Annual Drinking Water Quality Report 2012
Jefferson County PSD – Cavaland
340 Edmond Road, Suite A
Kearneysville, WV 25430
PWS #WV3301972
April 5, 2013

Why am I receiving this report?

In compliance with the Safe Drinking Water Act Amendments, the Jefferson County PSD is providing its customers with this annual water quality report. This report explains where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The information in this report shows the results of our monitoring for the period of January 1 to December 31, 2012.

If you have any questions concerning this report, you may contact Susanne Lawton, General Manager, at (304)725-4647. If you have any further questions, comments, or suggestions, please attend any of our regularly scheduled board meetings. Meeting information is posted on the website www.jcpsd.com.

Where does my water come from?

Your water source is ground water drawn from wells.

Source Water Assessment

A Source Water Assessment was conducted on August 24, 2012 by the West Virginia Bureau for Public Health (WVBPH). The well that supplies drinking water to the Cavaland water system has a moderate susceptibility to contamination, due to the sensitive nature of the aquifer in which the drinking water wells are located and the existing potential contaminant sources identified within the area. This does not mean that the wellfield will become contaminated; only that conditions are such that the ground water could be impacted by a potential contaminant source. The source water assessment report which contains more information is available for review at www.jcpsd.com or a copy will be provided to you by request at our office during normal business hours or from WVBPH (304)558-2981.

Water System Evaluation and Feasibility Study

In 2008 Jefferson County Public Service District (the District) entered into a contract with Gwin Dobson & Foreman Inc to perform an Evaluation and Feasibility Study of the Cavaland water system. The completed study was received in February of 2009. The study indicated the system is in need of substantial upgrades. The study can be viewed on the District website, www.jcpsd.com, or by making an appointment to view it at our office. In March of 2012 the District submitted an application to the West Virginia Infrastructure and Jobs Development Council (IJDC) to move forward on a modified project that will still meet basic needs for many years. If approved by IJDC, the project will move forward to the West Virginia Public Service Commission for their approval. A letter notifying customers of this application was mailed on March 22, 2012. If you would like a copy of that letter, or if you wish to discuss this further, please contact Susanne Lawton, General Manager, at (304)725-4647.

Sanitary Survey

A Sanitary Survey was conducted on March 11, 2009 for the Cavaland Water System by Alan F. Marchun and Justin E. Jordan, from the Office of Environmental Health Services (OEHS) Kearneysville District Office. Located off Engle Molers Road approximately one mile east of WV Route 230, the water system serves 42 residential customers. Source water is obtained from a single well with treatment consisting of disinfection with retention in a 5,500 gallon tank. The distribution system is pressurized by two centrifugal pumps and a 525 gallon hydropneumatic tank.

Results of the survey show that the Cavaland Subdivision Water System is capable of compliance with all requirements with all requirements of the WV Public Water Systems Legislative Rules on a continuous basis. Improvements were made since the last survey was conducted in March 2004, which included installing a manual transfer switch to operate the plant using a portable generator and installing a continuous well water level monitoring system. All required monitoring is being performed and records of the system's operation and monitoring are being properly maintained. The Sanitary Survey which contains more information is available for review at www.jcpsd.com or a copy will be provided to you by request at our office during normal business hours or from WVBPH (304)558-2981.

Why must water be treated?

All drinking water contains various amounts and kinds of contaminants. Federal and state regulations establish limits, controls, and treatment practices to minimize these contaminants and to reduce any subsequent health effects.

Contaminants in Water

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

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these 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).

The source of drinking water (both tap and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

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

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

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

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

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 disorders, some elderly, and infants can be particularly at risk for 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).

Water Quality Data Table

Definitions of terms and abbreviations used in the table or report:

- **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 technique.

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

- **MRDL - Maximum Residual Disinfectant Level,** or the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary to control microbial contaminants.

Abbreviations that may be found in the table:

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

- **ppm** - parts per million or milligrams per liter

- **ppb** - parts per billion or micrograms per liter

- **ND** - not detected

- **N/A** – not applicable

The Jefferson County PSD routinely monitors for contaminants in your drinking water according to federal and state laws. The tables below show the results of our monitoring for contaminants.

Table of Test Results - Regulated Contaminants – Jefferson County PSD (WV3301972)

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants						
Nitrate	N	4.9	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Lead	N	3.3	ppb	0	15	Household plumbing
Copper	N	0.83	ppm	1.3	1.3	Household plumbing
Volatile Organic Contaminants						
Chlorine	N	1.0 Annual avg. Range 0.3-2.0	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes

WE ARE PLEASED TO REPORT THAT CAVALAND MET ALL FEDERAL AND STATE WATER STANDARDS FOR THE REPORTING YEAR 2012.

Additional Information

All other water test results for the reporting year 2012 were all non-detects.

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. The Jefferson County PSD 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 or at http://www.epa.gov/safewater/lead.