

Well Water Contaminants in Granville County

Contaminant	Drinking Water Standard	Private Well Water Test Results					
		Total wells tested	Number of wells tested above standard	Percentage (%) of wells tested above standard	Minimum	Maximum	Average
Maximum Contaminant Level (MCL)							
Arsenic	10	1220	5	0.41%	0.71	49	3.15
Barium	2000	864	0	0%	70.71	755	84.23
Beryllium	4	0	-	-	-	-	-
Cadmium	5	892	0	0%	0.71	3.54	0.73
Chromium	100	864	1	0.12%	7.07	100	8.07
Copper	1300	867	4	0.46%	35.36	6340	66.04
Lead	15	1219	23	1.89%	3.54	92	4.28
Mercury	2	665	0	0%	0.35	0.7	0.35
Nitrate	10000	635	2	0.31%	707.11	22000	914.3
Nitrite	1000	635	1	0.16%	70.71	1000	72.9
Selenium	50	864	4	0.46%	3.54	320	4.49
Uranium	30	0	-	-	-	-	-
NC 2L Groundwater							
Barium	700	864	1	0.12%	70.71	755	84.23
Boron	700	0	-	-	-	-	-
Cadmium	2	892	6	0.67%	0.71	3.54	0.73
Chromium	10	864	46	5.32%	7.07	100	8.07
Cobalt	1	0	-	-	-	-	-
Nickel	100	0	-	-	-	-	-
Zinc*	1000	865	53	6.13%	35.36	10560	303.09
Health Advisory							
Iron*	2500 (DEQ)	867	222	25.61%	70.71	40600	507.69
Manganese*	300 (EPA)	1222	457	37.4%	21.21	10000	137.67
Sodium	20000 (EPA)	843	842	99.88%	707.11	1600000	23479.37
State Health Goal							
Hexavalent Chromium	0.07	0	-	-	-	-	-
Thallium	0.2	0	-	-	-	-	-
Vanadium	0.3	0	-	-	-	-	-

Contaminant levels are measured in micrograms per liter (µg/L), which is equal to parts per billion (ppb). Note: Copper and Lead standards are called "Action Levels".

*The EPA also has a nuisance standard for aesthetic effects caused by these contaminants, however, this table uses the health-based standard.

Maximum Contaminant Level (MCL): The highest level of a contaminant that the US EPA allows in drinking water supplied by public utilities. An MCL takes into consideration the best available treatment technology and associated costs along with health risk. More information about MCL standards: <https://bit.ly/epa-MCL>.

NC 2L Groundwater: Set by NC DEQ as the highest level of a contaminant allowed in groundwater, which may be tolerated without creating a threat to human health or which would otherwise make the groundwater unsuitable for its intended best usage, such as a drinking water. Note: Barium, Cadmium, and Chromium have different standards under state and federal regulations; both are included in this table. More information about NC 2L Groundwater standards: <https://bit.ly/nc2Lgw>.

Health Advisory: In the absence of federal standards, the US EPA and state agencies can issue advisories to communicate the level of a contaminant in drinking water at which harmful health and/or aesthetic effects are not anticipated to occur over a specific period of time.

State Health Goal: In the absence of state and federal standards, level established by NC DHHS to communicate to private well users the risk associated with using their well water.

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For more information visit:

<https://sph.unc.edu/superfund-pages-for-communities/>

Eaves LA, Keil AP, Rager JE, George A, Fry RC. Analysis of the novel NCWELL database highlights two decades of co-occurrence of toxic metals in North Carolina private well water: Public health and environmental justice implications. *Sci Total Environ.* 2022 Mar 15;812:151479. doi: [10.1016/j.scitotenv.2021.151479](https://doi.org/10.1016/j.scitotenv.2021.151479). Epub 2021 Nov 9. PMID: 34767890.

