



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 2021

"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: Scott Dungee _____

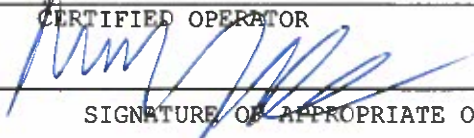
Signature: Scott Dungee Date: 4/1/2021

F&V Operations Representative: Robert Jones _____

Signature: [Signature] Date: 4/1/2021

**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

For Month of March 2021

<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 12.99 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 2817 gal.: Estimated supply 42 days
8. Sodium Hypochlorite on hand at outstations 207 gal: Estimated supply 53 days.
9. Phosphoric Acid on hand 1068 gal.: Estimated supply 47 days
10. Sodium Hydroxide on hand 3186 gal.: Estimated supply 24 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-21

DATE	Fluoride Applied F ⁻ mg/l	Fluoride Analyses mg/l			Chlorine App. Mg/l			Chlorine Residual mg/l							
		Fluoride Analyses mg/l			Chlorine (prior to filtration) mg/L OCI ⁻	Post Chlorine mg/L	Sta II	3MG Well		Tap					
		Raw	Tap	Dist				Free	Free						
1	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
2		0.57	0.67		0.80				1.1					1.7	
3		0.77	0.77		0.83				1.2					1.6	
4		0.62	0.51		0.82				1.1					1.7	
5		0.81	0.83		0.80				1.1					1.7	
6		0.73	0.66		0.82				1.1					1.6	
7		0.57	0.68		0.83				1.2					1.7	
8		0.80	0.92		0.81				1.1					1.7	
9		0.82	0.84		0.83				1.1					1.7	
10		0.59	0.49		0.85				1.2					1.7	
11		0.58	0.54		0.82				1.1					1.7	
12		0.53	0.59		0.88				1.1					1.7	
13		0.74	0.71		0.84				1.1					1.7	
14		0.67	0.69		0.87				1.1					1.7	
15		0.71	0.81		0.93				1.1					1.8	
16		0.64	0.79		0.90				1.1					1.6	
17		0.54	0.55		0.92				1.1					1.7	
18		0.59	0.64		0.88				1.1					1.7	
19		0.85	0.84		0.88				1.1					1.7	
20		0.72	0.67		0.87				1.1					1.7	
21		0.66	0.69		0.93				1.1					1.7	
22		0.79	0.78		0.88				1.1					1.8	
23		0.73	0.73		0.93				1.1					1.6	
24		0.67	0.61		0.91				1.1					1.7	
25		0.84	0.84		0.90				1.1					1.7	
26		0.75	0.75		0.86				1.2					1.7	
27		0.63	0.56		0.85				1.1					1.7	
28		0.61	0.72		0.86				1.2					1.7	
29		0.65	0.59		0.86				1.2					1.7	
30		0.65	0.61		0.97				1.1					1.6	
31		0.68	0.68		1.01				1.1					1.7	
AVG		0.61	0.62		1.00				1.1					1.6	
MAX			0.69		0.88				1.1					1.7	
MIN			0.49		0.80				1.2					1.8	



Chemical Analyses WSSN 2310 **Mar-21**

D A T E	pH		Total Hardness as CaCO ₃ , mg/l		Total Alkalinity as CaCO ₃ , mg/l		NonCarbonate Hardness as CaCO ₃ , mg/l		Iron mg/L		Calcium Ca ²⁺ , mg/l		Magnesium as Mg ²⁺ , mg/l		Chloride as Cl ⁻ , mg/l	
	CSII	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap
	29	30	31	32	33	34	35	36	37	38.00	39	40	41	42	43	44
1	7.23	7.49		100		80	28	0.03	0.02		28.9		6.8		15	
2	7.28	7.53	98	100	###	80	28.0	32	0.02	0.03	28.1	28.9	6.8	7.8	15.0	14
3	7.29	7.57		100		80	28	0.02	0.01		28.9		6.8		15	
4	7.27	7.44		100		78	30	0.01	0.03		28.1		7.3		16	
5	7.30	7.66		100		82	32	0.03	0.02		27.3		7.8		14	
6	7.24	7.48		100		78	28	0.00	0.01		28.9		6.8		15	
7	7.37	7.41		100		80	36	0.02	0.02		25.7		8.7		16	
8	7.26	7.46		100		78	28	0.01	0.02		28.9		6.8		14	
9	7.20	7.48	102	100	78	80	34	30	0.00	0.00	27.3	28.1	8.3	7.3	15	14
10	7.24	7.51		100		80	30	0.01	0.01		28.1		7.3		15	
11	7.23	7.51		102		80	30	0.00	0.01		28.9		7.3		15	
12	7.22	7.62		104		82	32	0.00	0.01		28.9		7.8		15	
13	7.31	7.46		104		82	34	0.01	0.06		28.1		8.3		16	
14	7.27	7.49		104		84	32	0.00	0.00		28.9		7.8		16	
15	7.29	7.55		100		82	26	0.02	0.08		29.7		6.3		16	
16	7.29	7.56	102	104	74	84	32	32	0.01	0.02	28.1	28.9	7.8	7.8	15	14
17	7.23	7.53		104		84	30	0.01	0.00		29.7		7.3		15	
18	7.23	7.49		102		80	30	0.02	0.02		28.9		7.3		15	
19	7.29	7.70		100		82	30	0.03	0.03		28.3		7.3		15	
20	7.20	7.51		102		82	30	0.00	0.02		28.9		7.3		15	
21	7.26	7.50		102		84	28	0.03	0.02		29.7		6.8		15	
22	7.29	7.48		102		80	30	0.01	0.01		28.9		7.3		15	
23	7.21	7.49	102	102	76	82	30	28	0.01	0.01	28.9	28.1	7.3	6.8	16	14
24	7.19	7.41		102		80	32	0.00	0.02		28.1		7.8		14	
25	7.19	7.48		102		80	30	0.01	0.02		28.1		7.3		15	
26	7.28	7.47		102		84	32	0.03	0.06		28.1		7.8		15	
27	7.26	7.48		102		82	34	0.01	0.01		27.3		8.3		15	
28	7.28	7.48		100		80	30	0.02	0.01		28.1		7.3		15	
29	7.27	7.52		100		78	30	0.01	0.00		28.1		7.3		15	
30	7.33	7.57	100	100	76	80	32	30	0.00	0.01	27.3	28.1	7.8	7.3	14	13
31	7.21	7.49		102		80	34	0.02	0.03		27.3		8.3		15	
AVG	7.26	7.51		101		81	31				28.4		7.4		15	
MAX	7.37	7.70		104		84	36				29.7		8.7		16.0	
MIN	7.19	7.41		100		78	26				25.7		6.3		13.0	



WSSN 2310 Mar-21

D A T E	Total Coliform										Standard Plate Count	Conductivity (mS)	Temp deg.C	Color		Odor		
	Plant Tap					Lab Tap								Raw Tap	Tap	Raw Tap	Tap	
	Dort	3MG Well	Sta II	Lab Tap	Lab Tap	60	61	62	63	64								65
1												69						
2												0.23	8.3					
3												0.23	8.3					
4												0.23	8.3					
5												0.23	6.3					
6												0.23	7.9					
7												0.23	7.6					
8												0.22	7.7					
9												0.23	8.2					
10												0.23	8.8					
11												0.24	9.5					
12												0.24	6.8					
13												0.24	6.3					
14												0.24	6.5					
15												0.24	8.7					
16												0.24	8.3					
17												0.24	8.8					
18												0.24	8.5					
19												0.23	6.9					
20												0.24	8.2					
21												0.24	7.3					
22												0.24	8.7					
23												0.23	8.8					
24												0.24	10.2					
25												0.23	9.9					
26												0.23	8.1					
27												0.23	7.7					
28												0.22	7.6					
29												0.23	9.3					
30												0.23	9.5					
31												0.23	9.9					
AVG												0.23	8.2					
MAX												0.24	10.2					
MIN												0.22	6.3					



Distribution System Monitoring

WSSN 2310

Mar-21

DATE	Total Chlorine Residual at Bacteriological Monitoring Stations mg/l																									Number of Samples							
	1	2	3	4	CS	6	7	8	9	10	WR	12	13	14	15	16	17	18	19	20	26	27	28	29	30		21	22	23	24	25		
1	1.84	1.83		1.79	1.85	1.75		1.92	1.50	1.89	1.78							1.57				1.88			1.66							1.64	8
2																											1.46					6	
3				1.86	1.95						1.83			1.82	1.52	1.85	1.84			1.63							1.69	1.85	1.83			9	
4	1.73																			1.53			1.92									7	
5													1.82			1.82	1.83			1.69												4	
6																																0	
7																																0	
8	1.60	1.90		1.82	1.86	1.79		1.90	1.54	1.74	1.81							1.67				1.61		1.79							1.75	8	
9																											1.68					6	
10														1.76	1.81	1.84	1.78			1.68					1.80		1.72	1.43	1.83			9	
11	1.62			1.87	1.86						1.73	1.57								1.26			1.99									8	
12													1.87			1.88	1.86			1.81												4	
13																																0	
14																																0	
15	1.68	1.92		1.71	1.70			1.94	1.42	1.83	1.73							1.67						1.44								7	
16																																6	
17																											1.40						
18	1.66			1.81	1.90						1.77	1.36													1.82	1.82	1.55	2.01	1.75			9	
19													1.82																			8	
20																																4	
21																																0	
22	1.61	1.85		1.74	1.87	1.57													1.59													0	
23																																8	
24								1.80	1.12	1.75	1.66										1.73												6
25	1.65			1.71	1.87						1.73	1.42		1.79	1.42	1.67	1.72	1.92			1.92				1.87		1.68	1.84	1.72			9	
26																					1.37												8
27													1.78			1.68	1.71	1.62															4
28																																0	
29	1.53	1.87		1.61	1.64	1.05												1.59											1.60			0	
30								1.79	1.12	1.79	1.61											1.72					1.56	1.31				8	
31													1.59	1.56	1.70	1.84	1.56							1.81					1.88	1.62		8	
Monthly Cl ₂ Avg.																											1.71						
Total Samples																											136						

