

LEW JONES SUBDIVISION

2020 WATER QUALITY REPORT

PWSID# 3053650



Prepared by:

Dinwiddie County Water Authority

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If you have any questions concerning this Lew Jones Subdivision Water Quality Report (WQR) for **2020**, any dates and times for our Board meetings or how you may participate in decisions regarding your water supply, please don't hesitate to contact **Ben Jones, Operations Manager** by email at benjones@dcwa.org or by phone at (804)861-0998 ext. 112. You can also obtain more information about the Dinwiddie County Water Authority by visiting our web site at www.dcwa.org.

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INTRODUCTION

This Lew Jones Subdivision Annual Drinking Water Quality Report for calendar year **2020** is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water must meet State and Federal requirements administered by the Virginia Department of Health, (VDH).

GENERAL INFORMATION

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals 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, or 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 stormwater runoff, and septic system;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. More information can be obtained by calling the **Environmental Protection Agency's Safe Drinking Water Hotline at (800)426-4791**.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at (800)426-4791

SOURCE OF YOUR DRINKING WATER

The source is a central groundwater well located in Lew Jones Village. Your drinking water has no additional treatment.

MONITORING INFORMATION

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The [Table of Detected Contaminants](#) in this report lists only those contaminants that had some level of detection. Other contaminants have been analyzed but were not present or below the detection limits of lab equipment. Those sample results are available by contacting **Ben Jones, Operations Manager** at (804)861-0998 ext. 112 or benjones@dcwa.org. Contaminants in your drinking water are constantly monitored according to Federal and State regulations. The EPA requires that results listed in the table of contaminants reflect monitoring results for the period of January 1st, 2016 through December 31st, 2020. In addition, The DCWA takes routine bacteriological monitoring samples that are collected throughout the water system from businesses and homes. Many other contaminants have been analyzed, but were not present or were below detection limits of the lab equipment. In the Table and elsewhere in this report you will find terms and abbreviations you might not be familiar with. The definitions shown are provided to help you better understand these terms and abbreviations.

Maximum contaminant levels (MCLs) are set at very stringent levels by the Environmental Protection Agency (EPA). In developing the standards EPA assumes that the average adult drinks two liters of water each day throughout a life span of 70 years. EPA generally sets MCL's at levels that will result in no adverse health effects for some contaminants or a one-in-10,000 to one-in-a-million chance of having the described health effect for other contaminants.

LEW JONES SOURCE WATER ASSESSMENT

The Virginia Department of Health conducted a Source Water Assessment of Lew Jones Subdivision Waterworks in 2001. The well was determined to be of high susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program. The assessment report consists of maps showing the Source Water Assessment area, an inventory of known Land Use Activities and Potential Sources of Contamination, Potential Conduits to Groundwater, Susceptibility Explanation Chart, and Definitions of Key Terms. This report is available by contacting **Ben Jones, Operations Manager**, Dinwiddie County Water Authority, (804) 861-0998 ext. 112, or by e-mail; benjones@dcwa.org

ADDITIONS INFORMATION

The Dinwiddie County Water Authority has also installed a stand-by generator on the well system so the residents of Lew Jones Subdivision can maintain their drinking water supply even during power outages. The Dinwiddie County Water Authority continues to make efforts to improve and make the water supply more dependable.

DEFINITIONS

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 \$10,000.00.

Parts per billion – (ppb) or micrograms per liter (ug/L) – Parts of an analyte per billion parts of a water sample.

Maximum Contaminant Level – (MCL) – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology. MCL's are set at very stringent levels by the U.S. Environmental Protection Agency (EPA). In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCL's at levels that will result in no adverse health effects for some contaminants or a one-in-10,000 to one-in-a-1,000,000 chance of having the described health effect for other contaminants.

Maximum Contaminant Level Goal – (MCLG) – The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Non-Detects – (ND) – Lab analysis indicates that the contaminant is not present.

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

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 required process intended to reduce the contaminant level in drinking water.

DCWA – Dinwiddie County Water Authority

CCR – Consumer Confidence Report

WQR – Water Quality Report

WATER QUALITY RESULTS (Detected Contaminants Only)

Contaminant (units)	MCLG	MCL	Level Found	Range	Violation	Date of Sample	Typical Source of Contamination
Fluoride (ppm)	4	4	0.62	NA	No	2018	Erosion of natural deposits.
Nitrite/Nitrate (ppm)	10	10	0.14	NA	No	2020	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Combined Radium (pCi/L)	0	5	2.0	0.4 – 6.1	No**	2019	Erosion of natural deposits
Alpha Emitters (pCi/L)	0	15	9.7	0 – 28.4	No***	2019	Erosion of natural deposits.
Gross Beta (pCi/L)	0	50*	3.6	ND – 10.8	No	2019	Erosion of natural and man-made deposits

A note about fluoride in drinking water: Some people that drink water containing fluoride in excess of the maximum Contaminant Level (MCL) of 4 ppm 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 children’s teeth, 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.

* The MCL for Gross Beta is 4 mrem/year however EPA considers 50 pCi/L to be the level of concern.

** Compliance for Combined Radium and Alpha Emitters is determined by averaging the initial sample and required confirmation samples. Some people who drink water containing radium-226 or -228 in excess of the MCL over many years may have an increased risk of getting cancer.

*** Compliance for Combined Radium and Alpha Emitters is determined by averaging the initial sample and required confirmation samples. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

LEAD AND COPPER CONTAMINANTS

CONTAMINANT (units)	MCLG	Action Level	Level Detected	Range	# of samples above AL	Date of Sample	Typical Source of Contamination
Copper (ppm)	1.3	1.3	0.45	0.11 – 0.51	0	2019	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching of wood preservatives.
Lead (ppb)	0	15	ND	NA	0	2019	Corrosion of household plumbing; Erosion of natural deposits

A note about lead in drinking water: “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. Dinwiddie County Water Authority 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 the 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 ([1-800-426-4791](tel:1-800-426-4791)) or at <http://www.epa.gov/safewater/lead>.”

Additional Nonregulated Monitoring Results

Analyte (units)	Level Detected	Range	Date of Samples	Typical Source of Contamination
Sodium (ppm)	12.7	NA	2018	Sodium occurs naturally in groundwater. However, sources such as road salt, water softeners, natural underground salt deposits, pollution from septic systems as well as saltwater intrusion due to proximity to the ocean are often causes of elevated levels in drinking water supplies.

Sodium was detected in your water sample. There is presently no established standard for sodium in drinking water. Water containing more than 270 mg/l of sodium should not be used as drinking water by those persons whose physician has placed them on moderately restricted sodium diets. Water containing more than 20 mg/l should not be used as drinking water by those persons whose physician has placed them on severely restricted sodium diets.