

Fredericksburg city has a moderate risk profile. Manganese is detected in ~100% of wells, driven by geological sources. Contamination is often invisible — testing is the only way to confirm your well's safety.

**N/A**  
HOUSEHOLDS ON  
PRIVATE WELLS

**Varies**  
PRIMARY  
AQUIFER TYPE

**MODERATE**  
OVERALL  
RISK LEVEL

### YOUR TOP WATER QUALITY RISKS

CONTAMINANT	HOW COMMON	RISK LEVEL	SOURCE & CONTEXT
<b>Manganese*</b>	~100% of wells	<b>Moderate</b>	<b>Geological</b> — Found in reducing aquifer zones alongside iron
<b>Iron*</b>	~20% above aesthetic limit	<b>Moderate</b>	<b>Geological</b> — Common in glacial and alluvial aquifers; staining and taste
<b>Sulfate*</b>	~100% of wells	<b>Low–Moderate</b>	<b>Geological</b> — Natural dissolution from gypsum and sulfate minerals
<b>Lead</b>	~100% of wells	<b>Low–Moderate</b>	<b>Infrastructure</b> — Older well casing materials and household plumbing
<b>Chloride*</b>	~100% of wells	<b>Low–Moderate</b>	<b>Road/Geological</b> — Road salt application and natural mineral deposits

\* Secondary standard — an aesthetic limit for taste, odor, or staining. Not a health-based EPA limit.

### WHAT TO DO NEXT

- Order a water test.**  
Test for Manganese, Iron, Sulfate, Lead, coliform bacteria. Bacteria annually; others every 3–5 years.
- Get your free county report.**  
See full data, treatment options, and certified labs at <https://yourwaterreport.com/states/va/fredericksburg-city/>
- Upload your lab results.**  
We'll interpret them, flag anything above limits, and recommend next steps — free.

### KNOW YOUR WELL

Well age / year drilled

Last water test date

Treatment systems installed

Well driller / service contact

### WHAT YOUR RESULTS MEAN

Use this to interpret your lab report — match the contaminant to your result.

IF YOUR TEST SHOWS	WHAT IT MEANS	CONSIDER
<b>Bacteria detected</b>	<b>Immediate concern</b>	Shock chlorination; add UV system
<b>Manganese &gt; 0.05 mg/L</b>	<b>Aesthetic + health concern at high levels</b>	Oxidation + filtration system
<b>Iron &gt; 0.3 mg/L</b>	<b>Staining, taste — aesthetic issue</b>	Oxidizing iron filter
<b>Lead &gt; 15 µg/L</b>	<b>EPA action level exceeded</b>	RO filter; inspect well casing

### WHO SHOULD USE THIS

- Homeowners on private wells — not covered by public water testing
- Home buyers doing due diligence before closing
- Families with infants, elderly, or immunocompromised members
- Anyone who hasn't tested their well in the past 3 years

### LOCAL RESOURCES

#### Full county report

<https://yourwaterreport.com/states/va/fredericksburg-city/>

Free personalized well water report at

<https://yourwaterreport.com/states/va/fredericksburg-city/>

Data: EPA ECHO · USGS NWIS · Water Quality Portal · U.S. Census ACS  
For informational purposes only. Contact a licensed professional for testing and treatment.