PRST STD
U.S. Postage
Paid
Permit #1
Bunkerville, NV

Postal Customer

500 Riverside Road
Mesquite, Nevada
89027

2013 ANNUAL WATER QUALITY REPORT

500 Riverside Road
Mesquite, Nevada 89027

(702) 346-5731

http://www.vvh2o.com

We are pleased to present the 2013 Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water at the lowest cost possible. We want you to understand our efforts to continually improve the water treatment process and to protect our water resources. We are committed to ensuring the quality of your water.

NEVADA SOURCE WATER ASSESSMENT SUMMARY SHEET

We treat your water to remove several contaminants and 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 our source water. For results of the source water assessment, please contact us.

A copy of the complete source water assessment is available for viewing at the Bureau of Safe Drinking Water (BSDW) Carson City office between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. It is suggested that an appointment be made if you are interested in viewing a report. The BSDW office is located at 901 So. Stewart Street, Suite 4001, Carson City, Nevada 89701. Telephone 1-775-687-9520.

WATER SYSTEM CONTACT INFORMATION

WATER SYSTEM NAME: VIRGIN VALLEY WATER DISTRICT **COUNTY:** CLARK
BHPS SYSTEM ID NUMBER: NV0000167 **NUMBER OF RESIDENTIAL CONNECTIONS:** 7,726 **POPULATION SERVED:** 18,800

GENERAL MANAGER: KEVIN BROWN **ADDRESS:** 500 RIVERSIDE RD. MESQUITE, NV 89027
TELEPHONE: (702) 346-5731 **FAX:** (702) 346-2596 **E-MAIL:** kbrown@vvh2o.com

CONTACT PERSON: AARON BUNKER **ADDRESS:** 500 RIVERSIDE RD. MESQUITE, NV 89027
TELEPHONE: (702) 346-5731 **FAX:** (702) 346-2596 **E-MAIL:** abunker@vvh2o.com

FEDERAL AND STATE WATER QUALITY STANDARDS COMPLIANCE

☑ If checked, the above referenced water system is in compliance with all State of Nevada and Federal water quality standards.

WHERE DOES MY WATER COME FROM?

Our water supply currently comes from the hydrologic basin known as Basin 222, the lower Virgin River basin. The Water District draws the water from eight deep wells located throughout the valley. Depths of wells range from 650' to 2,250'.

WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. 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 it's treated include:

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, 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, 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, may also come from gas stations, urban storm water run-off, and septic systems.

The Water District routinely monitors for contaminants in our drinking water in accordance with State and Federal laws.
More information about contaminants and potential health effects can be obtained by calling the EPA hotline at 1-800-426-4791.

DETECTED CONTAMINANTS

The following table summarizes results of detected contaminants during the 2013 monitoring period. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. The table analyzes the concentration of contaminants in your water in relation to the Maximum Contaminant Level (MCL). All contaminants were well below the MCL.

A copy of all test results is available upon request at the Water District office.

REGULATED CONTAMINATES	MONITORING PERIOD	UNIT	*YOUR WATER	RANGE	MCL	MCLG	TYPICAL SOURCE
Arsenic	2013	ppb	2.8	0.0-6.3	10	0	Erosion of natural deposits.
Barium	2013	ppm	0.039	0.023-0.057	2	2	Discharge of drilling wastes; Erosion of natural deposits
Fluoride	2013	ppm	0.98	0.77-1.4	2	4	Erosion of natural deposits; Discharge from fertilizer.
Nitrate	2013	ppm	0.79	0-1.5	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2013	ppb	0.5	0-3.1	50	50	Erosion form natural deposits: Discharge from mines.
Chromium	2013	ppb	4.0	0-12	100	100	Erosion of natural deposits.
DISINFECTION BY-PRODUCTS	**MONITORING PERIOD**	**UNIT**	***YOUR WATER**	**RANGE**	**MCL**	**MCLG**	**TYPICAL SOURCE**
TTHM	2013	ppb	8.4	7.8-9.0	80	n/a	By-product of drinking water chlorination.
LEAD & COPPER	**MONITORING PERIOD**	**UNIT**	**90th PERCENTILE**	**95th PERCENTILE**	**RANGE**	**AL**	**TYPICAL SOURCE**
Lead	2012	ppb	2.8		0-7.4	15	Corrosion of household plumbing systems. Erosion of natural deposits.
Copper	2012	ppm	0.12	0.088	0.010-0.20	1.3	Corrosion of household plumbing systems. Erosion of natural deposits.
Microbiological	**MONITORING PERIOD**	**Results**		**MCL**		**MCLG**	**TYPICAL SOURCE**
Coliform	September 2013	One sample returned as positive		No more than one positive sample per month		0	Naturally present in the environment

*YOUR WATER: The annual average of contaminant during the monitoring period.

IMPORTANT DRINKING WATER DEFINITIONS

MCLG (Maximum Contaminant Level Goal)—The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL (Maximum Contaminant Level)—The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLG's as feasible using the best available treatment technology.

AL (Action Level)—The concentration of a contaminant, which if exceeded, triggers treatment or other corrective action to mitigate the contaminant.

ND (Non-Detect) —The concentration of a specific contaminant is below the detection limits of the EPA's accepted monitoring method.

ppm (parts per million) / mg/L (milligrams per Liter)—one ppm compares to one minute in two years or a single penny in $10,000.

ppb (parts per billion) / µg/L (micrograms per Liter)—one ppb compares to one minute in 2,000 years, or a single penny in $10,000,000.

pC/L (picocuries per Liter)—A picocurie is one-trillionth of a curie, which is a unit of measure used to express the results of radioactivity.

Arsenic:

While your drinking water meets EPA's standard for arsenic, it does contain very 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.

ARSENIC TREATMENT PLANTS

The District has 5 arsenic treatment plants that have been in operation for approximately 5 years. The treatment plants are state of the art facilities that can remove the natural occurring arsenic in our ground water to very low levels, and in some instances non-detect levels. The District and its staff are dedicated to providing the highest quality of dependable drinking water.

Lead:

Although our water meets all standards, lead if present at elevated levels can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from plumbing fittings and pipelines associated with home plumbing. The Water District 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 drinking 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 (800) 426-4791or at http://www.epa.gov/safewater/lead.

Coliform:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Virgin Valley Water District had one positive result for Total Coliform in September of 2013, and this may have been a warning of potential problems. We maintain a chorine residual in the distribution system, and additional monitoring for Coliform was conducted. All follow up samples came back Absent of this biological contaminant.

WHAT OTHER INFORMATION CAN YOU GIVE ME ABOUT MY WATER?

pH — 7.62
Fluoride — 0.77-1.4 mg/L
Sodium — 50 - 160 mg/L
Sulfate — 97-240 mg/L
Iron — 0.0 mg/L
Water Temperature — 76°F
Hardness — 10 - 17 grains/gallon
Hardness — 150 - 250 mg/L
Specific Conductance — 570-1000 µS/cm
Total Dissolved Solids — 390-700mg/L

Each water source is tested quarterly, annually, or once every three years depending on the constituent for 133 different contaminants as required by State and Federal agencies. Results of those tests can be obtained at the Water District's website at vvh2o.com or contacting the Water District at 702-346-5731.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 their health care provider. EPA/Center 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.

HOW CAN I LEARN MORE ABOUT MY WATER?

If you have any questions regarding water quality or Water District operations, please visit the Water District's office at 500 Riverside Road or call (702) 346-5731. The Water District Board of Directors meets every 1st and 3rd Tuesday at 5:00 p.m at the District's office.