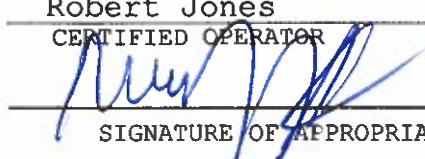


**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

For Month of August 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 14.36 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 2654 gal.: Estimated supply 25 days
8. Sodium Hypochlorite on hand at outstations 208 gal: Estimated supply 28 days.
9. Phosphoric Acid on hand 1044 gal.: Estimated supply 50 days
10. Sodium Hydroxide on hand 2353 gal.: Estimated supply 39 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

Aug-20

DATE	Fluoride Applied mg/l	Fluoride Analyses mg/l			Chlorine App. Mg/l		Chlorine Residual mg/l					
		Raw	Tap	Dist	Chlorine App. Mg/l (prior to filtration) OCT	Post Chlorine mg/L	Free	Dort	3MG Well	Tap		
										Free	Free	
1	0.99	0.81		1.13			0.9				1.8	
2	0.66	0.83		0.96			0.9				1.7	
3	0.67	0.70		1.16			0.9				1.6	
4	0.80	0.79		1.36			0.8				1.6	
5	0.78	0.79		1.56			0.8				1.7	
6	0.83	0.87		1.56			0.8				1.6	
7	0.62	0.62		1.50			0.9				1.6	
8	0.66	0.69		1.60			0.8				1.6	
9	0.63	0.68		1.64			0.8				1.7	
10	0.74	0.79		1.43			0.8				1.7	
11	0.75	0.80		1.39			0.8				1.6	
12	0.65	0.66		1.36			0.8				1.6	
13	0.78	0.88		1.51			0.8				1.7	
14	0.60	0.68		1.66			0.8				1.7	
15	0.73	0.82		1.68			0.8				1.7	
16	0.75	0.82		1.72			0.9				1.7	
17	0.65	0.65		1.49			0.9				1.7	
18	0.73	0.78		1.38			0.8				1.6	
19	0.67	0.68		1.39			0.8				1.7	
20	0.75	0.72		1.38			0.8				1.6	
21	0.73	0.76		1.36			0.8				1.7	
22	0.69	0.70		1.28			0.8				1.8	
23	0.70	0.76		1.14			0.9				1.8	
24	0.76	0.85		1.15			0.8				1.7	
25	0.52	0.68		1.20			0.9				1.7	
26	0.80	0.79		1.25			0.8				1.7	
27	0.73	0.71		1.31			0.8				1.7	
28	0.71	0.77		1.46			0.8				1.7	
29	0.72	0.80		1.42			0.9				1.8	
30	0.64	0.70		1.35			0.8				1.6	
31	0.70	0.73		1.39			0.8				1.7	
AVG		0.75		1.39			0.8				1.7	
MAX		0.88		1.72			0.9				1.8	
MIN		0.62		0.96			0.8				1.6	



Chemical Analyses

WSSN 2310

Aug-20

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	7.48	7.56	100	100	80	80	30	0.01	0.01	28.1	40	41	7.3	14		
2	7.44	7.51	100	100	80	80	32	0.0	0.01	27.2	27.2	7.8	16	16		
3	7.34	7.56	98	98	80	80	28	0.01	0.01	28.1	28.1	6.8	15	15		
4	7.30	7.55	100	100	80	80	30	0.03	0.02	28.1	28.1	7.3	16	16		
5	7.31	7.57	94	94	80	80	22	0.01	0.01	28.9	28.9	5.3	16	16		
6	7.34	7.54	98	98	84	84	26	0	0.01	28.9	28.9	6.3	16	16		
7	7.38	7.52	104	104	84	84	36	0.01	0.02	27.3	27.3	8.7	15	15		
8	7.37	7.49	100	100	80	80	34	0.01	0.01	26.5	26.5	8.3	15	15		
9	7.45	7.52	98	98	80	80	34	0.01	0.01	25.7	25.7	8.3	15	15		
10	7.32	7.54	100	100	80	80	28	0.01	0.01	28.9	28.9	6.8	15	15		
11	7.29	7.50	100	100	76	80	28	0.02	0.01	28.9	28.1	6.8	7.3	16		
12	7.31	7.51	100	100	82	82	28	0.01	0.01	28.9	28.9	6.8	16	16		
13	7.29	7.53	100	100	82	82	30	0	0.01	28.1	28.1	7.3	16	16		
14	7.29	7.55	98	98	80	80	24	0.01	0.02	29.7	29.7	5.8	16	16		
15	7.49	7.53	98	98	80	80	34	0.01	0.02	25.7	25.7	8.3	15	15		
16	7.49	7.57	102	102	80	80	34	0.01	0.01	27.3	27.3	8.3	15	15		
17	7.28	7.51	100	100	80	80	28	0.02	0.01	28.9	28.9	6.8	16	16		
18	7.34	7.56	100	98	76	80	28	0.01	0.01	28.9	28.1	6.8	6.8	14		
19	7.31	7.54	100	100	80	80	32	0.02	0.02	27.3	27.3	7.8	15	15		
20	7.29	7.53	100	100	78	78	30	0.01	0.00	28.1	28.1	7.3	16	16		
21	7.30	7.55	98	98	76	76	28	0	0.02	28.1	28.1	6.8	15	15		
22	7.45	7.58	100	100	78	78	36	0.01	0.02	25.7	25.7	8.7	15	15		
23	7.46	7.50	102	102	78	78	36	0	0.00	26.5	26.5	8.7	13	13		
24	7.30	7.55	102	102	80	80	30	0.01	0.01	28.9	28.9	7.3	14	14		
25	7.29	7.52	98	100	76	78	26	0.03	0.01	28.9	26.5	6.3	8.3	16		
26	7.27	7.52	100	100	80	80	28	0.01	0.01	28.9	28.9	6.8	19	19		
27	7.29	7.53	98	98	76	76	26	0.01	0.02	28.1	28.1	6.3	15	15		
28	7.30	7.53	100	100	80	80	32	0.01	0.02	27.3	27.3	7.8	15	15		
29	7.40	7.54	100	100	80	80	34	0	0.01	26.5	26.5	8.3	15	15		
30	7.39	7.53	98	98	78	78	32	0	0.00	26.5	26.5	7.8	14	14		
31	7.32	7.55	100	100	78	78	28	0.01	0.00	28.9	28.9	6.8	16	16		
AVG	7.35	7.54	100	100	80	80	30	0.01	0.01	27.7	27.7	7.4	15	15		
MAX	7.49	7.58	104	104	84	84	36	0.02	0.02	29.7	29.7	8.7	19.0	19.0		
MIN	7.27	7.49	94	94	76	76	22	0.00	0.00	25.7	25.7	5.3	13.0	13.0		



WSSN 2310

Aug-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	Raw Tap			
	60	61	Dort	3MG Well	Sta II			Lab Tap	66			67	68	69
1						2/0				0.23	20.1			
2						2/0				0.23	19.7			
3						2/0				0.23	20.1			
4						2/0				0.23	19.2			
5						2/0				0.23	19.8			
6						2/0				0.23	20.2			
7						2/0				0.23	20.5			
8						2/0				0.23	21.3			
9						2/0				0.23	21.5			
10						2/0				0.23	21.2			
11						2/0				0.23	21.4			
12						2/0				0.23	21.4			
13						2/0				0.23	21.4			
14						2/0				0.23	21.4			
15						2/0				0.23	21.9			
16						2/0				0.23	21.9			
17						2/0				0.23	21.2			
18						2/0				0.23	21.1			
19						2/0				0.23	21.0			
20						2/0				0.23	21.1			
21						2/0				0.23	21.1			
22						2/0				0.22	20.8			
23						2/0				0.23	20.9			
24						2/0				0.23	20.9			
25						2/0				0.23	21.2			
26						2/0				0.23	21.3			
27						2/0				0.23	21.4			
28						2/0				0.23	21.6			
29						2/0				0.23	22.0			
30						2/0				0.23	22.0			
31						2/0				0.23	21.4			
AVG										0.23	21.0			
MAX										0.23	22.0			
MIN										0.22	19.2			



Distribution System Monitoring WSSN 2310

Aug-20

D A T E	Free 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		Chlorine only sites mg/l
1																											
2																											
3	1.19	1.51		1.19	1.46	1.20												0.77			1.24		1.00				
4								1.21	0.98	1.37	1.12	0.68	1.53		1.41	0.81	1.32	1.56									
5											0.98									0.98							
6	0.93				1.31	1.58											1.27	1.50									
7																											
8																											
9																											
10	1.36	1.57		1.29		1.50	0.88											0.87									
11								1.36	0.94	1.33	1.42	0.83	0.82		1.53	0.96	1.44	1.39		0.90		1.24		0.69			
12																											
13	0.77			1.31	1.60						0.64						1.16	1.57		1.15		1.24		1.41			
14																											
15																											
16																											
17	0.67	1.07			1.32	1.37	1.44											0.98						1.50			
18								1.38	0.95	1.48	0.94	0.78	0.99								1.32						
19														1.34	0.84	1.28	1.61		1.08								
20	1.20			1.10	1.48						1.16									0.20		1.63		1.48			
21																											
22																											
23																											
24	0.55	1.52			1.39	1.32	1.33											0.86			0.56						
25								1.29	0.81	1.01	1.25	0.63	1.63														
26														1.49	1.32	1.19	1.49		1.13								
27	1.00				1.29	1.57																					
28											1.03		0.80														
29																											
30																											
31	0.68	1.23		1.11	1.56	1.03												0.79									
Monthly Cl ₂ Avg.	1.20																										
Total Samples	128																										



Distribution System Monitoring

WSSN 2310

Aug-20

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																																0
2																																0
3	1.31	1.68		1.50	1.83	1.35												1.03						1.22							8	
4							1.64	1.13	1.56	1.50	1.05	1.72											1.52								7	
5													1.52	1.01	1.46	1.65															9	
6	1.13			1.46	1.87						1.45																				7	
7																															3	
8																															0	
9																															0	
10	1.50	1.76		1.50	1.53	1.10												1.13													8	
11							1.61	1.07	1.58	1.53	1.01	1.02																			8	
12													1.68	1.07	1.56	1.51															9	
13	0.97			1.43	1.71					1.40																					7	
14																															3	
15																															0	
16																															0	
17	0.88	1.11		1.37	1.46	1.57												1.07													8	
18							1.70	1.04	1.53	1.44	1.00	1.01																			8	
19													1.61	0.74	1.40	1.73															9	
20	1.42			1.46	1.76																										7	
21										1.53																					3	
22																															0	
23																															0	
24	0.81	1.73		1.56	1.74	1.47																									8	
25													1.61	1.01	1.06	1.48	0.85	1.84													8	
26													1.62	1.56	1.47	1.61															9	
27	1.19			1.42	1.83																										6	
28																															5	
29																															0	
30																															0	
31	0.94	1.69		1.40	1.75	1.35																									8	
Monthly Cl ₂ Avg:		1.41																														
Total Samples		128																														

