

# 2011 Las Campanas Water Quality Report

## **Your water meets all State and Federal regulations**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. Last year, the City of Santa Fe water division and Las Campanas Water Cooperative conducted 500 tests for over 80 contaminants.

## **Special population advisory**

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. EPA/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 Water Drinking Hotline (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. EPA/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 (800-426-4791).

## **Where does my water come from?**

Your water comes from the Buckman Wells, City Wells, and the Canyon Road WTP and the Buckman Regional Water Treatment Plant (BRWTP). Source water assessment information may be obtained from the City of Santa Fe.

## **Source water assessment and its availability**

The New Mexico Environment Department (NMED) completed a Source Water Assessment for the City of Santa Fe. This assessment includes a determination of source water protection areas and an inventory of pollution sources within the areas of concern. NMED concluded: "The Susceptibility Analysis of the City of Santa Fe water utility reveals that the utility is well maintained and operated, and the sources of drinking water are generally protected from potential sources of contamination based on an evaluation of the available information. The susceptibility rank of the entire water system is "moderately low". The report was provided to the City of Santa Fe water system for initial review, and is now available at the State of New Mexico Environment Department Drinking Water Bureau, 525 Camino de Los Marquez, Suite 4, Santa Fe, NM 87505.

Copies may also be requested by emailing the Drinking Water Bureau or by calling toll free 1-877-654-8720. Please include your name, address, telephone number, and email address, and the

name of the water utility. *NMED-DWB may charge a nominal fee for paper copies.*

### **Contaminants in 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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: 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, which 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, which 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **Public participation opportunities**

Our Board meets at a time and date to be announced. Please feel free to participate in these meetings. Please call 505-820-2669 for additional information.

### **Description of Water Treatment Process**

Your water is treated by filtration and disinfection. Filtration removes particles suspended in the source water. Particles typically include clays and silts, natural organic matter, iron and manganese, and microorganisms. Your water is also treated by disinfection. Disinfection involves the addition of chlorine or other disinfectants to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

### **Additional Information for Lead**

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. Las Campanas water system 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>.

### **Additional Information for Nitrate**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six

months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

### Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

<b>Contaminants</b>	<b>MCLG or MRDLG</b>	<b>MCL, TT, or MRDL</b>	<b>Your Water</b>	<b>Range</b>		<b>Sample Date</b>	<b>Violation</b>	<b>Typical Source</b>
				<b>Low</b>	<b>High</b>			
<b>Disinfectants &amp; Disinfectant By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Haloacetic Acids (HAA5) (ppb) *	NA	60	30.5	ND	30.5	2011	No	By-product of drinking water chlorination
Bromate (ppb)	0	10	1	ND	1	2011	No	By-product of drinking water chlorination
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	0.53	0.09	2.4	2011	No	Water additive used to control microbes
TTHMs [Total Trihalomethanes] (ppb) *	NA	80	53.2	ND	53.2	2011	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb) **	NA	80	1.47	ND	1.47	2009	No	By product of drinking water disinfection
*TTHM and HAA5 values from Santa Fe Distribution System								
**TTHM value from Las Campanas Distribution System								
<b>Inorganic Contaminants</b>								
Barium (ppm)	2	2	0.8	0.11	0.8	2011	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.35	0.1	0.35	2011	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Nitrate [measured as Nitrogen] (ppm)	10	10	7.5	ND	7.5	2011	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Arsenic (ppb)	0	10	4.6	ND	4.6	2011	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Selenium (ppb)	50	50	1.7	ND	1.7	2011	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (optional) (ppm)	NA	NA	24	5.5	24	2011	No	Erosion of natural deposits; Leaching
<b>Microbiological Contaminants</b>								
Total Coliform (positive samples/month)	0	1	0	NA	NA	2011	No	Naturally present in the environment
<b>Radioactive Contaminants</b>								
Alpha emitters (pCi/L)	0	15	3	ND	3	2011	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	4.18	ND	4.18	2011	No	Erosion of natural deposits
Beta/photon emitters (pCi/L)	0	50	6.8	0.7	6.8	2011	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Uranium (ug/L)	0	30	1	ND	1	2011	No	Erosion of natural deposits
<b>Synthetic organic contaminants including pesticides and herbicides</b>								
Ethylene dibromide (ppt)	0	50	61	ND	61	2011	No	Discharge from petroleum refineries; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching from grain and fruit crops
<b>Contaminants</b>	<b>MCLG</b>	<b>AL</b>	<b>Your Water</b>	<b>Sample Date</b>	<b># Samples Exceeding AL</b>	<b>Exceeds AL</b>	<b>Typical Source</b>	
<b>Inorganic Contaminants</b>								
Copper - action level at consumer taps (ppm)	1.3	1.3	0.81	2009	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead - action level at consumer taps (ppb)	0	15	0.025	2009	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

### Exceedances

#### Ethylene dibromide (EDB)

Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer. Samples collected by the City of Santa Fe in June 2011 indicated an exceedance of the MCL for EDB. A confirmation sample was taken which indicated a non-detect of EDB. The City of Santa Fe has increased the monitoring frequency for this contaminant to quarterly sampling as of August 2011.

<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ug/L	ug/L : Number of micrograms of substance in one liter of water
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
ppt	ppt: parts per trillion, or nanograms per liter
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	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 allow for a margin of safety.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level