

Montgomery County

Household Water Quality Program

Montgomery Cooperative Extension

Thomas Weeks

Mailing Address:

4095 Fortress Dr, Blacksburg, VA 24060

Sample Address:

4095 Fortress Dr, Blacksburg, VA 24060

Sample ID: 23438

Date of Sample: 3/16/2022

Sample Location: kitchen tap - before treatment

Water Source: Drilled_Well

Water Treatment: None

Test (units)	Water Quality Sample Results	Maximum Recommended Level or Range
Iron (mg/L)	0.009	0.3
Manganese (mg/L)	0.115**	0.05
Arsenic (mg/L)	ND	0.01
Hardness (mg/L)	135.4	180
Sulfate (mg/L)	7.6	250
Fluoride (mg/L)	ND	2
Total Dissolved Solids (mg/L)	228	500
pH	7.4	6.5 to 8.5
Sodium (mg/L)	11.45	20
Nitrate-N (mg/L)	ND	10
Total Coliform Bacteria Data:		
Presence/Absence	ABSENT	ABSENT
Most Probable Number Count (MPN/100mL)	ND	
E. coli Bacteria Data:		
Presence/Absence	ABSENT	ABSENT
Most Probable Number Count (MPN/100mL)	ND	
First Draw Data:		
Copper (mg/L)	0.001	1.3
Lead (mg/L)	ND	0.015
Flush Data:		
Copper (mg/L)	ND	1.3
Lead (mg/L)	ND	0.015

**Measured value exceeds recommendation for household water; ND indicates not detected (below the instrument detection limit)

For more information, contact your local Cooperative Extension Office or Erin Ling with the Virginia Household Water Quality Program:

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 755 Roanoke St, Suite 1G
 Christiansburg, VA 24073
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Erin Ling
 Biological Systems Engineering - Virginia Tech
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 Blacksburg, VA 24061
 (540) 231-9058 or wellwater@vt.edu

www.wellwater.bse.vt.edu

Analysis coordinated by Water Quality Laboratory, Dept. of Biological Systems Engineering, Virginia Tech, Blacksburg, VA. The information provided is for the exclusive use of the homeowner and should not be used as official documentation of water quality. This material is based upon work supported by the U.S. Department of Agriculture, Extension Service.



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Interpretation Sheet

Sample ID: 23438

Contaminant Levels: The Environmental Protection Agency (EPA) sets either a Maximum Contaminant Level (MCL) or a Secondary Maximum Contaminant Level (SMCL) for each contaminant. Maximum Contaminant Levels are set to protect the public health from contaminants in water. These legally enforceable national standards apply to public drinking water systems, but serve as a guide for private systems. Secondary Maximum Contaminant Levels are concentration limits for nuisance contaminants. No regulations are enforced for private water systems, such as wells and springs; these standards are useful guidelines for individual water supplies.

Units: Contaminants in your water test are reported in milligrams per liter (mg/l). One mg/l is equal to 1 part per million (ppm). To visualize this, about 4 drops of ink in a 55 gallon barrel of water results in an "ink concentration" of 1 ppm or mg/l.

Manganese (SMCL=0.05 mg/L)

Manganese in groundwater usually originates from certain rock formations, and is currently regulated as a nuisance contaminant in U.S. municipal drinking water at 0.05 mg/L, based on staining and taste considerations. A lifetime health advisory value of 0.3 mg/L was established by EPA in 2004 to protect against concerns of potential neurological effects. If present in amounts greater than 0.05 mg/l, it may give water a bitter taste and produce black stains on laundry, cooking utensils, or plumbing fixtures.