

Water quality testing Report

1670 Patuxent Bend, Laurel, MD 20707

CLIENT The Okafor Family	INSPECTION DATE August 12, 2026	WEATHER Overcast, 77°F
OCCUPANCY Occupied — seller present	INSPECTOR Ahmed H. Farouk	SERVICE AREA Laurel and surrounding Maryland

10
SERVICEABLE

3
MONITOR

0
REPAIR / REPLACE

0
SAFETY HAZARD

Summary of findings

The property is served by a private drilled well. Samples were collected at the kitchen tap (bacteriological) and the pressure-tank tap (chemical panel) under chain of custody and analyzed by a Maryland-certified drinking water laboratory (MDE). Results: total coliform ABSENT and E. coli ABSENT; nitrate 3.1 mg/L (below the 10 mg/L MCL); lead below detection; hardness 214 mg/L (very hard); iron 0.42 mg/L (above the 0.3 mg/L secondary standard). The water met all primary health standards tested; a softener and iron filtration are recommended for aesthetic concerns.

SCOPE & COMPANY PROFILE

SOURCE & SAMPLING

Water source (well / municipal)

Private drilled well, 6-inch casing, approximately 180 feet deep per the 2004 completion report.

SERVICEABLE

Sampling method & preservation

Bacteriological sample collected at the kitchen tap after a 5-minute flush into a sterile sodium thiosulfate container; chemical panel at the pressure-tank tap unpreserved, iced for transport.

SERVICEABLE

Laboratory & certification

Analysis by a Maryland-certified drinking water laboratory (MDE) (certification on report file).

SERVICEABLE

OBSERVATIONS & DIAGNOSTICS

SYSTEM OBSERVATIONS

Well cap & casing

SERVICEABLE

Front yard

Sanitary well cap intact; casing extends 12 inches above grade with sound mounded grout.



Well cap & casing

Pressure tank & pump

SERVICEABLE

Basement

Pressure switch cycles 42/62 psi; tank pre-charge within range.



Pressure tank & switch

SAMPLING DETAILS

BACTERIOLOGICAL

Total coliform

SERVICEABLE

ABSENT per 100 mL.

E. coli

SERVICEABLE

ABSENT per 100 mL.

CHEMICAL PANEL

Nitrate / nitrite

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Nitrate 3.1 mg/L (MCL 10 mg/L); nitrite below detection.

Lead

SERVICEABLE

Below detection (<0.001 mg/L; action level 0.015 mg/L).

Iron & manganese

MONITOR

Iron 0.42 mg/L exceeds the 0.3 mg/L secondary (aesthetic) standard; manganese within range. Orange staining observed at fixtures.

Recommendation: Consider an iron filtration system.

Hardness

MONITOR

214 mg/L as CaCO3 — classified very hard; scale visible on fixtures and the water heater element.

Recommendation: A water softener will reduce scale and extend appliance life.

CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS & RECOMMENDATIONS

Comparison to EPA MCLs

SERVICEABLE

All tested parameters met EPA primary drinking water standards at the time of sampling.

Retest interval

MONITOR

Retest bacteria annually and the chemical panel every 3–5 years, or after any well work.

Sampling details

WQ-01 · BACTERIOLOGICAL	
Location	Kitchen tap (first draw after flush)
Media / cassette	Sterile 100 mL bottle, Na2S2O3
Volume (L)	—
Collected	8/12/2026, 1:14:00 PM
Laboratory	Maryland-certified drinking water laboratory (MDE)
Lab sample #	MD-260812-117
Results	
Total coliform ABSENT · E. coli ABSENT	

WQ-02 · CHEMICAL PANEL	
Location	Pressure-tank tap
Media / cassette	1 L HDPE, iced
Volume (L)	—
Collected	8/12/2026, 1:22:00 PM
Laboratory	Maryland-certified drinking water laboratory (MDE)
Lab sample #	MD-260812-118
Results	
Nitrate 3.1 mg/L · Lead <0.001 · Iron 0.42 mg/L · Hardness 214 mg/L · pH 7.1 · TDS 386 mg/L	

Chain of custody

Custody of each sample is documented from collection through laboratory receipt. Signatures below attest to the accuracy of the transfers recorded on this page.

WQ-01

Collected 8/12/2026, 1:14:00 PM · Kitchen tap (first draw after flush)

Relinquished by: A. Farouk

Received by: Lab intake

Date/time: 8/12/2026, 3:30:00 PM

Date/time: 8/12/2026, 5:02:00 PM

Laboratory: Maryland-certified drinking water laboratory (MDE)

WQ-02

Collected 8/12/2026, 1:22:00 PM · Pressure-tank tap

Relinquished by: A. Farouk

Received by: Lab intake

Date/time: 8/12/2026, 3:30:00 PM

Date/time: 8/12/2026, 5:02:00 PM

Laboratory: Maryland-certified drinking water laboratory (MDE)

SAMPLER / INSPECTOR ATTESTATION



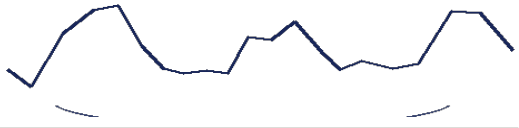
Ahmed H. Farouk

Signed 8/18/2026, 11:42:00 PM

Acknowledgement & signatures

The signatures below acknowledge receipt and review of inspection report PSW-2026-0148 for 1670 Patuxent Bend, Laurel, MD 20707.

INSPECTOR

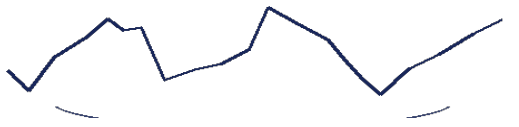


Ahmed H. Farouk

MDE-certified water sampling technician

Signed 8/18/2026, 11:42:00 PM

CLIENT



The Okafor Family

Client — acknowledgement of receipt

Signed 8/19/2026, 1:15:00 PM

SCOPE & LIMITATIONS

Drinking water analyses were performed by a laboratory certified by the Maryland Department of the Environment (MDE). This document is a demonstration sample containing fictional parties, license numbers, measurements, and findings.

Water testing results apply only to the sample collected at the stated location, date and time. Water quality can change; no warranty of potability is expressed or implied.