



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 January 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: _____

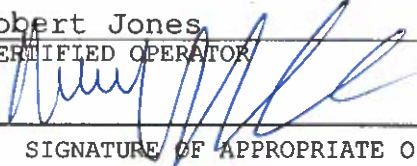
Signature: _____ Date: _____

F&V Operations Representative: Robert Jones _____

Signature: _____ Date: 2/4/2021

**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

For Month of January 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
<u></u> SIGNATURE OF APPROPRIATE OFFICIAL		

TREATMENT RATE AND FILTER DATA

1. Treatment Rate, Maximum 11.3 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 3648 gal.: Estimated supply 57 days
8. Sodium Hypochlorite on hand at outstations 366 gal: Estimated supply 78 days.
9. Phosphoric Acid on hand 523 gal.: Estimated supply 24 days
9. Sodium Hydroxide on hand 5070 gal.: Estimated supply 49 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

Jan-21

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	Sta II Free	Dort Free	3MG Well Free	Tap Free		
										27	28	
1	0.70	0.78		0.94			1.1				1.7	
2	0.72	0.63		1.01			1.1				1.8	
3	0.63	0.63		0.93			1.2				1.7	
4	0.69	0.73		1.09			1.1				1.7	
5	0.66	0.59		0.98			1.0				1.6	
6	0.65	0.72		0.87			1.0				1.6	
7	0.65	0.71		0.91			1.0				1.6	
8	0.57	0.61		0.84			1.1				1.7	
9	0.68	0.73		0.88			1.1				1.8	
10	0.76	0.77		0.85			1.1				1.7	
11	0.71	0.75		0.92			1.1				1.7	
12	0.76	0.68		0.94			1.0				1.6	
13	0.72	0.72		0.96			1.1				1.6	
14	0.72	0.80		0.89			1.0				1.7	
15	0.69	0.74		0.85			1.1				1.7	
16	0.70	0.74		0.84			1.1				1.8	
17	0.73	0.75		0.99			1.1				1.7	
18	0.68	0.63		0.90			1.1				1.5	
19	0.64	0.57		0.90			1.1				1.7	
20	0.61	0.77		0.86			1.1				1.6	
21	0.76	0.77		0.89			1.1				1.6	
22	0.72	0.69		0.83			1.1				1.8	
23	0.76	0.68		0.90			1.1				1.7	
24	0.71	0.80		0.90			1.1				1.8	
25	0.68	0.67		0.89			1.0				1.7	
26	0.78	0.67		0.85			1.1				1.6	
27	0.64	0.71		0.87			1.0				1.7	
28	0.72	0.67		0.85			1.0				1.7	
29	0.88	0.72		0.82			1.1				1.7	
30	0.63	0.79		0.87			1.0				1.6	
31	0.73	0.84		0.85			1.0				1.7	
AVG		0.71		0.90			1.1				1.7	
MAX		0.84		1.09			1.2				1.8	
MIN		0.57		0.82			1.0				1.5	



Chemical Analyses

WSSN 2310

Jan-21

DATE	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	
1	7.30	7.58	100		82		30	0.02	0.01		28.1		7.3		15		
2	7.35	7.47	100		80		28	0.0	0.02		28.9		6.8		15		
3	7.30	7.55	100		80		32	0.02	0.01		27.3		7.8		15		
4	7.19	7.49	100		80		28	0	0.01		28.9		6.8		15		
5	7.26	7.48	98		76		28	0.01	0.01		28.1	27.3	7.3	6.8	14	15	
6	7.22	7.47	100		78		26	0.01	0.01		29.7		6.3		13		
7	7.28	7.50	100		80		26	0.02	0.02		29.7		6.3		14		
8	7.53	7.60	100		80		28	0.08	0.02		28.9		6.8		15		
9	7.42	7.49	98		80		26	0.02	0.02		28.9		6.3		16		
10	7.43	7.48	100		80		28	0.03	0.02		28.9		6.8		16		
11	7.31	7.54	100		78		28	0.01	0.01		28.9		6.8		16		
12	7.30	7.57	102		100	74	26	30	0.03	0.01	30.5	28.1	6.3	7.3	13	13	
13	7.31	7.57	102		102		78		30	0.01	0.01	28.9		7.3		14	
14	7.28	7.39			98		78		28	0.02	0.01	28.1		6.8		14	
15	7.36	7.62	100		80		30	0.02	0.02		28.0		7.3		15		
16	7.38	7.64	102		80		32	0.01	0.01		28.1		7.8		15		
17	7.29	7.53	100		80		30	0.04	0.06		28.1		7.3		15		
18	7.24	7.48	102		102		78		32	0.01	0.02	29.7		7.8		16	
19	7.27	7.57	102		102	78	80	30	30	0.01	0.01	28.9	28.9	7.3	7.3	13	14
20	7.26	7.47			102		78		32	0.01	0.01	29.7		7.8		13	
21	7.26	7.47			102		78		30	0.02	0.01	28.9		7.8		14	
22	7.42	7.69	102		102		78		32	0.02	0.01	28.1		7.8		14	
23	7.48	7.75	102		102		80		32	0.02	0.01	28.1		7.8		14	
24	7.41	7.48	100		100		80		28	0.03	0.03	28.9		6.8		15	
25	7.26	7.45	100		100		80		26	0.02	0.02	29.7		6.3		15	
26	7.28	7.52	98		100	76	80	26	26	0.02	0.01	72	29.7	6.3	6.3	14	14
27	7.21	7.46	100		100		80		26	0.03	0.00	29.7		6.3		14	
28	7.21	7.47	102		102		80		26	0.01	0.00	30.5		6.3		14	
29	7.26	7.49	104		104		80		28	0.02	0.00	30.5		6.8		14	
30	7.42	7.53	102		102		76		32	0	0.01	28.1		7.8		16	
31	7.24	7.47	100		100		82		30	0.01	0.02	28.1		7.3		15	
AVG	7.31	7.52			101		79		29		0.01	28.8		7.1		15	
MAX	7.53	7.75			104		82		32		0.06	30.5		7.8		16.0	
MIN	7.19	7.39			98		76		26		0.00	27.3		6.3		13.0	



WSSN 2310

Jan-21

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	62	63	64	65								
1						2/0	0.23	9.6		71	72	73	74	
2						2/0	0.22	10.3						
3						2/0	0.22	10.7						
4						2/0	0.23	10.5						
5						2/0	0.22	10.7						
6						2/0	0.22	10.3						
7						2/0	0.22	10.8						
8						2/0	0.22	9.9						
9						2/0	0.21	9.8						
10						2/0	0.21	10.1						
11						2/0	0.22	10.2						
12						2/0	0.22	10.3						
13						2/0	0.22	10.5						
14						2/0	0.23	10.6						
15						2/0	0.23	9.3						
16						2/0	0.22	8.5						
17						2/0	0.22	10.7						
18						2/0	0.23	10.3						
19						2/0	0.23	10.0						
20						2/0	0.23	10.4						
21						2/0	0.23	9.9						
22						2/0	0.22	8.8						
23						2/0	0.22	8.8						
24						2/0	0.21	9.2						
25						2/0	0.22	9.5						
26						2/0	0.22	9.7						
27						2/0	0.22	9.4						
28						2/0	0.22	9.2						
29						2/0	0.23	9.4						
30						2/0	0.22	9.2						
31						2/0	0.22	8.3						
AVG							0.22	9.8						
MAX							0.23	10.8						
MIN							0.21	8.3						



Distribution System Monitoring

WSSN 2310

Jan-21

D A T E	Total Chlorine Residual at Bacteriological Monitoring Stations mg/l																									Chlorine only sites 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																1.55			1.59														2
2																																0	
3																																0	
4	1.49	1.94		1.70	1.92	1.78			2.07	1.38	1.95	1.63				1.62	1.50										1.44	1.94	1.94		1.55	9	
5																			1.66			1.81					1.47				6		
6																			1.28			1.87				1.92					7		
7	1.64			1.74	1.93						1.68								1.52			1.87				1.82					4		
8																															0		
9																															0		
10																															0		
11	1.57			1.75	1.96	1.44												1.52								1.11					7		
12									1.96	1.37	1.89	1.68	1.35								1.79						1.53				7		
13														1.64		1.72	1.84		1.87			1.87			1.92		1.67	1.86	1.93		8		
14	1.66			1.75	1.93						1.72								1.49			1.87				1.95					7		
15													1.85			1.78	1.82		1.68												4		
16																															0		
17																															0		
18	1.86	1.87		1.73	1.91	1.74												1.48								1.67					8		
19									2.01	1.49	1.93	1.63									1.71						1.70				6		
20														1.62	1.73	1.85	1.82		1.66			1.86			2.05		1.57	2.03	1.91		9		
21	1.62			1.75	1.91						1.68								1.56						1.77						7		
22													1.85			1.62	1.81		1.65												4		
23																															0		
24																															0		
25	1.71			1.67	1.79	1.72												1.28													7		
26									1.99	1.42	1.84	1.64	1.54								1.88						1.50				9		
27														1.64	1.43	1.70	1.88		1.68												7		
28	1.90			1.81	1.92						1.80								1.55			1.93									3		
29																1.89	1.91		1.62												0		
30																															0		
31																															0		
Monthly Cl ₂ Avg.	1.73																																
Total Samples	117																																

