

Orange County has an elevated risk profile. Iron 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
Iron*	~57% above aesthetic limit	Moderate	Geological — Common in glacial and alluvial aquifers; staining and taste
Manganese*	~52% above aesthetic limit	Moderate	Geological — Found in reducing aquifer zones alongside iron
Nitrite	~8% above limit	Moderate	
Uranium	~50% of wells	Low-Moderate	Geological — Naturally occurring in granitic and sedimentary bedrock
Arsenic	~100% of wells	Low-Moderate	Geological — Naturally dissolves from bedrock and glacial sediment

* 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 Iron, Manganese, Nitrite, Uranium, 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/orange-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
Iron > 0.3 mg/L	Staining, taste — aesthetic issue	Oxidizing iron filter
Manganese > 0.05 mg/L	Aesthetic + health concern at high levels	Oxidation + filtration system
Uranium > 30 µg/L	EPA limit exceeded — kidney risk	Reverse osmosis or ion exchange
Arsenic > 10 µg/L	EPA limit exceeded — chronic cancer risk	Reverse osmosis or activated alumina 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/orange-county/>

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

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