

| Radionuclides                 | Collection Date | Compliance Value | Range      | Unit  | MCL    | MCLG | Typical Source                         |
|-------------------------------|-----------------|------------------|------------|-------|--------|------|----------------------------------------|
| GROSS ALPHA PARTICLE ACTIVITY | 2006            | 10               | 1 - 10     | pCi/L | 15     | 0    | Decay of natural and man-made deposits |
| GROSS BETA PARTICLE ACTIVITY  | 2006            | 11               | 3 - 11     | pCi/L | 50     | 0    | Decay of natural and man-made deposits |
| RADIUM, COMBINED (226, 228)   | 2008            | 1                | 1          | pCi/L | 5      | 0    | Erosion of natural deposits            |
| RADON                         | 2008            | 1040             | 317 - 1040 | pCi/L | No MCL |      | Erosion of natural deposits            |
| URANIUM                       | 2009            | 23               | 0.2 - 23   | ppb   | 30     | 0    | Erosion of natural deposits            |

| Secondary Regulated Contaminants | Collection Date | Compliance Value | Range       | Unit | Secondary Standard |
|----------------------------------|-----------------|------------------|-------------|------|--------------------|
| ALKALINITY                       | 2008            | 150              | 94 - 150    | ppm  | No MCL             |
| ALUMINUM                         | 2008            | 1                | ND - 1      | ppm  | 0.2                |
| CALCIUM                          | 2005            | 24               | 3 - 24      | ppm  | No MCL             |
| CHLORIDE                         | 2008            | 46               | 5.1 - 46    | ppm  | 400                |
| HARDNESS                         | 2008            | 60               | 14 - 60     | ppm  | No MCL             |
| IRON                             | 2008            | 1                | ND - 1      | ppm  | 0.6                |
| MAGNESIUM                        | 2007            | 13               | 1.3 - 13    | ppm  | 150                |
| MANGANESE                        | 2008            | 0.034            | ND - 0.034  | ppm  | 0.1                |
| NICKEL                           | 2008            | 0.008            | ND - 0.008  | ppm  | 0.1                |
| PH                               | 2008            | 8.87             | 7.93 - 8.87 | pH   | 6.5-8.5            |
| SODIUM                           | 2008            | 83               | 22 - 83     | ppm  | No MCL             |
| SULFATE                          | 2008            | 47               | 6 - 47      | ppm  | 500                |
| TOTAL DISSOLVED SOLIDS (TDS)     | 2008            | 320              | 150 - 320   | ppm  | 1000               |
| ZINC                             | 2008            | 0.099            | ND - 0.099  | ppm  | 5                  |

| Microbiological                                              | Result | MCL | MCLG | Typical Source |
|--------------------------------------------------------------|--------|-----|------|----------------|
| No detected results were found in the calendar year of 2009. |        |     |      |                |

**Violations**

During the 2009 calendar year, the Lemmon Valley Public Water System had no violations.

**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).

**LEMMON VALLEY 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 |
|----------------------|-------------------|
| Lemmon Valley Well 5 | Ground Water      |
| Lemmon Valley Well 6 | Ground Water      |
| Lemmon Valley Well 7 | Ground Water      |
| Lemmon Valley Well 8 | Ground Water      |

Your drinking water is supplied from groundwater sources. We add disinfectant to protect you against microbial contaminants. 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) 954-4730.

**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.



### Well Head Protection Program

Much of the water we use everyday comes from groundwater wells operated by the Washoe County Department of Water Resources. Well Head Protection Programs (WHPPs) help ensure the safety of your drinking water by protecting underground aquifers from contamination. The WHPPs developed by the Department of Water Resources meet or exceed all State and Federal requirements and are specific to your region. For more information about Well Head Protection in your community or to learn how you can help protect the groundwater, contact the Department of Water Resources at (775) 954-4612. You can view the WHPP for your community online at [www.washoecounty.us/water](http://www.washoecounty.us/water).

### 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 3 samples 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.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

### 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 Lemmon Valley Public Water System

| Primary Regulated Contaminants | Collection Date | Compliance Value | Range        | Unit | MCL | MCLG    | Typical Source                                                                                                            |
|--------------------------------|-----------------|------------------|--------------|------|-----|---------|---------------------------------------------------------------------------------------------------------------------------|
| ARSENIC                        | 2008            | 9                | ND - 9       | ppb  | 10  | 0       | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes                    |
| BARIUM                         | 2008            | 0.11             | 0.004 - 0.11 | ppm  | 2   | 2       | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits                                |
| CHROMIUM                       | 2007            | 2                | 1 - 2        | ppb  | 100 | 100     | Discharge from steel and pulp mills; Erosion of natural deposits                                                          |
| FLUORIDE                       | 2008            | 0.4              | 0.14 - 0.4   | ppm  | 2   | 4       | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| NITRATE                        | 2009            | 1.5              | ND - 1.5     | ppm  | 10  | 10      | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits                               |
| TURBIDITY                      | 2008            | 0.4              | 0.4 - 1.2    | NTU  | 5   | No MCLG | Soil runoff                                                                                                               |

| Disinfection By-Products       | Monitoring Period | RAA | Range     | Unit | MCL | MCLG | Typical Source                            |
|--------------------------------|-------------------|-----|-----------|------|-----|------|-------------------------------------------|
| CHLORINE (as Cl <sub>2</sub> ) | 2009              | 0.8 | 0.2 - 1.3 | 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          | 2007 | 0.0587                      | 0.005 - 0.11 | ppm  | 1.3 | 0             | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| LEAD            | 2007 | ND                          | ND - 1       | ppb  | 15  | 0             | Corrosion of household plumbing systems; Erosion of natural deposits                                   |