2014 Consumer Confidence Report

Water System Name: **Redwood Lodge Water Company** Report Date: 3/30/2015

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2014 and may include earlier monitoring data.

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

Type of water source(s) in use: Natural spring #1 – Underground collection – sealed storage

Name & general location of source(s): Santa Cruz County APN 097-07-06
25117 Soquel-San Jose road, Los Gatos CA 95033

Drinking Water Source Assessment information: Soil Control Lab Work order #4030845
Comprehensive CA Title 22 assessment of General Minerals, Inorganics and Physical Characteristics

Time and place of regularly scheduled board meetings for public participation:
For water quality comments contact Patricia Heimer PO Box 320161, Los Gatos,CA 95032

For more information, contact: Patricia Heimer Phone: (408) 688/6711

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: State Board 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 (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 State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board 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 State Board 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 (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(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*	(In the 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

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	3/27/14	1	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	3/27/14	1	ND	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/27/14	18 mg/L		none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	3/27/14	180 mg/L		none	none	Sum of polyvalent cations present in the water, generally magnesium

						and calcium, and are usually naturally occurring

**Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.*

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
See attached full spectrum test	3/27/14					

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
See attached full spectrum test	3/27/14					

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
See attached full spectrum test	3/27/14				

**Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later 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).

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. [INSERT NAME OF UTILITY] 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.

Water disinfection is accomplished by adding 16 oz Sodium Hypochlorite based disinfectant to 2500 gallons of collected spring water. Dilution into 26,000 gallons of water occurs prior to delivery to customers

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**

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	(In the year)		0	(0)	Human and animal fecal waste
Enterococci	(In the year)		TT	n/a	Human and animal fecal waste
Coliphage	(In the year)		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

SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES

VIOLATION OF GROUND WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**

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)	
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 _____ NTU in 95% of measurements in a month. 2 – Not exceed _____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	
Highest single turbidity measurement during the year	
Number of violations of any surface water treatment requirements	

(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 below.*

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**

Summary Information for Operating Under a Variance or Exemption

ANALYTICAL CHEMISTS
and
BACTERIOLOGISTS
Approved by State of California

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

TEL: 831-724-5422
FAX: 831-724-3188

Redwood Lodge Water Co.
P.O. Box 320161
Los Gatos, CA 95032
Attn: Patricia Heimer

Work Order #: 4030845
Reporting Date: April 10, 2014

Date Received:	March 27, 2014
Project # / Name:	None / None
Water System #:	4400584 REDWOOD LODGE WATER COMPANY (SSWS)
Sample Identification:	Effluent from Spring Basin, sampled 3/27/2014 10:10:00AM
Sampler Name / Co.:	Tyler Boswell / AWSM
Matrix:	Water
Laboratory #:	4030845-02

	Results	Units	RL	State Drinking Water Limits [1]	Analysis Method	Date Analyzed	Flags
General Mineral							
pH	6.6	pH Units	0.1	-	SM4500-H+ B	03/27/14	
Specific Conductance (EC)	440	uS/cm	1.0	1600	SM2510B	03/27/14	
Hydroxide as OH	ND	mg/L	2.0	-	SM 2320B	03/27/14	
Carbonate as CO3	ND	mg/L	2.0	-	SM 2320B	03/27/14	
Bicarbonate as HCO3	190	mg/L	2.0	-	SM 2320B	03/27/14	
Total Alkalinity as CaCO3	150	mg/L	2.0	-	SM 2320B	03/27/14	
Hardness	180	mg/L	5.0	-	SM 2340 B	03/28/14	
Total Dissolved Solids	280	mg/L	10	1000	SM2540C	04/02/14	
Nitrate as NO3	3.5	mg/L	1.0	45	EPA 300.0	03/28/14	
Chloride	14	mg/L	1.0	500	EPA 300.0	03/28/14	
Sulfate as SO4	49	mg/L	1.0	500	EPA 300.0	03/28/14	
Fluoride	0.26	mg/L	0.10	2	EPA 300.0	03/28/14	
Calcium	48	mg/L	0.50	-	EPA 200.7	03/28/14	
Magnesium	15	mg/L	0.50	-	EPA 200.7	03/28/14	
Potassium	1.3	mg/L	0.50	-	EPA 200.7	03/28/14	
Sodium	18	mg/L	0.50	-	EPA 200.7	03/28/14	
Iron	ND	ug/L	50	300	EPA 200.7	03/28/14	
Manganese	ND	ug/L	20	50	EPA 200.7	03/28/14	
Copper	ND	ug/L	50	1000	EPA 200.7	03/28/14	
Zinc	ND	ug/L	50	5000	EPA 200.7	03/28/14	
Inorganics							
Nitrate+Nitrite as N	0.78	mg/L	0.10	10	EPA 300.0	03/28/14	
Arsenic	ND	ug/L	2.0	10	EPA 200.8	04/03/14	
Barium	ND	ug/L	100	1000	EPA 200.7	03/28/14	

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.
State Drinking Water Limits[1] - as listed by California Administrative Code, Title 22.
* - a * in the left hand margin of the report means that particular constituent is above the California Drinking Water Limits.

Mike Galloway

ANALYTICAL CHEMISTS
and
BACTERIOLOGISTS
Approved by State of California

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

TEL: 831-724-5422
FAX: 831-724-3188

Redwood Lodge Water Co.
P.O. Box 320161
Los Gatos, CA 95032
Attn: Patricia Heimer

Work Order #: 4030845
Reporting Date: April 10, 2014

Date Received: March 27, 2014
Project # / Name: None / None
Water System #: 4400584 REDWOOD LODGE WATER COMPANY (SSWS)
Sample Identification: Effluent from Spring Basin, sampled 3/27/2014 10:10:00AM
Sampler Name / Co.: Tyler Boswell / AWSM
Matrix: Water
Laboratory #: 4030845-02

	Results	Units	RL	State Drinking Water Limits [1]	Analysis Method	Date Analyzed	Flags
Inorganics							
Boron	ND	ug/L	100	-	EPA 200.7	03/28/14	
Cadmium	ND	ug/L	1.0	5	EPA 200.8	04/03/14	
Chromium	ND	ug/L	1.0	50	EPA 200.8	04/03/14	
Cyanide (total)	ND	ug/L	100	200	SM 4500-CN F	04/07/14	
Lead	ND	ug/L	5.0	15	EPA 200.8	04/03/14	
Mercury	ND	ug/L	1.0	2	EPA 245.1	04/01/14	
Selenium	ND	ug/L	5.0	50	EPA 200.8	04/03/14	
Silver	ND	ug/L	10	100	EPA 200.8	04/03/14	
MBAS (Surfactants)	ND	mg/L	0.025	0.5	SM5540C	03/28/14	
Aluminum	ND	ug/L	50	1000	EPA 200.7	03/28/14	
Antimony	ND	ug/L	6.0	6	EPA 200.8	04/03/14	
Beryllium	ND	ug/L	1.0	4	EPA 200.7	03/28/14	
Nickel	ND	ug/L	10	100	EPA 200.7	03/28/14	
Thallium	ND	ug/L	1.0	2	EPA 200.8	04/03/14	
Nitrite as N	ND	mg/L	0.10	1	EPA 300.0	03/28/14	
General Physical							
Color	ND	Color Units	3.0	-	SM 2120B	03/27/14	
Threshold Odor No.	ND	T.O.N.	1.0	-	SM 2150B	03/27/14	
Turbidity	0.65	NTU	0.10	-	SM 2130B	03/27/14	

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.
State Drinking Water Limits[1] - as listed by California Administrative Code, Title 22.
* - a * in the left hand margin of the report means that particular constituent is above the California Drinking Water Limits.

Mike Galloway