



Swain County

Contaminant	Number of wells tested	Minimum	Maximum	Average	<u>Maximum Contaminant Level (MCL)</u> * Secondary MCL	Units	Number of wells tested above MCL	Percentage of wells tested above MCL	Number of wells below MCL	Percentage of wells tested below MCL
1,2-Dibromoethane	4	0.25	0.25	0.25	0.05	µg/L	0	0.00%		
1,2-Dichloropropane	4	0.25	0.25	0.25	5	µg/L	0	0.00%		
Arsenic	386	0.5	12.1	1.5	10	µg/L	1	0.26%		
Barium	120	50	50	50	2,000	µg/L	0	0.00%		
Benzene	4	0.25	0.25	0.25	5	µg/L	0	0.00%		
Cadmium	120	0.5	0.5	0.5	5	µg/L	0	0.00%		
Chromium	120	5	5	5	100	µg/L	0	0.00%		
cis-1,2-Dichloroethene (c-DCE)	8	0.25	0.25	0.25	70	µg/L	0	0.00%		
Copper	386	25	3,330.00	48.20	1,300*	µg/L	1	0.26%		
Ethylbenzene	8	0.25	0.25	0.25	700	µg/L	0	0.00%		
Fluoride	402	100	5,480.00	411.00	4,000*	µg/L	9	2.24%		
Iron	383	25	44,700.00	862.60	300*	µg/L	97	25.33%		
Isopropyl Ether	4	0.25	0.25	0.25	No drinking water standard	µg/L				
Lead	390	2.5	159	3.5	15	µg/L	6	1.54%		
Magnesium	386	5,300	5,400.00	5,317.10	No drinking water standard	µg/L				
Manganese	386	15	1,170.00	40.80	50*	µg/L	37	9.59%		

Contaminant	Number of wells tested	Minimum	Maximum	Average	Maximum Contaminant Level (MCL) * Secondary MCL	Units	Number of wells tested above MCL	Percentage of wells tested above MCL	Number of wells below MCL	Percentage of wells tested below MCL
Mercury	112	0.3	0.3	0.3	2	µg/L	0	0.00%		
Methyl tertiary butyl ether (MTBE)	10	0.25	0.25	0.25	20* (recommended taste and odor threshold)	µg/L	0	0.00%		
Nitrate	115	500	18,000.00	902.60	10,000	µg/L	0	0.00%		
Nitrite	117	50	50	50	1,000	µg/L	0	0.00%		
pH	386	4.4	11.7	7.2	6.5-8.5*	standard units	18	4.66%	56	14.51%
Selenium	120	2.5	2.5	2.5	50	µg/L	0	0.00%		
Silver	120	25	25	25	100*	µg/L	0	0.00%		
Sodium	93	500	116,000.00	10,686.00	No drinking water standard	µg/L				
Tetrachloroethylene (PCE)	6	0.25	0.25	0.25	5	µg/L	0	0.00%		
Toluene	4	0.25	0.25	0.25	1,000	µg/L	0	0.00%		
trans-1,2-Dichloroethene (t-DCE)	8	0.25	0.25	0.25	100	µg/L	0	0.00%		
Trichloroethylene (TCE)	8	0.25	0.25	0.25	5	µg/L	0	0.00%		
Vinyl chloride	8	0.25	0.25	0.25	2	µg/L	0	0.00%		
Xylenes (Total)	6	0.25	0.25	0.25	10,000	µg/L	0	0.00%		
Zinc	383	25	10,250.00	258.40	5,000*	µg/L	7	1.83%		

* **Secondary MCL:** Secondary contaminants may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.⁸ The **Secondary Maximum Contaminant Level (SMCL)** is a non-enforceable standard for secondary contaminants in drinking water. SMCLs may be based upon a contaminant's likelihood to cause changes to the taste, odor, or color of drinking water, or, may be based on the likelihood of the contaminant to cause technical changes such as damage to water fixtures or an increased availability of other contaminants in drinking water.⁸

Tracking and Analyzing Contaminants (TrAC) in Private Well Water in NC

UNC Superfund Research Program- Research Translation Core

Funded by an ARRA supplement from NIEHS (P42-ES005948) 2009-2011

