



The City of Flint and F&V Operations and Resource Management are submitting the following report(s) to Michigan Department of Environment, Great Lakes and Energy:

MOR MARCH 2020  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons or persons who manage the system or those persons directly responsible for gathering such information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

City of Flint Representative: \_\_\_\_\_

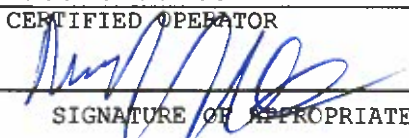
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

F&V Operations Representative: Robert Jones \_\_\_\_\_

Signature:  \_\_\_\_\_ Date: 4/5/2020

**MONTHLY OPERATION REPORT  
OF  
WATER TREATMENT PLANT**

**For Month of March 2020**

<u>Flint Water Plant</u> NAME OF WATER SYSTEM	<u>2310</u> WSSN	<u>Genesee</u> COUNTY
<u>Robert Jones</u> CERTIFIED OPERATOR		<u>D-1</u> CLASSIFICATION
 SIGNATURE OF APPROPRIATE OFFICIAL		

**TREATMENT RATE AND FILTER DATA**

1. Treatment Rate, Maximum 10.87 Million Gallons Per Day
2. Treatment Rate, Approved Rated Plant Capacity 36 Million Gallons per Day
3. Average Filter Run N/A Hours, Average Head Loss N/A Feet
4. Average Filtration Rate N/A Gallons per Square Ft. per Minute
5. Maximum Filtration Rate N/A Gallons per Square Ft. per Minute
6. Average Wash Water Use N/A percent of Treated Water

**CHEMICAL DATA**

7. Sodium Hypochlorite on hand at CS2 2884 gal.: Estimated supply 41 days
8. Sodium Hypochlorite on hand at outstations 363 gal: Estimated supply 58 days.
9. Phosphoric Acid on hand 1385 gal.: Estimated supply 81 days
9. Sodium Hydroxide on hand 6130 gal.: Estimated supply 61 days

**Remarks:**

Submit to: MDEQ - Office of Drinking Water & Municipal Assistance  
LANSING DISTRICT OFFICE  
525 West Allegan Street, 1st Floor South  
(Constitution Hall)  
PO Box 30242  
Lansing, MI 48909-7742





Fluoridation & Chlorination

WSSN 2310

Mar-20

DATE	Fluoride Applied mg/l	Fluoride Analyses mg/l			Chlorine App. Mg/l		Chlorine Residual mg/l					
		Raw	Tap	Dist	Chlorine App. (prior to filtration) mg/L	Post Chlorine mg/L	Free	Dort	3MG Well	Tap		
										Free	Free	
1	0.55	0.61		0.84		1.1					1.7	
2	0.55	0.54		0.87		1.1					1.7	
3	0.60	0.64		0.97		1.0					1.7	
4	0.54	0.55		0.92		1.0					1.7	
5	0.62	0.50		0.83		1.0					1.7	
6	0.63	0.66		0.88		1.0					1.6	
7	0.76	0.75		0.95		1.1					1.7	
8	0.67	0.73		0.91		1.0					1.6	
9	0.59	0.58		0.88		1.1					1.6	
10	0.62	0.62		0.96		1.1					1.7	
11	0.60	0.55		0.91		1.1					1.6	
12	0.76	0.70		0.92		1.0					1.7	
13	0.64	0.67		0.90		1.1					1.7	
14	0.70	0.79		0.94		1.2					1.6	
15	0.60	0.64		0.95		1.2					1.7	
16	0.62	0.67		0.96		1.0					1.7	
17	0.65	0.65		0.91		1.0					1.7	
18	0.57	0.57		0.88		1.0					1.7	
19	0.47	0.55		0.97		1.0					1.7	
20	0.50	0.49		0.96		1.2					1.7	
21	0.64	0.72		0.90		1.1					1.7	
22	0.80	0.91		0.95		1.0					1.8	
23	0.76	0.73		1.01		1.0					1.7	
24	0.64	0.65		0.96		1.1					1.7	
25	0.87	0.85		0.96		1.1					1.7	
26	0.65	0.66		0.95		1.1					1.6	
27	0.75	0.79		0.84		1.0					1.7	
28	0.70	0.72		0.91		1.0					1.7	
29	0.67	0.67		0.93		0.9					1.7	
30	0.51	0.69		0.85		1.1					1.7	
31	0.52	0.65		1.03		1.0					1.6	
AVG				0.66		0.92					1.7	
MAX				0.91		1.03					1.8	
MIN				0.49		0.83					1.6	



Chemical Analyses

WSSN 2310

Mar-20

DATE	pH		Total Hardness as CaCO <sub>3</sub> mg/l		Total Alkalinity as CaCO <sub>3</sub> mg/l		NonCarbonate Hardness as CaCO <sub>3</sub> mg/l		Iron mg/L		Calcium Ca <sup>2+</sup> mg/l		Magnesium as Mg <sup>2+</sup> mg/l		Chloride as Cl <sup>-</sup> mg/l		
	CSII	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	
1	7.38	7.63		104		84		34		0.05	0.02		28.1		8.3		15
2	7.32	7.53		100		84		30		0.00	0.01		28.1		7.3		15
3	7.26	7.48	100	102	80	82	28	32	0.03	0.00	28.9	28.1	6.8	7.8	15	15	
4	7.26	7.49		104		86		32		0.00	0.01		28.9		7.8		15
5	7.22	7.42		106		84		36		0.03	0.00		28.1		8.7		14
6	7.23	7.50		104		84		34		0.03	0.00		28.1		8.3		16
7	7.29	7.50		104		84		40		0.00	0.03		25.6		9.7		16
8	7.28	7.40		102		84		30		0.01	0.03		28.1		7.3		16
9	7.22	7.50		102		80		30		0.02	0.01		28.1		7.3		14
10	7.22	7.48	98	98	76	80	30	32	0.03	0.03	27.3	27.3	7.3	7.8	14	15	
11	7.24	7.40		100		86		30		0.01	0.01		28.1		7.3		15
12	7.21	7.52		100		80		28		0.01	0.01		28.9		6.8		16
13	7.26	7.55		100		80		30		0.01	0.02		28.1		7.3		15
14	7.33	7.42		102		80		30		0.01	0.01		28.9		7.3		14
15	7.36	7.60		106		82		36		0.00	0.00		28.1		8.7		15
16	7.27	7.56		100		82		32		0.00	0.00		27.3		7.8		14
17	7.24	7.43	98	96	78	80	32	28	0.02	0.02	26.5	27.3	7.8	6.8	15	15	
18	7.32	7.49		104		82		36		0.01	0.02		27.3		8.7		15
19	7.24	7.45		102		82		32		0.02	0.01		28.1		7.8		16
20	7.24	7.58		102		82		30		0.01	0.02		28.9		7.3		16
21	7.41	7.44		102		82		30		0.00	0.00		28.9		7.3		16
22	7.37	7.52		104		84		34		0.01	0.03		28.1		8.3		15
23	7.35	7.58		104		82		34		0.00	0.01		28.1		8.3		15
24	7.25	7.56	96	96	78	80	26	26	0.00	0.02	28.1	28.1	6.3	6.3	14	14	
25	7.28	7.61		100		82		30		0.02	0.01		28.1		7.3		16
26	7.26	7.60		100		82		28		0.01	0.01		28.9		6.8		15
27	7.20	7.53		102		84		34		0.01	0.00		27.3		8.3		16
28	7.38	7.55		102		82		36		0.03	0.02		26.5		8.7		17
29	7.35	7.56		104		84		34		0.03	0.01		28.1		8.3		15
30	7.24	7.59		98		76		30		0.02	0.03		27.3		7.3		16
31	7.30	7.59	100	98	80	82	20	30	0.01	0.00	32.1	28.1	8.9	7.3	17	17	
AVG	7.28	7.52		102		82		32		0.01	0.01		28.0		7.8		15
MAX	7.41	7.63		106		86		40		0.03	0.03		28.9		9.7		17.0
MIN	7.20	7.40		96		76		26		0.00	0.00		25.6		6.3		14.0



WSSN 2310

Mar-20

DATE	Total Coliform					Standard Plate Count	Conductivity (ms)	Temp deg C	Color			Odor	
	Plant Tap								Raw Tap	Raw Tap	Raw Tap	Raw Tap	
	60	61	Dort	3MG Well	Sis II								Lab Tap
1						2/0	0.23	6.6		71			
2						2/0	0.24	8.3					
3						2/0	0.24	7.8					
4						2/0	0.24	9.0					
5						2/0	0.24	8.7					
6						2/0	0.25	8.5					
7						2/0	0.24	9.6					
8						2/0	0.23	8.6					
9						2/0	0.23	9.6					
10						2/0	0.23	9.3					
11						2/0	0.23	8.5					
12						2/0	0.24	8.6					
13						2/0	0.23	8.1					
14						2/0	0.23	9.2					
15						2/0	0.22	6.5					
16						2/0	0.23	8.9					
17						2/0	0.22	8.6					
18						2/0	0.22	8.7					
19						2/0	0.22	9.1					
20						2/0	0.23	10.1					
21						2/0	0.23	8.6					
22						2/0	0.20	9.3					
23						2/0	0.23	6.7					
24						2/0	0.23	8.5					
25						2/0	0.23	7.8					
26						2/0	0.23	9.3					
27						2/0	0.23	9.6					
28						2/0	0.23	11.7					
29						2/0	0.23	8.7					
30						2/0	0.23	9.5					
31						2/0	0.23	8.5					
AVG							0.23	8.7					
MAX							0.25	11.7					
MIN							0.20	6.5					









