## Annual Drinking Water Quality Report The Water We Drink

Lewiston City 2018

We're pleased to present to you this year's Annual Drinking 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. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources have been determined to be from groundwater sources. Our water source is Hy Bair Spring, Griffin Well.

The Drinking Water Source Protection Plan for Lewiston is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. Our sources have been determined to have a low level of susceptibility from potential contamination from sources such as septic tanks, roads, residential areas, industrial areas. We have also developed management strategies to further protect our sources from contamination. Please contact us if you have questions or concerns about our source protection plan.

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first. If you'd like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

This report shows our water quality and what it means to you our customer.

If you have any questions about this report or concerning your water utility, please contact. **Paul Swainston at 435-258-2141.** We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the third Tuesday every month at 7:30 pm

Lewiston City routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2018. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's

important to remember that the presence of these constituents does not necessarily pose a health risk.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects* (*ND*) - laboratory analysis indicates that the constituent is not present.

**ND/Low - High** - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

**Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter (ug/l)* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

*Parts per quadrillion (ppq) or Picograms per liter (picograms/l)* - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*Millirems per year (mrem/yr)* - measure of radiation absorbed by the body.

*Million Fibers per Liter (MFL)* - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

**Maximum Contaminant Level (MCL)** - The "Maximum Allowed" (MCL) is 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.

*Maximum Contaminant Level Goal (MCLG)* - The "Goal"(MCLG) is 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.

*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.

*Date*- Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates may seem out-dated.

*Waivers* (*W*)- Because some chemicals are not used or stored in areas around drinking water sources, some water systems have been given waivers that exempt them from having to take certain chemical samples, these waivers are also tied to Drinking Water Source Protection Plans.

|                                  |                  |                                  | TEST RES            | ULTS |  |                 |   |
|----------------------------------|------------------|----------------------------------|---------------------|------|--|-----------------|---|
| Contaminant                      | Violation<br>Y/N | Level<br>Detected<br>ND/Low-High | Unit<br>Measurement | MCLG | MCL  | Date<br>Sampled | Likely Source of<br>Contamination   |
| Microbiologi                     |                  | taminants                        |                     |      |  |                 |   |
| Total Coliform<br>Bacteria       | N                | ND                               | N/A                 | 0    | Presence of<br>coliform<br>bacteria in<br>5% of<br>monthly<br>samples  | 2018            | Naturally present in the environment  |
| Fecal coliform and E.coli        | N                | ND                               | N/A                 | 0    | If a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive | 2018            | Human and animal fecal waste  |
| Turbidity<br>for Ground<br>Water | N                | ND                               | NTU                 | N/A  | 5  | 2017            | Soil runoff   |
| <b>Inorganic Co</b>              | ontamin          | ants                             |                     |      |  |                 |   |
| Arsenic                          | N                | 2.6                              | ppb                 | 0    | 10   | 2016            | Erosion of natural<br>deposits; runoff<br>from orchards;<br>runoff from glass<br>and electronics<br>production wastes |
| Barium                           | N                | ND-1                             | ppb                 | 2    | 2  | 2016            | Discharge of  |

|  |        |                 |   |     |      |                    |      | drilling wastes;<br>discharge from<br>metal refineries;<br>erosion of natural<br>deposits   |
|--|--------|-----------------|---|-----|------|--------------------|------|---|
| Carbon, Total<br>Organic (TOC)                         | N      | ND              |   | ppm | NA   | ТТ                 | 2017 | Naturally present in the environment  |
| Copper a. 90% results b. # of sites that exceed the AL | N      | a.<br>275<br>b. |   | ppb | 1300 | AL=1300            | 2017 | Corrosion of<br>household plumbing<br>systems; erosion of<br>natural deposits   |
| Cyanide  | N      | NT-2            |   | ppb | 200  | 200                | 2016 | Discharge from<br>steel/metal<br>factories; discharge<br>from plastic and<br>fertilizer factories   |
| Fluoride   | N      | 200             |   | ppb | 4000 | 4000               | 2016 | Erosion of natural<br>deposits; water<br>additive which<br>promotes strong<br>teeth; discharge<br>from fertilizer and<br>aluminum factories |
| Lead a. 90% results b. # of sites that exceed the AL   | N      | a.<br>b.        | 2 | ppb | 0    | AL=15              | 2017 | Corrosion of<br>household plumbing<br>systems, erosion of<br>natural deposits   |
| Nitrate (as<br>Nitrogen)                               | N      | ND-4            |   | ppm | 10   | 10                 | 2018 | Runoff from<br>fertilizer use;<br>leaching from septic<br>tanks, sewage;<br>erosion of natural<br>deposits                                  |
| Sodium   | N      | 4-5             |   | ppm | 500  | None set by<br>EPA | 2016 | Erosion of natural<br>deposits; discharge<br>from refineries and<br>factories; runoff<br>from landfills.                                    |
| Sulfate  | N      | 6               |   | ppm | 1000 | 1000               | 2016 | Erosion of natural<br>deposits; discharge<br>from refineries and<br>factories; runoff<br>from landfills,<br>runoff from<br>cropland         |
| TDS (Total<br>Dissolved solids)                        | N      | 148-24          | 6 | ppm | 2000 | 2000               | 2016 | Erosion of natural deposits   |
| <b>Disinfection I</b>                                  | 3y-pro | ducts           |   |     |      |                    |      |   |
| TTHM<br>[Total<br>trihalomethanes]                     | N      | 2               |   | ppb | 0    | 80                 | 2018 | By-product of<br>drinking water<br>disinfection   |
| Haloacetic Acids                                       | N      | 4               |   | ppb | 0    | 60                 | 2017 | By-product of<br>drinking water<br>disinfection   |
| Chlorine   | N      | ND-1            |   | ppm | 4    | 4                  | 2018 | Water additive used to control microbes   |

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

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of 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 advice from your health care provider.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

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. Lewiston 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 or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

We at Lewiston City work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.