

Radionuclides	Collection Date	Compliance Value	Range	Unit	MCL	MCLG	Typical Source
GROSS ALPHA PARTICLE ACTIVITY	2006	7	ND - 7	pCi/L	15	0	Decay of natural and man-made deposits
GROSS BETA PARTICLE ACTIVITY	2009	17	1 - 17	pCi/L	50	0	Decay of natural and man-made deposits
RADIUM, COMBINED (226, 228)	2006	1	ND - 1	pCi/L	5	0	Erosion of natural deposits
RADON	2009	9,817	9,000 – 9,817	pCi/L	No MCL	No MCLG	Erosion of natural deposits
URANIUM	2009	13	ND - 13	ppb	30	0	Erosion of natural deposits

Secondary Regulated Contaminants	Collection Date	Compliance Value	Range	Unit	Secondary Standard
ALKALINITY	2009	97	92 - 240	ppm	No MCL
CALCIUM	2009	23	15 - 23	ppm	No MCL
CHLORIDE	2009	8.5	2.7 - 8.5	ppm	400
HARDNESS	2009	76	41 - 76	ppm	No MCL
MAGNESIUM	2009	7.6	0.9 - 7.6	ppm	150
MANGANESE	2009	0.003	ND - 0.003	ppm	0.1
PH	2009	8.27	7.28 - 8.27	pH	6.5-8.5
SODIUM	2009	13	11 - 13	ppm	No MCL
SULFATE	2009	3.3	ND - 3.3	ppm	500
TOTAL DISSOLVED SOLIDS (TDS)	2009	160	110 - 160	ppm	1000
ZINC	2009	0.03	ND - 0.03	ppm	5

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2009.				

**Violations**

The Lightning W Public Water System had the following violation in 2009:

Type	Category	Analyte	Compliance Period
MONITORING, ROUTINE MAJOR	Failure to Monitor	SOCs	Quarter 4, 2009

The Lightning W Water System failed to monitor for Synthetic Organic Compounds in the fourth quarter of 2009. We are required to issue a Public Notice regarding this failure to monitor. We will return to compliance by sampling for Radionuclides during the calendar year of 2010. As this was a failure to monitor violation and not an exceedance, no known health effects are believed to have resulted from these missed samples.

**Contact information**

If you have any questions regarding water quality or the material in this report, please contact the Washoe County Department of Water Resources at: 4930 Energy Way Reno, NV 89502 (775) 954-4612 [www.washoecounty.us/water](http://www.washoecounty.us/water)



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## LIGHTNING W PUBLIC WATER SYSTEM Consumer Confidence Report – 2010 Covering Calendar Year – 2009



The Washoe County Department of Water Resources is a leader in providing integrated water resources. These services are critical to the region's quality of life. They include utility services (water, sewer, and reclaimed water) and water resource planning services (flood management, remediation of contaminated groundwater, and development of water resource plans).

The Department of Water Resources is committed to be the leader in the provision of integrated water resource services to our community. Our mission is to provide quality product and service to our community through teamwork, accountability and professionalism.

Regular testing of the water resources is one way we fulfill that mission. This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are continually being made to improve their water systems.

Your water comes from:

Source Name	Source Water Type
Lightning W Well 1	Ground Water
Lightning W Well 2	Ground Water
Lightning W Well 3	Ground Water

Your drinking water is supplied from groundwater sources. We treat your water to remove uranium, and we add disinfectant to protect you against microbial contaminants. The new Lightning W Well 3 has been constructed and began supplying water in April, 2009. The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of your source water. For results of the Source Water Assessment, please contact the Department of Water Resources at (775) 954-4612.

**Message from EPA**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer under going 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/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).

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

The sources of drinking water (both tap water and bottled water) included rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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 before we treat it 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, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, may come from a variety of sources such as storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We aim to provide water that meets EPA's regulations. We treat your water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

### Terms & Abbreviations

In this report you may find terms or abbreviations that may not be familiar. To help you better understand these terms we have provided the following definitions:

Terms and Abbreviations	Definition
Action Level (AL)	the concentration of a contaminant that, if exceeded, triggers requirements that a water system must follow.
Maximum Contaminant Level (MCL)	the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG)	the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.
Non-Detects (ND)	laboratory analysis indicates that the constituent is not present.
Parts per Billion (ppb)	or micrograms per liter (µg/L)
Parts per Million (ppm)	or milligrams per liter (mg/L)
Picocuries per Liter (pCi/L)	picocuries per liter is a measure of the radioactivity in water.
Running Annual Average (RAA)	running annual average (RAA) is calculated by averaging the four (4) most recent quarters of readings.

### Health Information About Water Quality

Your water system tested a minimum of 1 sample per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presences in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

### Water Quality Data

The tables following below list all of the drinking water contaminants, which were detected during the 2009 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2009. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. The bottom line is that the water that is provided to you is safe.

#### Testing Results for Lightning W Public Water System

Primary Regulated Contaminants	Collection Date	Compliance Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	2007	1	ND - 1	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM	2007	0.1	0.005 - 0.1	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
DIBROMOCHLOROPROPANE	2009	0.14	ND - 0.43	ppb	0.2	0	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
FLUORIDE	2007	0.6	ND - 0.6	ppm	2	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	2009	0.55	ND - 0.55	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TURBIDITY	2009	0.4	0.4	NTU	5	No MCLG	Soil runoff

Disinfectants and Disinfection By-Products	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
CHLORINE (as Cl <sub>2</sub> )	2009	0.9	0.5 - 1.4	ppm	4	4	Water additive used to control microbes
TOTAL HALOACETIC ACIDS (HAA5)	2009	ND	ND	ppb	60	0	By-product of drinking water disinfection
TOTAL TRIHALOMETHANES (TTHM)	2009	ND	ND	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Date	90 <sup>TH</sup> Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER	2009	0.13	0.021 - 0.18	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2009	ND	ND	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits