Tuesday of each month
For more information, con	tact: Darren Hernandez, Sr. Water Plant Operator	Phone: (707) 894-1781

TERMS USED IN THIS REPORT

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.

N/A, n/a: Not Applicable

ND: not detectable at testing limit

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

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

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

ppq: parts per quadrillion or picogram per liter (pg/L)

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

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 USEPA and the California Department of Public Health 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.

Tables 1, 2, 3, 4, 5, 7, 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 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 the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA							
Microbiological Contaminants	Highest No. of Detections		No. of months in violation		MCL		Typical Source of Bacteria
Total Coliform Bacteria	0	(0	More than 1 sample in a		(0)	Naturally present in the
				month with a			environment
Fecal Coliform or E. coli	0	(0	A routine sai		(0)	Human and animal fecal waste
				repeat sampl			
				total coliforn			
				sample also			
				coliform or I			
TABLE 2	TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper	Sample Date	No. of samples collected	90 th percentil level detected	exceeding	AL	PHG	Typical Source of Contaminant
Lead (ppb)	9/18/13	20	<0.005	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/18/13	20	0.250	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	TABLE 3	- SAMPL	ING RES	SULTS FOR S	SODIUM A	ND HARDI	NESS
Chemical or Constituent	Sample Date		Level F Detected D		MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	9/1/15	7.7		7-8.6	none	none	Salt present in the water and is

onsumer Confidence Report						Page 3 of 5
Hardness (ppm)	9/1/2015	135.6	116-153	none	none	generally naturally occurring Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
ny violation of an MCL or AL	is asterisked.	Additional inform	ation regarding the	violation is	provided later	
TABLE 4 – DET	ECTION (OF CONTAMINA	ANTS 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
Aluminum (ppb)	9/1/2015	140	64-140	1,000	600	Erosion of natural deposits; residu from some surface water treatmen processes
Chlorine mg/L	Daily 2015	1.2	0.68-1.2	4.0	4.0	Drinking water disinfectant added for treatment
Gross Alpha Particle Activity (pCi/L)	7/30/14	1.46	-0.58 – 1.46	15	(0)	Erosion of natural deposits
Barium (ppb)	9/1/15	130.0	110.0-130.0	1,000	2,000	Discharge or oil drilling wastes ar from metal refineries; erosion of natural deposits
Fluoride (ppm)	9/1/15	.11	<.1011	2	4.0	Leaching from natural deposits
Nickel (ppb)	9/1/15	12	<10 – 12	100	none	Erosion of natural deposits; discharge from metal factories
Nitrate (as NO ₃) (ppm)	9/1/15	4.1	<2-4.1	45	45	Runoff and leaching from fertilize use; leaching from septic tanks an sewage; erosion of natural deposit
Haloacetic Acids (HAA5) (ppb)	Qtly in 2015	10.4	1.1-10.4	60	N/A	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	Qtly in 2015	28.85	12.09-28.85	80	N/A	By-product of drinking water disinfection
TABLE 5 – DETE	CTION OF	CONTAMINA	NTS WITH A <u>S</u> I	ECONDAR	Y DRINKIN	G WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	9/1/15	7.3	5.4-7.3	500	none	Run off/leaching from natural deposits; seawater influence
Color (Units)	9/1/15	9	<5-9	15	none	Naturally-occurring organic materials
Iron (ppb)	9/1/15	450	<100-450	300	none	Leaching from natural deposits; industrial wastes
Manganese (ppm)	9/1/15	26	<20 – 26	50	none	Leaching from natural deposits
Specific Conductance	4/22/15	350	250-370	1,600	none	Substances that form ions when in

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	9/1/15	7.3	5.4-7.3	500	none	Run off/leaching from natural deposits; seawater influence
Color (Units)	9/1/15	9	<5-9	15	none	Naturally-occurring organic materials
Iron (ppb)	9/1/15	450	<100-450	300	none	Leaching from natural deposits; industrial wastes
Manganese (ppm)	9/1/15	26	<20 – 26	50	none	Leaching from natural deposits
Specific Conductance (μS/cm)	4/22/15 9/1/15	350	250-370	1,600	none	Substances that form ions when in water; seawater influence
Sulfate (ppm)	9/1/15	23	12-23	500	none	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	9/1/15	220	130-220	1,000	none	Runoff/leaching from natural deposits
Turbidity (NTU Units)	9/1/30	3.3	<0.1-3.3	5	none	Soil runoff
TARLE 6 DETECTION OF UNDECULATED CONTAMINANTS						

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS Sample Range of **Chemical or Constituent Level Detected Notification Level Health Effects Language** (and reporting units) Date **Detections**

Additional General Information on Drinking Water

Revised Jan 2016

^{*}Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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).

Lead-Specific Language for Community Water Systems: 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. The City of Cloverdale Water Dept. 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.

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

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT						
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language		
None						

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES						
Microbiological Contaminants (complete if fecal-indicator detected) Total No. of Detections Sample Dates MCL [MRDL] PHG (MCLG) [MRDLG] Typical Source of Contaminant						
E. coli	11	2015	0	(0)	Human and animal fecal waste	
Enterococci	None	N/A	TT	n/a	Human and animal fecal waste	
Coliphage	None	N/A	TT	n/a	Human and animal fecal waste	

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE					
None					
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES					
None					
VIOLATION OF GROUND WATER TT					

TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
None				

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES				
Treatment Technique ^(a) (Type of approved filtration technology used)	Alternative; Adsorption Clarifier & Multi-media polishing filtration			
	Turbidity of the filtered water must:			
Turbidity Performance Standards (b)	1 – Be less than or equal to <u>0.20</u> NTU in 95% of measurements in a month.			
(that must be met through the water treatment process)	2 – Not exceed <u>1.0</u> NTU for more than eight consecutive hours.			
	3 – Not exceed <u>5.0</u> NTU at any time.			
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%			
Highest single turbidity measurement during the year	0.35			
Number of violations of any surface water treatment requirements	None			

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

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT						
TT Violation	TT Violation Explanation Duration Actions Taken to Correct the Violation Language					
None						

Summary Information for Operating Under a Variance or Exemption

N/A

⁽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 below.