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 EGLE Lab.

MDHHS Sampling Event 7 EGLE Lab (11/16/2021-11/18/2021)

Section 1: Metals										
Parameter	Number of locations sampled (number of initial samples/number	Range in initial samples (mg/L)			Range in f	lushed samp	les (mg/L)	US Environmental Protection Agency (US EPA) drinking water	Health-based level (mg/L)	
	of flushed samples)	Median	Lowest	Highest	Median	Lowest	Highest	value (mg/L)	\ <i>\\</i>	
Aluminum	12 (0/12)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	0.125	.0051	1	0.05-0.20 (J)	0.3 (D)	
Antimony	12 (0/12)	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	12 (0/12)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.01(F)	0 (G)	
Barium	12 (0/12)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	0.013	ND	0.021	2 (F)	0.7 (E: 1/10- day for children)	
Beryllium	12 (0/12)	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	12 (0/12)	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	12 (0/12)	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	12 (0/12)	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	12 (0/12)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	.00315	ND	.022	1.3 (A) 1.0 (J)	0.07 (C: acute/ intermediate for children) 1.3 (G) ²
Iron	12 (0/12)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	.13	0.30 (J)	2 (D)
Lead	12 (0/12)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	ND	0.015 (A)	0 (G)
Manganese	12 (0/12)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	.041	0.05 (J)	0.3 (E: lifetime)
Molybdenum	12 (0/12)	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	12 (0/12)	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	12 (0/12)	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	12 (0/12)	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	12 (0/12)	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	NA / Not analyzed by lab	NA / Not analyzed by lab	Value not established	2.1 (C: intermediate children)					
Vanadium	12 (0/12)	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	12 (0/12)	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	ND	ND	0.015	5 (J)	2 (E: lifetime)

Section 2: Disinfectants Parameter	Number of locations sampled (number of initial samples/number	Range in initial samples			Range in flushed samples			US Environmental Protection Agency (US EPA) drinking water	Health-based level (μg/L)
	of flushed samples)	Median	Lowest	Highest	Median	Lowest	Highest	value	\ro/ =/
Haloacetic Acids (HAA5,		NA / Not	NA / Not	NA / Not	NA / Not	NA / Not	NA / Not	NA / Not analyzed by	
μg/L)	NA / Not analyzed by lab	analyzed	analyzed	analyzed	analyzed	analyzed	analyzed	lab	<u>Learn more here</u>
μg/ ι/		by lab	by lab	by lab	by lab	by lab	by lab		
Total Trihalomethanes (TTHMs, μg/L)	NA / Not analyzed by lab	NA / Not	NA / Not	NA / Not	NA / Not	NA / Not	NA / Not	NA / Not analyzed by	
		analyzed	analyzed	analyzed	analyzed	analyzed	analyzed	lab	Learn more here
		by lab	by lab	by lab	by lab	by lab	by lab		

Section 3: General Chemistry										
Parameter	Number of locations sampled (number of initial samples/number	Range in initial samples			Range	in flushed sa	mples	US Environmental Protection Agency (US EPA) drinking water	Health-based level	
	of flushed samples)	Median	Lowest	Highest	Median	Lowest	Highest	value		
Calcium (mg/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	Learn more here	Learn more here	
Chloride (mg/L)	12/12	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	11	11	12	250 (F)	Learn more here	
Specific Conductance (μmhos/cm)	12/12	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	234	231	239	Learn more here	Learn more here	
Hardness (as mg/L of CaCO₃)	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	Learn more here	Learn more here	
Magnesium (mg/L)	12/12	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	6.95	ND	7.4	Learn more here	400 (D)	
Orthophosphate (mg/L)	12/12	1.1	0.98	1.3	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	Learn more here	Learn more here	
pH (SU)	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	6.5 – 8.5 (F)	Learn more here	
Sodium (mg/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	<u>Learn more here</u>	Learn more here	
Sulfate (mg/L)	12/12	25	24	26	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	250 (F)	500 (E)	

Total Alkalinity (mg/L)	12/12	84.5	81	86	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	<u>Learn more here</u>	<u>Learn more here</u>
Turbidity (NTU)	12/12	ND	ND	1.4	NA / Not analyzed by lab	NA / Not analyzed by lab	NA / Not analyzed by lab	Learn more here	<u>Learn more here</u>