Well Water Contaminants in Mecklenburg 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)						
10	2600	3	0.12%	0.71	44	2.24
2000	1010	0	0%	70.71	800	77.12
4	0	-	-	-	-	-
5	2248	0	0%	0.71	3.54	1.8
100	1010	1	0.1%	7.07	100	7.41
1300	1017	11	1.08%	35.36	6100	92.31
15	2593	71	2.74%	3.54	2170	5.8
2	909	0	0%	0.35	0.8	0.35
10000	93	0	0%	707.11	6100	1039.76
1000	93	0	0%	70.71	70.71	70.71
50	1010	0	0%	3.54	25	3.63
30	2	0	0%	0.71	4	2.35
NC 2L Groundwater						
700	1010	1	0.1%	70.71	800	77.12
700	0	-	-	-	-	-
2	2248	873	38.83%	0.71	3.54	1.8
10	1010	20	1.98%	7.07	100	7.41
1	0	-	-	-	-	-
100	0	-	-	-	-	-
1000	1011	71	7.02%	35.36	73000	441.82
Health Advisory						
2500 (DEQ)	1014	231	22.78%	70.71	21000	463.3
300 (EPA)	2596	363	13.98%	21.21	5400	50.46
20000 (EPA)	1005	1005	100%	1000	1100000	14980.9
State Health Goal						
0.07	0	-	-	-	-	-
0.2	0	-	-	-	-	-
0.3	17	17	100%	7.07	17.9	9.01
	Maximum Contaminant Level (MCL) 10 2000 4 5 100 1300 15 2 10000 15 2 10000 50 30 NC 2L Groundwater 700 2 10 10 10 100 2000 2000 2000 2000 10 10 100 2000 2000 2500 (DEQ) 300 (EPA) 20000 (EPA) 20000 (EPA) 0.07 0.2	Maximum Contaminant Level (MCL) 10 2600 2000 1010 4 0 5 2248 100 1010 1300 1017 15 2593 2 909 1000 93 1000 93 1000 93 1000 93 50 1010 30 2 NC 2L Groundwater 2248 10 1010 700 0 2 2248 10 1010 700 0 2 2248 10 1010 1 0 100 0 1000 1011 Health Advisory 2596 20000 (EPA) 2596 20000 (EPA) 1005 State Health Goal 0 0.07 0 0.2 0	Drinking Water Standard Total wells tested Number of wells tested above standard Maximum Contaminant Level (MCL) - 10 2600 3 2000 1010 0 4 0 - 5 2248 0 100 1010 1 1300 1017 11 1300 1017 11 15 2593 71 2 909 0 10000 93 0 10000 93 0 10000 93 0 30 2 0 700 1010 1 700 0 - 2 2248 873 10 1010 20 10 0 - 100 0 - 100 0 - 100 0 - 100 0 - 1000 1011	Drinking Water Standard Total wells tested Number of wells tested above standard Percentage (%) of wells tested above standard Maximum Contaminant Level (MCL) - - - 10 2600 3 0.12% 2000 1010 0 0% 4 0 - - 5 2248 0 0% 100 1010 1 0.13% 1300 1017 11 1.08% 15 2593 71 2.74% 2 909 0 0% 1000 93 0 0% 1000 93 0 0% 30 2 0 0% 700 1010 1 0.1% 700 1010 1 0.1% 700 1010 20 1.98% 1 0 - - 700 1010 20 1.98% 100 0 - -	Drinking Water Standard Total wells tested Number of wells tested above standard Percentage (%) of wells tested above standard Maximum Contaminant Level (MCL) 0 3 0.12% 0.71 10 2600 3 0.12% 0.71 2000 1010 0 0% 70.71 4 0 - - - 5 2248 0 0% 0.71 100 1010 1 0.1% 70.71 1300 1017 11 1.08% 35.36 15 2593 71 2.74% 35.4 2 909 0 0% 0.711 1000 93 0 0% 70.711 1000 93 0 0% 0.711 50 1010 0 0% 70.71 700 1010 1 0.1% 70.71 700 0 - - - 700 1010 1 <	Drinking Water Standard Total wells tested Number of wells tested above standard Percentage (%) of wells tested above standard Minimum Maximum Maximum Contaminant Level (ML2) 0 3 0.12% 0.71 44 2000 1010 0 0% 70.71 800 4 0 - - - - 5 2248 0 0% 0.71 3.54 100 1010 1 0.19% 7.07 100 1300 1017 11 1.08% 35.36 6100 15 2593 71 2.74% 3.54 2170 2 909 0 0% 0.35 0.8 10000 93 0 0% 70.71 70.71 50 1010 0 0% 3.54 25 30 2 0 0% 0.71 4 Minimum 1010 1 0.1% 70.71 10.1% <td< td=""></td<>

Contaminant levels are measured in micrograms per liter (μ g/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: <u>https://bit.ly/epa-MCL</u>.

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.

This publication was funded by a grant from the National Institute of Environmental Health Sciences (P42ES031007).

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. Epub 2021 Nov 9. PMID: 34767890.

