

# 2019 Consumer Confidence Report

Water System Name: Grizzly Hill School Report Date: 2019

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2018 and may include earlier monitoring data.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Type of water source(s) in use: Groundwater Well treated with chlorine for iron and manganese removal

Name & general location of source(s): One groundwater well located on the facility property

Drinking Water Source Assessment information: An assessment was performed in 2002. Please contact Nev. Co. Environmental Health at 530-265-1222 for a copy of the assessment

Time and place of regularly scheduled board meetings for public participation: Routine board meetings are held every 2<sup>nd</sup> Tuesday at 4pm at Grizzly Hill School

For more information, contact: School District Office Phone: (530) 265-9052

## TERMS USED IN THIS REPORT

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Variations and Exemptions:** State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**ND:** not detectable at testing limit

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (µg/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

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 include:**

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Contaminant
Total Coliform Bacteria (state Total Coliform Rule)	(In a mo.) 0	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or E. coli (state Total Coliform Rule)	(In the year) 0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. coli positive		Human and animal fecal waste
E. coli (federal Revised Total Coliform Rule)	(In the year) 0	0	(a)	0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> . (* ) The facility failed to collect a Total Coliform Bacteria sample in the month of February 2018. Thence the facility management was uncertain of the water quality at that time					

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER								
Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 <sup>th</sup> Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	2017	5	9.46	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppb)	2017	5	204.1	0	1300	0.3	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (reporting units)	Sample Date	Level Detected	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2003	8.9	N/A	N/A	Salt present in the water and is generally naturally occurring
Hardness – Pre Treatment (ppm)	2003	191	N/A	N/A	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
Hardness – Post Treatment (ppm)	2013	157	N/A	N/A	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Samples are taken Pre- Treatment unless otherwise noted

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (reporting units)	Sample Date	Level Detected	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic (ppb)	2018	1.98	10	0.004	Erosion of natural deposits; runoff from orchards
Barium (ppm)	2018	0.016	1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (ppb)	2018	5.21	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	2016	1.43 (+/- 0.968)	15	(0)	Erosion of natural deposits
Nickel (ppb)	2018	8.71	100	12	Erosion of natural deposits; discharge from metal factories
Radium 226 (pCi/L)	2016	0.066 (+/- 0.129)	5	0.05	Erosion of natural deposits
Thallium (ppb)	2018	1.31	2	0.1	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

Samples are taken Pre-Treatment unless otherwise noted

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	2018	88.1	200	N/A	Erosion of natural deposits
Chloride (ppm)	2003	3.2	500	N/A	Naturally occurring; seawater influence
Specific Conductivity (µmhos/cm)	2003	435	1600	N/A	Substances that form ions in water
Sulfate (ppm)	2014	56.8	500	N/A	Naturally occurring; industrial waste
Total Dissolved Solids (ppm)	2003	268	1000	N/A	Run-off/leaching from natural deposits
Iron (ppb)	2018	1,101	300	N/A	Leaching from natural deposits; industrial wastes
Iron {Post-Filtration} (ppb)	2018	ND	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2018	491.4	50	N/A	Leaching from natural deposits
Manganese {Post-Filtration} (ppb)	2018	ND	50	N/A	Leaching from natural deposits

Samples are taken Pre-Filtration unless otherwise noted

TABLE 6 – DISINFECTION BYPRODUCTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	MCL	PHG (MCLG)	Typical Source of Contaminant
Total THM's – Post Filtration (ppb)	2019	4.6	80	N/A	Byproduct of drinking water chlorination
Haloacetic Acids, (ppb)	2019	6.5	60	N/A	Byproduct of drinking water chlorination

### Additional General Information on Drinking 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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. U.S. EPA/Centers 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 (1-800-426-4791).

**Lead-Specific Language for Community Water Systems:** 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. Grizzly Hill School 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 (1-800-426-4701) or at <http://www.epa.gov/lead>.

# 2019 Consumer Confidence Report

Water System Name: Oak Tree School Report Date: 2019

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2018 and may include earlier monitoring data.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Type of water source(s) in use: Groundwater Wells (2)

Name & general location of source(s): Two groundwater wells located on the facility property

Drinking Water Source Assessment information: An assessment was performed in 2002. Please contact Nev. Co. Environmental Health at 530-265-1222 for a copy of the assessment

Time and place of regularly scheduled board meetings for public participation: Routine board meetings are held every 2<sup>nd</sup> Tuesday at 4pm at Grizzly Hill School

For more information, contact: School District Phone: (530) 265-9052

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**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

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 include:**

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Contaminant
Total Coliform Bacteria (state Total Coliform Rule)	(In a mo.) 2	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or E. coli (state Total Coliform Rule)	(In the year) 0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. coli positive		Human and animal fecal waste
E. coli (federal Revised Total Coliform Rule)	(In the year) 0	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 <sup>th</sup> Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	2017	5	2.08	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppb)	2017	5	229.0	0	1300	0.3	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (reporting units)	Sample Date	Water Source	Level Detected	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2014	Well 1	14.3	N/A	N/A	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2014	Well 1	137	N/A	N/A	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (reporting units)	Sample Date	Water Source	Level Detected	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Barium (ppb)	2018 2017	Well 1 Well 2	90.39 7.2	1000	2000	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium [Total] (ppb)	2018	Well 1	5.23	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Gross Alpha (pCi/L)	2016	Well 1 Well 2	3.91 (+/-1.96) 3.78 (+/-1.53)	15	(0)	Erosion of natural deposits
Nickel (ppb)	2018	Well 1	3.78	100	12	Erosion of natural deposits; discharge from metal factories
Radium 228 (pCi/L)	2016	Well 1 Well 2	0.67 (+/-0.29) 1.20 (+/-0.12)	5	0.05	Erosion of natural deposits
Radium 226 (pCi/L)	2016	Well 1 Well 2	0.76 (+/-0.65) 0.33 (+/-0.33)	5	0.019	Erosion of natural deposits
Thallium (ppb)	2018	Well 1	1.37	2	0.1	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Water Source	Level Detected	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	2018	Well 1	88.6	200	N/A	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2014	Well 1	2.6	500	N/A	Naturally occurring; seawater influence
Sulfate (ppm)	2014	Well 1	5.9	500	N/A	Naturally occurring; industrial waste
Total Dissolved Solids (ppm)	2014	Well 1	194	1000	N/A	Run-off/leaching from natural deposits
Specific Conductivity (µmhos/cm)	2014	Well 1	366	1600	N/A	Substances that form ions in water; seawater influence
Manganese (ppb)	2014	Well 1	73	50	N/A	Leaching from natural deposits

### Additional General Information on Drinking 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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