

WATER QUALITY REPORT  
2007  
SPANISH SPRINGS

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Constituent	Units	MCL	MCLG	Desert Springs Well #1	Desert Springs Well #2	Desert Springs Well #3	Desert Springs Well #4	Spring Creek Well #2	Spring Creek East Well #4	Spring Creek East Well #5	Spring Creek East Well #6	Spring Creek East Well #7	TMWA Water	
<b>Primary Standards</b>														
Arsenic	µg/L	10*	0	2	10	10	9	15	6	6	3	2	4.3	
Barium	mg/L	2	2	0.10	0.05	0.08	0.08	0.07	0.01	N.D.	0.01	0.006	0.023	
Chromium	µg/L	100	100	8	4	7	5	N.D.	1	4	4	4	10	
Cyanide	µg/L	200	200	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	5	N.D.	N.D.	
Fluoride	mg/L	4	4	0.2	0.7	0.5	0.35	0.3	0.3	0.3	0.4	0.4	N.D.	
Nickel	µg/L	100	100	N.D.	N.D.	N.D.	1	N.D.	N.D.	N.D.	N.D.	2	N.D.	
Nitrate (as N)	mg/L	10	10	4.4	2.3	9.7	5.6	4.1	2.4	2.1	1.9	2	N.D.	
Nitrite (as N)	mg/L	1	1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.11	
Total N (Nitrate + Nitrite)	mg/L	10	10	4.4	2.3	9.7	5.6	4.1	2.4	2.1	1.9	2	0.11	
Selenium	µg/L	50	50	N.D.	N.D.	11	2	N.D.	N.D.	2	N.D.	N.D.	N.D.	
Haloacetic Acids	µg/L	60	0	N.D. - 49										
Trihalomethanes	µg/L	80	0	N.D. - 38										
<b>Secondary Standards</b>														
Chloride	mg/L	400	250	14	13	93	22	40	11	9	8.3	11	9.4	
Color	CU	15	15	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	5	N.D.	1	
Copper	mg/L	1	1	0.014	N.D.	0.005	N.D.	0.001	0.001	0.004	N.D.	0.004	N.D.	
Fluoride	mg/L	2	2	0.2	0.7	0.5	0.35	0.3	0.3	0.3	0.4	0.4	N.D.	
Magnesium	mg/L	150	125	12	3	14	6.9	13	5	6	3.5	4.2	4.6	
Manganese	mg/L	0.1	0.05	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.003	N.D.	
pH		6.5 to 8.5	6.5 to 8.5	8.2	8.1	8.3	8.4	8.5	8.7	8.7	8.9	8.5	8.47	
Sulfate	mg/L	500	250	21	36	95	24	52	16	13	12	13	16	
Zinc	mg/L	5	5	0.04	N.D.	0.02	N.D.	0.01	0.01	0.01	N.D.	N.D.	N.D.	
Total Dissolved Solids	mg/L	1000	500	299	277	582	260	363	196	223	158	150	124	
<b>Additional Constituents</b>														
Calcium	mg/L	No MCL		35	12	60	26	40	11	10	8	9.1	15.5	
Hardness	mg/L	No MCL		137	42	207	94	153	48	50	34	40	67	
Potassium	mg/L	No MCL		3	2	5	3	4	2	2	6	5.8	1.9	
Silica	mg/L	No MCL		41	67	73	67	64	33	32	38	-	62	
Sodium	mg/L	No MCL		28	68	100	43	44	36	29	34	35	17	
<b>Radiochemistry</b>														
Gross Alpha	pCi/L	15	0	8	2	5	N.D.	2	2	1	1	N.D.	N.D.	
Gross Beta	pCi/L	50	0	7	4	9	N.D.	6	3	3	7	4	N.D.	
Uranium	µg/L	30	0	13	2	9	2	4	1	1	N.D.	N.D.	-	
Radium 226 + Radium 228	pCi/L	5	0	1	1	1	1	1	1	1	1	1	-	
Radon	pCi/L	No MCL		1200	800	880	920	620	730	460	87	4	N.D.	
<b>Leachable Lead and Copper</b>														
		<b>Action Level</b>		<b>90th Percentile Concentrations</b>										
Lead	µg/L	15		1				N.D.		N.D.				N.D.
Copper	mg/L	1.3		0.2				0.06		0.13				0.06

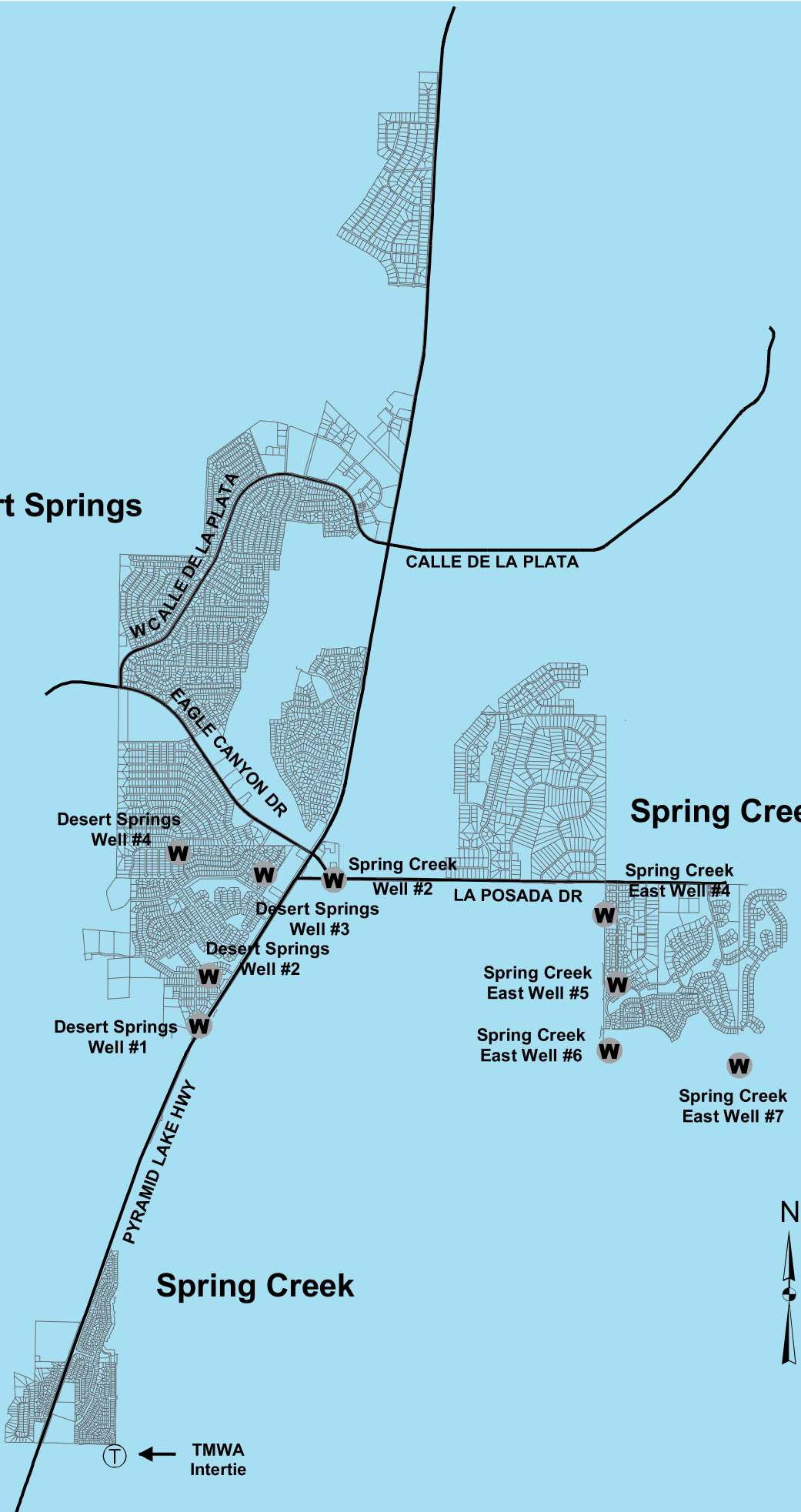
The following constituents were sampled in 2006 and not detected at any Spanish Springs water sources: antimony, beryllium, cadmium, foaming agents (MBAS), iron, mercury and thallium.

\* Desert Springs Water System is operating under an exemption from the new 10 mg/L standard issued by the Nevada State Environmental Commission. The exemption is described in the Arsenic Section of this report.

# Desert Springs

# Spring Creek East

# Spring Creek



## WHY WE TEST THE WATER

The Washoe County Department of Water Resources (DWR) is known as “the water place” because it 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 DWR 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 report summarizes water quality data for the period January 1, 2006 to December 31, 2006.

## HOW TO READ THE WATER QUALITY CHART

The far left column, titled Constituents, lists the naturally occurring and man-made inorganic contaminants that are monitored by DWR, according to U.S. Environmental Protection Agency (EPA) standards. The Primary Standards are monitored to ensure the water is safe to drink, and the Secondary Standards are monitored to ensure the water is aesthetically pleasing.

The third column, titled Maximum Contaminant Level (MCL), is the highest level of a contaminant allowed in drinking water defined by the EPA. The fourth column, titled Maximum Contaminant Level Goal (MCLG), is the level of a contaminant in the drinking water in which there is no known or expected risk to health defined by the EPA.

The remaining columns show what contaminant level, if any, was contained in the water sources. In most cases, the water served to customers is a blend of the sources listed. The map shows the sources that supply water to the system.

## THINGS TO KNOW ABOUT YOUR 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 EPA’s 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.

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 regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our 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.

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 for infections. These people should seek advice about drinking water from a health care provider. EPA/Center for Disease Control guidelines on the appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Environmental Protection Agency’s Safe Drinking Water Hotline (800-426-4791).

## SOURCE WATER ASSESSMENT

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. DWR has completed an assessment of our source water. For results of the source water assessment, please contact the DWR at 775-954-4730.

## CRYPTOSPORIDIUM

The Truckee Meadows Water Authority (TMWA), the only source of surface water, monitors their source water and treated water for *Cryptosporidium* on a weekly basis. *Cryptosporidium* is a waterborne microorganism. *Cryptosporidium* is rarely detected in the Truckee River and has not been detected in treated water that goes to your tap. If you have any questions regarding TMWA water quality please contact DWR.

## ARSENIC

Arsenic is a naturally occurring metal found in many of the nation’s groundwater supplies. Possible health effects from arsenic include an increased risk of cancer, skin damage, and circulatory problems. To reduce the risk to public health, the EPA established a Maximum Contaminant Level (MCL) for arsenic in drinking water. In January 2006, the EPA lowered the arsenic MCL from 50 µg/L to 10 µg/L.

Several wells serving the Desert Springs area contain arsenic at concentrations exceeding the new arsenic MCL, but below the old arsenic MCL. Controlling arsenic to meet the new MCL is a costly and lengthy process. DWR applied for and received a 3-year extension delaying compliance with the new arsenic MCL, giving DWR the time to develop the necessary funding and to implement an arsenic control plan.

The extension was granted by the Nevada State Environmental Commission on September 6, 2006 and will expire January 23, 2009. At which time, the water system must be in compliance with the new arsenic MCL or file for an extension. If DWR files for an extension, the public will have to opportunity to provide comment.

Until the arsenic control plan is implemented, DWR proposes to rely on water sources that already meet the new arsenic MCL to the extent possible. DWR has already begun the process of evaluating arsenic control alternatives, including treatment, blending and alternative water sources. Monitoring of blended water currently used in Desert Springs is being done on a weekly basis and has shown that typically both the old and new arsenic standard are being met.

### GROSS BETA

Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta particle and photon radioactivity in excess of the MCL over many years may have an increased risk of cancer.

### LEAD AND COPPER

DWR has completed monitoring in compliance with the Lead and Copper Rule (Rule). According to the Rule, the 90<sup>th</sup> percentile lead and copper concentrations are not to exceed Action Levels of 15 µg/L for lead and 1.3 mg/L for copper. Please refer to the table for the most recent lead and copper results. If you would like more information regarding the Rule or would like to participate in future sampling please contact our office.

### NITRATE

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants 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 the advice of a health care provider.

### DEFINITIONS

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:

<b>Action Level</b>	the concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.
<b>Color Units (CU)</b>	is the standard unit of measure for water color.
<b>Maximum Contaminant Level (MCL)</b>	is the highest level of a contaminant allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.
<b>Maximum Contaminant Level Goal (MCLG)</b>	is the level of a contaminant in drinking water in which there is no known or expected risk to health. MCLGs allow for a margin of safety.
<b>Micrograms per liter (µg/L)</b>	one microgram per liter corresponds to one penny in \$10,000,000 (same as parts per billion or ppb).
<b>Milligrams per liter (mg/L)</b>	one milligram per liter corresponds to one penny in \$10,000 (same as parts per million or ppm).
<b>Millirems per Year (mrem/yr)</b>	measure of radiation absorbed by the body.
<b>Non-Detects (N.D.)</b>	laboratory analysis indicates that the constituent is not present.
<b>Parts per Million (ppm)</b>	or milligrams per liter (mg/l)
<b>Parts per Billion (ppb)</b>	or micrograms per liter (µg/l)
<b>pH</b>	is a measure of acidity. A pH value of less than 7 is acidic, values greater than 7 are alkaline.
<b>Picocuries per liter (pCi/L)</b>	is a measure of water radioactivity.

The symbol “<” means less than.

The symbol “-” means no samples were taken in 2006.

### 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) 954-4600  
[www.washoecounty.us/water](http://www.washoecounty.us/water)