HOW CAN I LEARN MORE ABOUT MY WATER?

Additional information can be found by visiting the Water District's website at http://www.vvh2o.com. 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. Office hours are from 8:00 a.m. to 4:30 p.m. The Water District Board of Directors meets every 1st and 3rd Tuesday of the month at 5:00 p.m. at the District's office.



2020 ANNUAL WATER QUALITY REPORT



500 Riverside Road Mesquite, Nevada 89027

(702) 346-5731

http://www.vvh2o.com

We are pleased to present the 2020 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 W	COUNTY: CLARK								
BHPS SYSTEM ID NUMBER: NV0000167	NUMBER OF RESIDENTIAL CONNEC	CTIONS: 9,315	POPULATION SERVED: 26,624						
GENERAL MANAGER: KEVIN BROW	N ADDRESS: 500	ADDRESS: 500 RIVERSIDE RD. MESQUITE, NV 89027							
TELEPHONE: (702) 346-5731	FAX : (702) 346-2596	E-MAIL: kbro	wn@vvh2o.com						
CONTACT PERSON: AARON BUNK	KER ADDRESS: 5	ADDRESS: 500 RIVERSIDE RD. MESQUITE, NV 89027							
TELEPHONE: (702) 346-5731	FAX : (702) 346-2596	E-MAIL: abur	nker@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 nine deep wells located throughout the valley. Depths of wells range from 650' to 2,250'. The water temperature coming out of the ground is naturally warm at approximately 80 degrees Fahrenheit.

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:

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

<u>Inorganic contaminants</u>, 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

<u>Organic contaminants</u>, 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 2020 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	2020	ppb	*4.4	ND-12	10	0	Erosion of natural deposits.	
Barium	2020	ppm	0.057	0.0-0.057	2	2	Discharge of drilling wastes; Erosion of natural deposits	
Fluoride	2020	ppm	1.4	ND-1.4	2	4	Erosion of natural deposits; Discharge fron fertilizer.	
Nitrate	2020	ppm	1.5	ND-1.5	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
Chromium	2020	ppb	8.6	ND-8.6	100	100	Erosion of natural deposits.	
DISINFECTION BY-PRODUCTS	MONITORING PERIOD	UNIT	YOUR WATER	RANGE	MCL	MCLG	TYPICAL SOURCE	
HAA5	2020	ppb	0	0	60	0	By-product of drinking water chlorination.	
TTHM	2020	ppb	*7.18	3.65-10.7	80	n/a	By-product of drinking water chlorination.	
LEAD & COPPER	MONITORING PERIOD	UNIT	-	O th ENTILE	RANGE	AL	TYPICAL SOURCE	
Lead	2018	ppb	3.8 ND-6.5 1:		15	Corrosion of household plumbing systems Erosion of natural deposits.		
Copper	2018	ppm	0.14		ND-0.22	1.3	Corrosion of household plumbing systems Erosion of natural deposits.	
Radionuclides	MONITORING PERIOD	UNIT	HIGHEST VALUE	RANGE	MCL	MCLG	TYPICAL SOURCE	
Gross Alpha	2020	pCi/L	7.3	4.0-7.3	15	0	Erosion of natural deposits.	
Gross Beta	2020	pCi/L	12.5	6.8-12.5	50	0	Erosion of natural deposits.	
Combined Uranium	2020	μg/L	4.5	2.5-4.5	30	0	Erosion of natural deposits.	
SECONDARY CONTAMINANTS	MONITORING PERIOD	UNIT	HIGHEST VALUE	RANGE	MCL	MCLG	TYPICAL SOURCE	
Calcium	2020	mg/L	60	34-60	n/a		Erosion of natural deposits.	
Chloride	2020	mg/L	100	17-100	400	n/a	Erosion of natural deposits.	
Color	2020	CU	2.5	0 - 2.5	15	n/a	Erosion of natural deposits.	
Hardness	2020	mg/L	260	170-260	n/a		Erosion of natural deposits.	
Magnesium	2020	mg/L	33	20-33	150	150 n/a Erosion of natural deposits.		
Sodium	2020	mg/L	140	36-140	200	20	Erosion of natural deposits.	
Sulfate	2020	mg/L	230	94-230	500	n/a Erosion of natural deposits.		
TDS	2020	mg/L	650	340-650	1000	n/a	Erosion of natural deposits.	
Zinc	2020	mg/L	0.075	0 - 0.075	5	n/a	Erosion of natural deposits.	

^{*}Your Water (Arsenic & TTHM): 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.

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 which is a mineral known to cause cancer in humans at high 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 The District has six arsenic treatment plants throughout the have your water tested. Information on lead in drinking water, testing distribution system and a seventh arsenic treatment plant is methods, and steps you can take to minimize exposure is available currently being engineered and is scheduled to be online in early from the Safe Drinking Water Hotline (800) 426-4791 or at 2022. The treatment plants are state of the art facilities that can http://www.epa.gov/safewater/lead.

FLUORIDE:

The State of Nevada has set forth a more stringent MCL of 2.0 mg/L for Fluoride than the federal limit of 4.0 mg/L assigned nationally. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of the teeth of children, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

WHAT OTHER INFORMATION CAN YOU GIVE **ME ABOUT MY WATER?**

pH — 7.36-7.98 Fluoride — 0.0-1.4 mg/L Sodium — 36 - 140 mg/L Calcium — 34-60 mg/L Magnesium — 24-33 mg/L Silica — 18-35 mg/L

Iron — ND mg/L Hardness — 10 - 15 grains/gallon Hardness — 170 - 260 mg/L Specific Conductance — 570-1,000 μS/cm Total Dissolved Solids — 340-650 mg/L Temp. of well water — Approx. 80°F

Each water source is tested quarterly, annually, or once every three years depending on the constituent for over a 130 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.

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 concentrations and is linked to other health effects such as skin damage and circulatory problems.

ARSENIC TREATMENT PLANTS:

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.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general 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.