



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:

monthly Operating Report

"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: _____

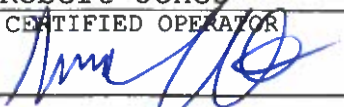
Signature: _____ Date: _____

F&V Operations Representative: Robert Jones _____

Signature:  _____ Date: 6/6/2020

**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

For Month of May 2020

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

TREATMENT RATE AND FILTER DATA

1. Treatment Rate, Maximum 10.62 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 4820 gal.: Estimated supply 60 days
8. Sodium Hypochlorite on hand at outstations 230 gal: Estimated supply 26 days.
9. Phosphoric Acid on hand 531 gal.: Estimated supply 22 days
9. Sodium Hydroxide on hand 5382 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

May-20

DATE	Fluoride Applied F mg/l	Fluoride Analyses mg/l			Chlorine App. Mg/l			Chlorine Residual mg/l							
					Chlorine App. Mg/l	Chlorine (prior to filtration) mg/L OCl ⁻	Post Chlorine mg/L	Sta II	Dort	3MG Well	Tap				
		Free	Free	Free				Free							
		14	15	16	17	18	19	20	21	1.05	23	24	25	26	27
1		0.60	0.60		1.04				1.1					1.7	
2		0.71	0.74		1.16				1.1					1.7	
3		0.64	0.68		1.10				1.1					1.8	
4		0.71	0.74		0.96				1.1					1.6	
5		0.72	0.62		1.03				1.1					1.7	
6		0.45	0.58		1.05				1.1					1.7	
7		0.56	0.64		0.98				1.1					1.8	
8		0.65	0.64		0.87				1.1					1.7	
9		0.58	0.64		1.01				1.1					1.8	
10		0.69	0.67		0.95				1.1					1.7	
11		0.80	0.76		0.88				1.0					1.7	
12		0.65	0.60		0.97				1.0					1.7	
13		0.75	0.64		0.99				1.1					1.6	
14		0.56	0.42		1.13				1.0					1.6	
15		0.64	0.66		1.11				0.9					1.7	
16		0.75	0.67		1.28				0.9					1.8	
17		0.67	0.70		1.36				0.8					1.8	
18		0.67	0.79		1.24				1.1					1.7	
19		0.70	0.65		1.19				0.9					1.7	
20		0.77	0.84		1.03				0.9					1.7	
21		0.71	0.70		1.02				0.9					1.6	
22		0.73	0.79		1.10				0.9					1.7	
23		0.71	0.75		1.23				0.9					1.7	
24		0.70	0.72		1.15				0.9					1.7	
25		0.75	0.81		1.14				0.9					1.7	
26		0.79	0.89		1.12				0.8					1.6	
27		0.61	0.51		1.22				0.9					1.6	
28		0.77	0.80		1.21				0.9					1.6	
29		0.68	0.69		1.30				0.7					1.7	
30		0.65	0.68		1.17				1.0					1.7	
31		0.64	0.58		0.97				1.0					1.7	
AVG			0.68		1.10				1.0					1.7	
MAX			0.89		1.36				1.1					1.8	
MIN			0.42		0.87				0.7					1.6	



Chemical Analyses WSSN 2310 May-20

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	7.36	7.56		104		82		34	0.01	0.01		28.1		8.3		15
2	7.40	7.46		104		84		36	0.0	0.02		27.3		8.7		16
3	7.40	7.47		104		84		38	0	0.00		26.5		9.2		14
4	7.35	7.42		104		82		34	0	0.02		28.1		8.3		15
5	7.38	7.64	104	100	82	80	34	28	0.01	0.01	28.1	28.9	8.3	6.8	15	14
6	7.34	7.53		102		84		34	0.01	0.01		27.3		8.3		15
7	7.35	7.56		104		86		34	0	0.01		28.1		8.3		15
8	7.40	7.52		102		86		32	0.03	0.02		28.1		7.8		14
9	7.40	7.49		104		78		34	0	0.00		28.1		8.3		16
10	7.34	7.51		102		76		32	0.01	0.01		28.1		7.8		14
11	7.38	7.60		100		76		32	0.01	0.01		27.3		7.8		15
12	7.42	7.44	102	100	80	80	30	30	0.02	0.02	28.1	28.1	7.3	7.3	14	15
13	7.32	7.53		102		82		32	0.01	0.01		28.1		7.8		16
14	7.38	7.42		100		82		30	0	0.00		28.1		7.3		15
15	7.40	7.49		104		86		34	0.01	0.01		28.1		8.3		16
16	7.43	7.51		104		84		32	0.01	0.02		28.9		7.8		16
17	7.40	7.55		108		84		36	0.02	0.02		28.9		8.7		16
18	7.41	7.45		102		88		30	0.02	0.01		28.9		7.3		16
19	7.37	7.43	110	108	86	86	36	34	0.02	0.02	29.7	29.7	8.7	8.3	17	16
20	7.35	7.39		106		86		34	0.02	0.01		28.9		8.3		17
21	7.34	7.39		106		90		30	0.01	0.02		30.5		7.3		17
22	7.40	7.56		106		82		34	0	0.00		28.9		8.3		16
23	7.35	7.52		96		90		24	0.01	0.01		28.9		5.8		16
24	7.42	7.53		100		88		26	0.01	0.00		29.7		6.3		17
25	7.35	7.40		110		90		34	0.03	0.01		30.5		8.3		17
26	7.35	7.36	112	114	88	90	36	38	0.01	0.00	30.5	30.5	8.7	9.2	17	17
27	7.38	7.48		114		90		42	0.02	0.01		28.9		10.2		18
28	7.36	7.42		110		88		38	0	0.00		28.9		9.2		18
29	7.40	7.57		110		86		40	0.02	0.02		28.1		9.7		16
30	7.35	7.50		112		88		38	0.02	0.02		29.7		9.2		16
31	7.45	7.60		106		86		36	0.02	0.01		28.1		8.7		16
AVG	7.38	7.49		105		85		34		0.01		28.6		8.2		16
MAX	7.45	7.64		114		90		42		0.02		30.5		10.2		18.0
MIN	7.32	7.36		96		76		24		0.00		26.5		5.8		14.0



WSSN 2310

May-20

D A T E	Total Coliform						Standard Plate Count		Conductivity (mS)	Temp deg.C	Color		Odor	
	Plant Tap						Raw	Tap			Raw	Tap	Raw	Tap
			Dort	3MG Well	Sta II	Lab Tap								
	60	61	62	63	64	65	66	67	68	69	71	72	73	74
1					2/0				0.23	9.3				
2					2/0				0.23	11.1				
3					2/0				0.23	9.8				
4					2/0				0.22	9.9				
5					2/0				0.23	9.4				
6					2/0				0.22	9.1				
7					2/0				0.22	9.7				
8					2/0				0.22	8.7				
9					2/0				0.21	9.5				
10					2/0				0.21	9.3				
11					2/0				0.22	9.6				
12					2/0				0.22	9.5				
13					2/0				0.23	10.8				
14					2/0				0.22	10.4				
15					2/0.01				0.23	10.0				
16					2/0				0.24	13.9				
17					2/0				0.23	10.4				
18					2/0				0.24	11.8				
19					2/0				0.25	11.4				
20					2/0				0.24	11.8				
21					2/0				0.24	11.7				
22					2/0				0.24	10.8				
23					2/0				0.24	11.8				
24					2/0				0.24	12.1				
25					2/0				0.25	12.8				
26					2/0				0.26	13.0				
27					2/0				0.26	13.4				
28					2/0				0.26	13.8				
29					2/0				0.24	12.5				
30					2/0				0.24	12.6				
31					2/0				0.23	11.6				
AVG									0.23	11.0				
MAX									0.26	13.9				
MIN									0.21	8.7				



Distribution System Monitoring WSSN 2310

May-20

DATE	Free Chlorine Residual at Bacteriological Monitoring Stations mg/l																									Chlorine only sites mg/l					Number of Samples	
	1	2	3	4	CS	6	7	8B	9	10	WR	12	13B	14	15	16	17	18	19	20	26	27	28	29	30	21	22	23	24	25		
1																1.44	1.56		1.47													3
2																																0
3																																0
4	1.26	1.85		1.40	1.66													1.36					1.02							1.39	7	
5								1.71	1.34	1.63	1.17	1.16	1.72								1.66										7	
6													1.65	1.36	1.47	1.67		1.46						1.69		1.30	1.16	1.88	1.01		10	
7	1.55			1.53	1.71			1.52			1.11									1.01		1.73			1.51						8	
8															1.47	1.64		1.50													3	
9																																0
10																																0
11	1.41			1.46	1.86													1.37						1.44						1.27	6	
12								1.78	1.21	1.62	1.10	1.18	1.80								1.50						1.16				8	
13														1.66	1.61	1.60	1.68		1.81					1.90		1.36		1.51	1.37		9	
14	1.3			1.55	1.71			1.72			1.06										1.31		1.72			1.75					8	
15																1.59	1.63		1.51													3
16																																0
17																																0
18	1.31	1.76		1.52	1.55													1.33						1.01						1.42	7	
19								1.82	1.26	1.69	1.06	1.00	1.76								1.56						1.38				8	
20													1.67	1.01	1.59	1.63		1.44						1.63		1.31		1.83	1.40		9	
21	1.77			1.55	1.71			1.62			1.12									1.19		1.37			1.64						8	
22															1.55	1.57		1.40													3	
23																																0
24																																0
25	1.24			1.41	2.48													1.29											1.35	5		
26								1.60	1.12	1.60	1.00	1.05	1.86								1.57					1.39					8	
27													1.62	1.46	1.59	1.66		1.41					1.01	1.58		1.37		1.79	1.10		10	
28	1.29			1.40	1.59			1.55			1.01									1.14		1.74		1.52							8	
29															1.56	1.58		1.43													3	
30																																0
31																																0
Monthly Cl₂ Avg.					1.49																											
Total Samples					121																											



Distribution System Monitoring

WSSN 2310

May-20

DATE	Total Chlorine Residual at Bacteriological Monitoring Stations mg/l																									Chlorine only sites mg/l					Number of Samples		
	1	2	3	4	CS	6	7	8B	9	10	WR	12	13B	14	15	16	17	18	19	20	26	27	28	29	30	21	22	23	24	25			
1																1.67	1.83		1.70														3
2																																	0
3																																	0
4	1.49	2.05		1.73	1.84													1.53					1.12							1.62		7	
5								1.91	1.52	1.92	1.36	1.35	1.93								1.88											7	
6														1.85	1.65	1.66	1.83		1.67					1.90		1.53	1.23	2.05	1.19			10	
7	1.71			1.75	1.87			1.73			1.30									1.22		1.91			1.68							8	
8																1.65	1.84		1.70													3	
9																																0	
10																																0	
11	1.58			1.65	2.03													1.55					1.62							1.44		6	
12								1.87	1.36	1.86	1.25	1.33	1.97								1.75						1.31					8	
13														1.84	1.79	1.78	1.83		2.03					1.72		1.53		1.62	1.50			9	
14	1.58			1.73	2.08			1.78			1.23										1.46		2.00		1.98							8	
15																	1.77	1.88		1.69												3	
16																																	0
17																																	0
18	1.53	1.99		1.70	1.83													1.51					1.06							1.58		7	
19								1.99	1.48	1.91	1.26	1.19	1.97								1.76						1.58					8	
20														1.87	1.08	1.83	1.82		1.62					1.87		1.52		2.05	1.58			9	
21	1.89			1.76	1.86			1.89			1.18										1.37		1.55		1.79							8	
22																1.65	1.76		1.56													3	
23																																	0
24																																	0
25	1.31			1.60	2.68													1.48												1.43		5	
26								1.69	1.31	1.69	1.13	1.16	1.97								1.72					1.48						8	
27														1.82	1.61	1.75	1.88		1.55				1.13	1.83		1.57		1.88	1.23			10	
28	1.52			1.59	1.71			1.81			1.16										1.31		1.87		1.60							8	
29																1.69	1.76		1.64													3	
30																																	0
31																																	0
Monthly Cl₂ Avg.					1.67																												
Total Samples					121																												

