

Drinking Water Testing Program

City of Flint Community Data

Multiple labs were used for this drinking water project with some samples going to more than one lab. Initial and flushed water samples from sampling events 6 and 7 were sent to Paragon Lab. Some of the flushed water samples from these sampling events were also sent to Trace Analytical Laboratories, Inc. (Trace Lab) and the Michigan Department of Energy and Great Lakes Environmental Laboratory (EGLE Lab). This was done to make sure that the results were accurate. Homes that had water testing during these sampling events received results in the mail from each lab that tested their water. Below are the results from Trace Lab.

MDHHS Sampling Event 6 Trace Lab (11/02/2021-11/04/2021)

Section 1: Metals									
Parameter	Number of locations sampled (number of initial samples/number of flushed samples)	Range in initial samples (mg/L)			Range in flushed samples (mg/L)			US Environmental Protection Agency (US EPA) drinking water value (mg/L)	Health-based level (mg/L)
		Median	Lowest	Highest	Median	Lowest	Highest		
Aluminum	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	0.067	ND	0.21	0.05-0.20 (J)	0.3 (D)
Antimony	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.006 (F)	0.0028 (B: chronic for children)
Arsenic	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.01(F)	0 (G)
Barium	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	0.013	ND	0.014	2 (F)	0.7 (E: 1/10- day for children)
Beryllium	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.004 (F)	0.004 (G)

Boron	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	Value not established	1.4 (C: chronic for children)
Cadmium	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.005 (F)	0.0007 (C: chronic for children)
Chromium, total	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.1 (F)	0.0063 (C: chronic for children, Cr (VI)) ¹
Copper	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	0.041	1.3 (A) 1.0 (J)	0.07 (C: acute/ intermediate for children) 1.3 (G) ²
Iron	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.30 (J)	2 (D)
Lead	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.015 (A)	0 (G)
Manganese	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.05 (J)	0.3 (E: lifetime)
Molybdenum	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	Value not established	0.035 (B: chronic for children)
Nickel	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	Value not established	0.1 (E: lifetime)
Selenium	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.05 (F)	0.035 (B, C: chronic for children)
Silver	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.1 (J)	0.035 (C: children – chronic for children)

Thallium	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.002 (F)	0.0002 (I)
Tin	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	Value not established	2.1 (C: intermediate children)
Vanadium	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	Value not established	0.0045 (D)
Zinc	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	0.017	5 (J)	2 (E: lifetime)

Section 2: Disinfectants, Disinfection Byproducts and Bacteria									
Parameter	Number of locations sampled (number of initial samples/number of flushed samples)	Range in initial samples			Range in flushed samples			US Environmental Protection Agency (US EPA) drinking water value	Health-based level (µg/L)
		Median	Lowest	Highest	Median	Lowest	Highest		
Haloacetic Acids (HAA5, µg/L)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	60 (F)	Learn more here
Total Trihalomethanes (TTHMs, µg/L)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	80 (F)	Learn more here

Section 3: General Chemistry

Parameter	Number of locations sampled (number of initial samples/number of flushed samples)	Range in initial samples			Range in flushed samples			US Environmental Protection Agency (US EPA) drinking water value	Health-based level
		Median	Lowest	Highest	Median	Lowest	Highest		
Calcium (mg/L)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	27	ND	27	Learn more here	Learn more here
Chloride (mg/L)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	11	10	13	250 (F)	Learn more here
Specific Conductance (µmhos/cm)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	250	250	260	Learn more here	Learn more here
Hardness (as mg/L of CaCO ₃)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	99	ND	100	Learn more here	Learn more here
Magnesium (mg/L)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	7.7	ND	7.7	Learn more here	400 (D)
Orthophosphate (mg/L)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	1	0.85	1.7	Learn more here	Learn more here
Sodium (mg/L)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	9.1	8.8	46	Learn more here	Learn more here
Sulfate (mg/L)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	22	20	29	250 (F)	500 (E)
Total Alkalinity (mg/L)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	78	75	80	Learn more here	Learn more here

Turbidity (NTU)	35 (0 / 35)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	Learn more here	Learn more here
-----------------	---------------	--------------------------	--------------------------	--------------------------	----	----	----	---------------------------------	---------------------------------