



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:

June MOR

"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: _____

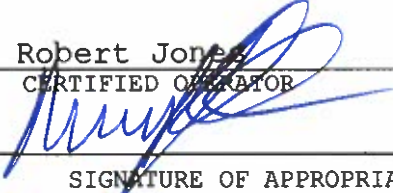
Signature: _____ Date: _____

F&V Operations Representative: Robert Jones _____

Signature:  _____ Date: 7/7/2020 _____

**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

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

TREATMENT RATE AND FILTER DATA

1. Treatment Rate, Maximum 11.97 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 3708 gal.: Estimated supply 42 days
8. Sodium Hypochlorite on hand at outstations 435 gal: Estimated supply 44 days.
9. Phosphoric Acid on hand 787 gal.: Estimated supply 34 days
9. Sodium Hydroxide on hand 4276 gal.: Estimated supply 74 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 Jun-20

DATE	Fluoride Applied F mg/l	Fluoride Analyses mg/l			Chlorine App. Mg/l		Chlorine (prior to filtration) mg/L OCI'		Post Chlorine mg/L	Chlorine Residual mg/l				
		Raw	Tap	Dist	Chlorine App. Mg/l	Chlorine mg/L OCI'	Sta II	Dort		3MG Well	Tap			
											Free	Free		
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	0.73	0.85			1.07			1.0						1.7
2	0.72	0.72			1.06			1.0						1.6
3	0.85	0.75			1.02			0.8						1.6
4	0.70	0.72			1.02			1.0						1.6
5	0.67	0.66			1.28			0.7						1.6
6	0.66	0.74			1.11			1.0						1.7
7	0.72	0.80			1.00			1.1						1.8
8	0.78	0.85			0.98			1.0						1.7
9	0.64	0.68			0.97			1.0						1.6
10	0.89	0.70			1.00			0.9						1.6
11	0.59	0.56			1.07			0.8						1.6
12	0.83	0.84			1.17			0.9						1.7
13	0.76	0.71			1.12			1.0						1.6
14	0.79	0.74			1.01			1.0						1.8
15	0.76	0.76			1.11			1.0						1.6
16	0.69	0.64			1.07			1.0						1.7
17	0.87	0.84			1.08			0.9						1.7
18	0.78	0.77			1.11			0.9						1.6
19	0.70	0.69			1.14			1.0						1.6
20	0.76	0.80			1.16			0.9						1.7
21	0.79	0.80			1.14			1.0						1.7
22	0.73	0.75			1.00			1.0						1.6
23	0.75	0.78			0.99			1.0						1.6
24	0.77	0.86			1.06			0.9						1.6
25	0.73	0.88			1.04			1.0						1.7
26	0.80	0.93			1.07			1.1						1.7
27	0.74	0.81			1.07			1.0						1.7
28	0.73	0.67			1.04			1.0						1.7
29	0.80	0.82			1.04			1.0						1.7
30	0.68	0.69			1.04			0.9						1.7
31														
AVG		0.76			1.07			1.0						1.7
MAX		0.93			1.28			1.1						1.8
MIN		0.56			0.97			0.7						1.6



Chemical Analyses WSSN 2310

Jun-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	7.34	7.43		100		86		30	0	0.01		28.1		7.3		16
2	7.35	7.41	106	100	80	82	34.0	30	0.0	0.03	28.9	28.1	8.3	7.3	15.0	16
3	7.35	7.40		102		88		30	0.02	0.02		28.9		7.3		16
4	7.39	7.42		104		88		32	0.02	0.00		28.9		7.8		16
5	7.41	7.51		108		88		38	0.01	0.02		28.1		9.2		17
6	7.38	7.50		108		88		40	0.01	0.01		27.3		9.7		15
7	7.36	7.50		106		88		34	0.01	0.01		28.9		8.3		15
8	7.38	7.39		104		86		32	0.01	0.01		28.9		7.8		15
9	7.35	7.38	104	104	84	88	32	32	0.03	0.03	28.9	28.9	7.8	7.8	14	15
10	7.51	7.62		104		88		32	0.04	0.03		28.9		7.8		15
11	7.32	7.40		102		88		28	0.03	0.02		29.7		6.8		15
12	7.32	7.35		100		88		28	0	0.02		28.9		6.8		15
13	7.38	7.52		102		82		34	0.01	0.01		27.3		8.3		14
14	7.30	7.57		102		80		36	0.02	0.01		26.5		8.7		15
15	7.34	7.40		102		82		32	0.01	0.01		28.1		7.8		14
16	7.36	7.42	100	100	82	80	32	32	0.02	0.02	27.3	27.3	7.8	7.8	14	15
17	7.37	7.43		100		78		30	0.01	0.01		28.1		7.3		15
18	7.33	7.38		102		84		32	0	0.01		28.1		7.8		15
19	7.33	7.49		106		86		40	0.01	0.01		26.5		9.7		16
20	7.44	7.69		104		86		36	0.01	0.01		27.3		8.7		16
21	7.45	7.48		100		82		34	0.02	0.03		26.5		8.3		17
22	7.25	7.34		100		80		34	0	0.00		26.5		8.3		15
23	7.29	7.40	98	96	76	80	26	26	0.02	0.02	28.9	28.1	6.3	6.3	15	14
24	7.31	7.40		98		82		30	0	0.01		27.3		7.3		14
25	7.33	7.40		100		84		32	0.01	0.02		27.3		7.8		15
26	7.34	7.41		100		82		30	0.02	0.02		28.1		7.3		15
27	7.39	7.57		102		82		36	0	0.00		26.5		8.7		14
28	7.41	7.55		106		82		36	0.01	0.01		28.1		8.7		16
29	7.32	7.59		104		82		34	0.02	0.02		28.1		8.3		15
30	7.33	7.58	100	100	80	78	30	30	0.02	0.02	28.1	28.1	7.3	7.3	14	15
31																
AVG	7.36	7.46		102		84		33		0.02		27.9		7.9		15
MAX	7.51	7.69		108		88		40		0.03		29.7		9.7		17.0
MIN	7.25	7.34		96		78		26		0.00		26.5		6.3		14.0



D A T E	Total Coliform										WSSN 2310			Jun-20					
	Plant Tap										Standard Plate Count	Conductivity (mS)	Temp deg C	Color		Odor			
	Dort	3MG Well	Sta II	Lab Tap	60	61	62	63	64	65				Raw Tap	Raw Tap	Raw Tap	Raw Tap	Raw Tap	Raw Tap
											66	67	68	69		71	72	73	74
1														0.24	12.7				
2														0.23	12.9				
3														0.23	14.0				
4														0.23	13.9				
5														0.24	12.3				
6														0.23	12.8				
7														0.24	13.2				
8														0.24	13.9				
9														0.24	13.7				
10														0.23	14.8				
11														0.23	13.3				
12														0.23	13.6				
13														0.22	13.1				
14														0.22	14.0				
15														0.22	14.5				
16														0.23	15.1				
17														0.22	14.7				
18														0.22	15.1				
19														0.23	14.6				
20														0.23	15.8				
21														0.22	16.5				
22														0.23	16.4				
23														0.23	16.1				
24														0.22	16.7				
25														0.23	16.6				
26														0.23	16.5				
27														0.22	16.2				
28														0.23	15.1				
29														0.23	15.2				
30														0.23	15.4				
31																			
AVG														0.23	14.6				
MAX														0.24	16.7				
MIN														0.22	12.3				



Distribution System Monitoring WSSN 2310

Jun-20

D A T E	Free 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	1.29			1.46	1.50													1.23															1.30	6			
2							1.66	1.31	1.46	0.95	1.18	1.75				1.48											1.12						8				
3													1.58	1.51	1.49	1.71		1.49						1.63		1.34			1.72	1.33			9				
4	1.49			1.53	1.73		1.58			1.13							1.70			0.79													8				
5																1.59	1.63		1.42															3			
6																																			0		
7																																			0		
8	1.34	1.60		1.55	1.77	1.52												1.12															1.32	8			
9																																			8		
10																																				9	
11	1.32			1.48	1.72																															7	
12																																				3	
13																																				0	
14																																				0	
15	1.15	1.73		1.45	1.56	1.00																														0	
16																																					0
17																																					7
18	1.65			1.51	1.77																																9
19																																					7
20																																					3
21																																					0
22	1.16	1.61		1.46	1.76	1.52																															8
23																																					8
24																																					9
25	1.12			1.33	1.53																																7
26																																					3
27																																					0
28																																					0
29	1.22	1.26		1.38	1.51	1.52																															8
30																																					7
31																																					0
Monthly Cl, Avg.				1.35																																	
Total Samples				131																																	



ROUTINE POSITIVE DISTRIBUTION SAMPLES

Jun-20

Total number of positive routine samples:		Total Coliform: 0				E. coli Bacteria: 0			Chlorine Residual (mg/L)	
Date	Monitoring Station	Total Coliform	E. coli Bacteria	Date	Time	Rest of Station, Upstream & Downstream	Total Coliform	E. coli Bacteria	Free	Total
Total number of routine distribution samples analyzed:										
Total number of routine distribution samples required:										

Total number of routine distribution samples analyzed:	131
Total number of routine distribution samples required:	100