TESTING RESULTS

Contaminants that may be present in source water include:

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

B. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

E. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, Department of Natural Resources prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

TERMS AND ABBREVIATIONS

Population: 810. This is the equivalent residential population served including non-bill paying customers.

90th percentile: For Lead and Copper testing. 10% of test results are above this level and 90% are below this level.

MCLG: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCL: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

AL: Action Level, or the concentration of a contaminant that, when exceeded, triggers treatment or other requirements that a water system must follow.

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

TTHM: Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane and bromoform) as a group.

HAA5: Haloacetic Acids (mono-, di- and tri-chloracetic acid, and mono- and di-bromoacetic acid) as a group.

ppb: Parts per billion or micrograms per liter

ppm: Parts per million or milligrams per liter

pCi/L: Picocuries per liter

n/a: Not applicable

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

MFL: Million fibers per liter, used to measure asbestos concentration

nd: not detectable at testing limits

Range of Results: Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Highest Test Results and Highest Value.

The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.

Regulated Contaminants

	Collection Dates	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	10/17/17	0.048	0.0401-0.048	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	10/17/17	3.54	2.76-3.54	ppb	100	100	Discharge from steel and pulp mills
FLUORIDE	10/17/17	1.48	1.23 - 1.48	ppm	4	4	Natural deposits; Additive which promotes strong teeth

Disinfection Byproducts	Monitoring Period	Highest Value	Range	Unit	MCL	MCLG	Typical Source
HAA5	2018	0	0-0	ppb	60	0	Byproducts of drinking water disinfection
TTHM	2018	3	3.42-3.42	ppb	80	0	Byproducts of drinking water disinfection

Lead and Copper	Dates	90th Percentile	Range	Unit	AL	Sites over AL	Typical Source
Copper	2014-2016	1.08	0.0295-1.19	ppm	1.3	0	Corrosion of household plumbing systems

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2016				

Regulated Contaminants	Collection Dates	Highest Value	Range	Unit	MCL	Typical Source
Combined Radium (-226 & -228)	7/28/16	2.2	2.2	pCi/L	5	Erosion of natural deposits
Gross Alpha Particle Activity	7/28/16	8.4	8.4	pCi/L	0E	Erosion of natural deposits
Radium -226	7/28/16	2.2	2.2	pCi/L	5	

Violations and Health Effects Information

No Violations Occurred in the Calendar Year of 2018

Optional Monitoring (Not Required by EPA)

Secondary Contaminants	Collection Dates	Highest Value	Range	Unit	SMCL
ALKALINITY, CACO3 STABILITY	10/17/2017	380	349-380	MG/L	
CALCIUM	10/17/2017	66.9	64.7-66.9	MG/L	
CHLORIDE	10/17/2017	48.4	44.2-48.4	MG/L	250
HARDNESS, CARBONATE	10/17/2017	308	300-308	MG/L	
IRON	10/17/2017	0.0909	0.047 - 0.0909	MG/L	0.3
MAGNESIUM	10/17/2017	34.2	33.7-34.2	MG/L	
MANGANESE	10/17/2017	0.0021	0.0019-0.0021	MG/L	0.05
PH	10/17/2017	7.34	7.32-7.34	PH	8.5
POTASSIUM	10/17/2017	9.2	8.02-9.2	MG/L	
SODIUM	10/17/2017	65.9	60.8-65.9	MG/L	
SULFATE	10/17/2017	94.6	83.3-94.6	MG/L	250
TDS	10/17/2017	513	498-513	MG/L	500
ZINC	10/17/2017	0.0273	0.00585-0.0273	MG/L	5

HEALTH RISKS

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 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).

SPECIAL LEAD AND COPPER NOTICE:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Innsbrook 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 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 (800.426.4791) or at http://water.epa.gov/drink/info/lead/index.cfm.

We are pleased to provide you with this year's Annual Water Quality Report. This report is designed to inform you about the quality of your water and the efforts we make to continually improve the water treatment process and to protect our water resources.

The sources of drinking water (both tap water and bottled water) include 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 human activity.

Our water is drawn from two different wells. Well #1 is in the wellhouse located between the Aspen Center and Clubhouse/Pro Shop and is 1,300 feet deep. It draws water from the Roubidoux Aquifer. Well #2 is located in the wellhouse by the Stracks Church gate, near Lake Konstanz. This well is 1,340 feet deep and draws from the Upper Gasconade Aquifer. A third well in the Lake Alpine area is also 1,340 feet deep and would be available if necessary.

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 Environmental Protection Agency's Safe Drinking Water Hotline (800.426.4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Innsbrook is responsible for providing high quality drinking water, and our water has always tested well below the action level for lead. But we 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 two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Additional information is available from the EPA Safe Drinking Water Hotline listed above.

The Missouri Department of Natural Resources regulates our water system and requires us to test our water on a regular basis to ensure its safety. Our system has been assigned the identification number MO6036142 for the purposes of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are on the following pages of this report. In addition we tested monthly for coliform bacteria. There were no violations of State or Federal standards. Our water has met and surpassed standards set by the EPA and Missouri DNR in all previous Consumer Confidence Reports.

If you would like to talk about the water system, the drinking water quality or the Water Quality Report, please contact me.

Sincerely,

Greg Nissing, Utilities Technician
636.745.3000 x9231 | utilities@innsbrook-resort.com

Rev. 5/15/19

VILLAGE OF INNSBROOK

MO6036142

2018 Annual Water Quality Report

(Consumer Confidence Report)

Innsbrook

596 Aspen Way Dr. • Innsbrook, MO 63390