North Carolina State Laboratory of Public Health

Environmental Sciences

Inorganic Chemistry

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Certificate of Analysis

FINAL REPORT

Report to: SHAD LEONARD

FRANKLIN CO ENVIRONMENTAL HEALTH
127 S BICKETT BLVD
LOUISBURG, NC 27549

Name of System:

Kyle Richardson
352 Leonard Rd
Louisburg, NC 27549

EIN: 566000299EH **Delivery:** NC Courier

StarLiMS ID: ES250605-0037 Date Collected: 06/04/2025 Time Collected: 11:53 By: Dawn Davis
Date Received: 06/05/2025 Time Received: 07:34

Sample Type: Raw Sampling Point: Outside spigot Well Permit No.
Sample Source: Well water Receipt Temp. : 2.5 °C GPS Number:

Profile: Default

Analyte	Test Result	Allowable Limit	Unit	Qualifier(s)
Chloride	<5	250	mg/L	
Fluoride	<0.1	4.00	mg/L	
Nitrate	2.29	10.0	mg/L	
Nitrite	<0.1	1.00	mg/L	
Sulfate	5.4	250	mg/L	

Report Date: 06/17/2025

Reported By: Marc Komlos

The State of North Carolina
DEPARTMENT OF HEALTH AND HUMAN SERVICES
Results from the NCDHHS Be Well Informed Guide
Created Jun 20, 2025

Information provided in this report is for informational purposes only and should not be substituted for direct consultation with a qualified water treatment professional. Other conditions or factors related to your well or home not considered by this online guide may determine the most appropriate water treatment option.

About the Results

Based on what you entered from your laboratory report, the Results Summary below indicates whether your water meets NC DPH drinking water goals. These drinking water goals are often referred to as "limits" on your laboratory report. If your water exceeds or is approaching these drinking water limits for the contaminant(s) entered, additional health information and treatment options will be shown. **Several contaminants, such as magnesium and potassium, do not have established drinking water goals.**

Results Summary

Key

- ✔ Meets the Drinking Water Limit
- ✖ Above the Drinking Water Limit
- ! Close to the Drinking Water Limit
- ● Consult NCDHHS Private Wells: Frequently Asked Questions about Testing

Result	Element	Your Entry	Limit	About Your Well Water
●	Arsenic		0.01 mg/L	Test your water. NCDHHS recommends testing your well for Arsenic every 2 years.
✔	Nitrate-N	2.29 mg/L	10 mg/L	The value entered meets the NC DPH drinking water goal.
✔	Sulfate	5.4 mg/L	250 mg/L	The value entered meets the NC DPH drinking water goal.
●	Gross Alpha		15 pCi/L	Test your water.
●	Radon		4000 pCi/L	Test both the air in your home and in your water for radon.
●	Uranium		30 µg/L	Test your water. Groundwater uranium is generally found in the geologic areas known as the Raleigh Belt, Carolina Slate Belt, and the Charlotte and Milton belts.

Results Details

Key

- ✔ Meets the Drinking Water Limit
- ✖ Above the Drinking Water Limit
- ! Close to the Drinking Water Limit
- ● Consult NCDHHS Private Wells: Frequently Asked Questions about Testing

Result	Element	Your Entry	Limit	About Your Well Water
●	Aluminum		0.2 mg/L	
●	Antimony		0.006 mg/L	
●	Arsenic		0.01 mg/L	Test your water. NCDHHS recommends testing your well for Arsenic every 2 years.
●	Barium		2 mg/L	
●	Beryllium		0.004 mg/L	

Result	Element	Your Entry	Limit	About Your Well Water
	Boron		0.7 mg/L	
	Cobalt		1 µg/L	
	Cadmium		0.005 mg/L	
	Chloride		250 mg/L	
	Chromium		0.1 mg/L	
	Copper		1.3 mg/L	
	Fluoride		4 mg/L	
	Hardness		-	
	Hexavalent Chromium		0.07 µg/L	
	Iron		0.3 mg/L	
	Lead		0.015 mg/L	
	Manganese		0.05 mg/L	
	Mercury		0.002 mg/L	
	Molybdenum		0.018 mg/L	
	Nickel		0.1 mg/L	
✓	Nitrate-N	2.29 mg/L	10 mg/L	The value entered meets the NC DPH drinking water goal.
	Nitrite-N		1 mg/L	
	pH		6.5-8.5 standard units	
	Selenium		0.05 mg/L	
	Silver		0.02 mg/L	
	Sodium		20 mg/L	
	Strontium		2.1 mg/L	
✓	Sulfate	5.4 mg/L	250 mg/L	The value entered meets the NC DPH drinking water goal.

Interpretation of Results:

Does my well water meet the NC DPH drinking water goal for sulfate. [https://www.epa.gov/sdwa/secondary-drinking-water-standards-guidance-nuisance-chemicals]? Your water meets the NC DPH drinking water goal if it contains less than 250 mg/L of sulfate.

Health Concerns:

Can consuming water containing sulfate affect my health? Drinking high levels of sulfate is not harmful, but the consumer will taste that the water has a salty presence. High levels could also produce a laxative effect to the consumer.

	Thallium		0.2 µg/L	
	Vanadium		0.3 µg/L	
	Zinc		1 mg/L	
	E. coli		0 CFU/100 mL or Absent	
	Total Coliform		0 CFU/100 mL or Absent	
	Gross Alpha		15 pCi/L	Test your water.

Result	Element	Your Entry	Limit	About Your Well Water
	Radon		4000 pCi/L	Test both the air in your home and in your water for radon.
	Uranium		30 µg/L	Test your water. Groundwater uranium is generally found in the geologic areas known as the Raleigh Belt, Carolina Slate Belt, and the Charlotte and Milton belts.
	Acetone		6000 µg/L	
	Acrylonitrile		0.5 µg/L	
	Benzene		1 µg/L	
	Bromobenzene		60 µg/L	
	Bromochloromethane		7.7 µg/L	
	Bromodichloromethane		0.6 µg/L	
	Bromoform		4 µg/L	
	Bromomethane		10 µg/L	
	2-Butanone		4000 µg/L	
	n-Butylbenzene		70 µg/L	
	sec-Butylbenzene		70 µg/L	
	tert-Butylbenzene		70 µg/L	
	Carbon Disulfide		700 µg/L	
	Carbon Tetrachloride		0.5 µg/L	
	Chlorobenzene		100 µg/L	
	Chloroethane		3000 µg/L	
	Chloroform		70 µg/L	
	Chloromethane		3 µg/L	
	2-Chlorotoluene		100 µg/L	
	4-Chlorotoluene		100 µg/L	
	Dibromochloromethane		0.5 µg/L	
	1,2-Dibromo-3-chloropropane		0.04 µg/L	
	Dibromoethane (1,2-)		0.02 µg/L	
	Dibromomethane		70 µg/L	
	1,2-Dichlorobenzene		600 µg/L	
	1,4-Dichlorobenzene		6 µg/L	
	1,1-Dichloroethane		6 µg/L	
	1,2-Dichloroethane		0.5 µg/L	
	1,1-Dichloroethene		7 µg/L	
	(cis 1,2)-Dichloroethene		6 µg/L	
	(trans 1,2)-Dichloroethene		100 µg/L	
	Dichlorofluoromethane		1000 µg/L	
	1,2-Dichloropropane		0.6 µg/L	
	(cis 1,3)-Dichloropropene		0.5 µg/L	

Result	Element	Your Entry	Limit	About Your Well Water
	(trans 1,3)-Dichloropropene		0.5 µg/L	
	Ethylbenzene		700 µg/L	
	2-Hexanone		40 µg/L	
	Isopropyl Ether		70 µg/L	
	Methylene Chloride		5 µg/L	
	4-Methyl-2-pentanone		100 µg/L	
	Methyl tert-butyl ether		20 µg/L	
	Naphthalene		100 µg/L	
	Styrene		100 µg/L	
	1,1,1,2-Tetrachloroethane		1 µg/L	
	1,1,2,2-Tetrachloroethane		0.5 µg/L	
	Tetrahydrofuran		6300 µg/L	
	Tetrachloroethene		5 µg/L	
	Toluene		600 µg/L	
	1,2,3-Trichlorobenzene		6 µg/L	
	1,2,4-Trichlorobenzene		70 µg/L	
	1,1,1-Trichloroethane		200 µg/L	
	1,1,2-Trichloroethane		0.6 µg/L	
	Trichloroethylene		1 µg/L	
	Trichlorofluoromethane		2000 µg/L	
	2,4,5-T		70 µg/L	
	Vinyl chloride		0.03 µg/L	
	Xylenes		1000 µg/L	
	Aldrin		0.1 µg/L	
	Chloramben		100 µg/L	
	Dieldrin		0.1 µg/L	
	Endrin		2 µg/L	
	Heptachlor		0.1 µg/L	
	Heptachlor epoxide		0.1 µg/L	
	Hexachlorobenzene		0.1 µg/L	
	Hexachlorocyclopentadiene		50 µg/L	
	Lindane		0.1 µg/L	
	Methoxychlor		40 µg/L	
	Propachlor		90 µg/L	
	Toxaphene		0.1 µg/L	
	Trifluralin		10 µg/L	
	Alachlor		2 µg/L	

Result	Element	Your Entry	Limit	About Your Well Water
	Atrazine		3 µg/L	
	Simazine		4 µg/L	
	Vernolate		7 µg/L	
	Glyphosate		700 µg/L	
	Bromoacetic acid		60 µg/L	
	Bromochloroacetic acid		60 µg/L	
	Chloroacetic acid		60 µg/L	
	Dibromoacetic acid		60 µg/L	
	Dichloroacetic acid		1.5 µg/L	
	Trichloroacetic acid		60 µg/L	
	Acifluorfen		1 µg/L	
	Bentazon		200 µg/L	
	Dalapon		200 µg/L	
	2,4-D		70 µg/L	
	DCPA		70 µg/L	
	Dichloroprop		250 µg/L	
	Dinoseb		7 µg/L	
	4-Nitrophenol		60 µg/L	
	Pentachlorophenol		0.4 µg/L	
	Picloram		500 µg/L	
	2,4,5-TP		50 µg/L	