

James City County has an elevated risk profile. Manganese is the primary concern, 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

ELEVATED
OVERALL
RISK LEVEL

YOUR TOP WATER QUALITY RISKS

CONTAMINANT	HOW COMMON	RISK LEVEL	SOURCE & CONTEXT
Manganese*	~67% above aesthetic limit	Moderate	Geological — Found in reducing aquifer zones alongside iron
Chloride*	~38% above aesthetic limit	Moderate	Road/Geological — Road salt application and natural mineral deposits
Radon†	~100% of wells	Advisory	Geological — Radioactive gas dissolved from uranium-bearing rock
Sulfate*	~10% above aesthetic limit	Moderate	Geological — Natural dissolution from gypsum and sulfate minerals
Iron*	~9% above aesthetic limit	Moderate	Geological — Common in glacial and alluvial aquifers; staining and taste

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

† No finalized EPA primary MCL. Figure shows detection frequency, not regulatory exceedance.

WHAT TO DO NEXT

- Order a water test.**
Test for Manganese, Chloride, Radon, Sulfate, 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/james-city-county/>
- 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
Bacteria detected	Immediate concern	Shock chlorination; add UV system
Manganese > 0.05 mg/L	Aesthetic + health concern at high levels	Oxidation + filtration system
Radon > 4,000 pCi/L	EPA proposed limit; also affects indoor air	Aeration system; test indoor air
Iron > 0.3 mg/L	Staining, taste — aesthetic issue	Oxidizing iron filter

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/james-city-county/>

Free personalized well water report at
<https://yourwaterreport.com/states/va/james-city-county/>