

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 Paragon Lab.

MDHHS Sampling Event 6 Paragon 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	60 (60 / 60)	0.0605	ND	3.7	0.067	ND	1.4	0.05-0.20 (J)	0.3 (D)
Antimony	60 (60 / 60)	ND	ND	ND	ND	ND	ND	0.006 (F)	0.0028 (B: chronic for children)
Arsenic	60 (60 / 60)	ND	ND	ND	ND	ND	ND	0.01(F)	0 (G)
Barium	60 (60 / 60)	0.013	ND	0.042	0.013	ND	0.023	2 (F)	0.7 (E: 1/10- day for children)
Beryllium	60 (60 / 60)	ND	ND	ND	ND	ND	ND	0.004 (F)	0.004 (G)
Boron	60 (60 / 60)	0.014	0.013	0.015	0.014	0.013	0.015	Value not established	1.4 (C: chronic for children)

Cadmium	60 (60 / 60)	ND	ND	0.0025	ND	ND	0.00026	0.005 (F)	0.0007 (C: chronic for children)
Chromium, total	60 (60 / 60)	ND	ND	0.0014	ND	ND	0.0015	0.1 (F)	0.0063 (C: chronic for children, Cr (VI)) ¹
Copper	60 (60 / 60)	0.00945	ND	0.2	0.0024	ND	0.024	1.3 (A) 1.0 (J)	0.07 (C: acute/ intermediate for children) 1.3 (G) ²
Iron	60 (60 / 60)	ND	ND	0.54	ND	ND	0.2	0.30 (J)	2 (D)
Lead	60 (60 / 60)	ND	ND	0.0019	ND	ND	ND	0.015 (A)	0 (G)
Manganese	60 (60 / 60)	0.00115	ND	0.12	0.00145	ND	0.049	0.05 (J)	0.3 (E: lifetime)
Molybdenum	60 (60 / 60)	ND	ND	ND	ND	ND	ND	Value not established	0.035 (B: chronic for children)
Nickel	60 (60 / 60)	0.0014	ND	0.0028	0.0014	ND	0.0022	Value not established	0.1 (E: lifetime)
Selenium	60 (60 / 60)	ND	ND	0.0011	ND	ND	0.0014	0.05 (F)	0.035 (B, C: chronic for children)
Silver	60 (60 / 60)	ND	ND	ND	ND	ND	ND	0.1 (J)	0.035 (C: children – chronic for children)
Thallium	60 (60 / 60)	ND	ND	ND	ND	ND	ND	0.002 (F)	0.0002 (I)
Tin	60 (60 / 60)	ND	ND	ND	ND	ND	ND	Value not established	2.1 (C: intermediate children)
Vanadium	60 (60 / 60)	ND	ND	ND	ND	ND	ND	Value not established	0.0045 (D)
Zinc	60 (60 / 60)	ND	ND	0.44	ND	ND	0.061	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 ($\mu\text{g}/\text{L}$)
		Median	Lowest	Highest	Median	Lowest	Highest		
Chlorine (as Cl_2 , mg/L)	60 (60 / 60)	0.91	ND	1.91	1.22	0.03	2.06	4 (H)	Learn more here
Haloacetic Acids (HAA5, $\mu\text{g}/\text{L}$)	60 (60 / 60)	24	ND	54	24	4.1	33	60 (F)	Learn more here
Total Trihalomethanes (TTHMs, $\mu\text{g}/\text{L}$)	60 (59 / 61)	34	27	47	33	ND	47	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)	60 (60 / 60)	27	ND	29	27	ND	28	Learn more here	Learn more here
Chloride (mg/L)	60 (60 / 60)	11	11	17	11	11	12	250 (F)	Learn more here
Specific Conductance ($\mu\text{mhos}/\text{cm}$)	60 (60 / 60)	210	200	240	210	200	230	Learn more here	Learn more here
Hardness (as mg/L of CaCO_3)	60 (60 / 60)	98	ND	100	98	ND	100	Learn more here	Learn more here

Magnesium (mg/L)	60 (60 / 60)	7.6	ND	8	7.6	ND	7.9	Learn more here	400 (D)
Orthophosphate (mg/L)	60 (60 / 60)	0.93	0.63	1.4	0.95	0.79	1.4	Learn more here	Learn more here
pH (SU)	60 (60 / 60)	7.9	7.6	8.1	7.9	7.6	8.1	6.5 – 8.5 (F)	Learn more here
Sodium (mg/L)	60 (60 / 60)	9.2	8.7	66	9.2	8.8	62	Learn more here	Learn more here
Sulfate (mg/L)	60 (60 / 60)	21	20	22	21	20	21	250 (F)	500 (E)
Total Alkalinity (mg/L)	60 (60 / 60)	70	70	80	70	70	80	Learn more here	Learn more here
Turbidity (NTU)	60 (60 / 60)	0.21	0.09	15	0.205	0.09	10	Learn more here	Learn more here