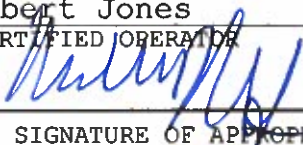


**MONTHLY OPERATION REPORT  
OF  
WATER TREATMENT PLANT**

**For Month of September 2018**

<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 14.55 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 2580 gal.: Estimated supply 25 days
8. Sodium Hypochlorite on hand at outstations 120 gal: Estimated supply 10 days
9. Phosphoric Acid on hand 721 gal.: Estimated supply 32 days
9. Sodium Hydroxide on hand 2665 gal.: Estimated supply 66 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**

**Sep-18**

DATE	Fluoride Applied F mg/l	Fluoride Analyses mg/l			Chlorine App. Mg/l	Chlorine (prior to filtration) mg/l	Post Chlorine mg/l	Chlorine Residual mg/l					Tap		
		Raw	Tap	Dist				Chlorine App. Mg/l	Free	Dort	3MG Well	Free	Free		
1	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
		0.68	0.68		1.17				0.8					1.6	
2		0.63	0.63		1.19				0.9					1.7	
3		0.67	0.64		1.11				0.9					1.8	
4		0.60	0.63		1.08				0.9					1.7	
5		0.71	0.73		1.32				0.9					1.7	
6		0.70	0.71		1.30				0.8					1.7	
7		0.66	0.64		1.35				0.9					1.7	
8		0.73	0.75		1.38				0.9					1.7	
9		0.71	0.70		1.27				0.9					1.7	
10		0.67	0.66		1.27				1.0					1.7	
11		0.64	0.64		1.25				1.0					1.7	
12		0.73	0.72		1.16				0.9					1.6	
13		0.74	0.75		1.20				0.9					1.7	
14		0.74	0.77		1.27				0.9					1.6	
15		0.64	0.62		1.29				0.9					1.6	
16		0.63	0.66		1.29				0.8					1.6	
17		0.72	0.74		1.26				0.9					1.9	
18		0.72	0.74		1.10				0.9					1.7	
19		0.72	0.74		1.15				0.8					1.6	
20		0.71	0.71		1.22				0.9					1.9	
21		0.72	0.74		1.19				0.8					1.5	
22		0.75	0.72		1.26				0.9					1.7	
23		0.73	0.73		1.19				0.9					1.7	
24		0.70	0.73		1.28				0.8					1.6	
25		0.73	0.73		1.27				0.9					1.7	
26		0.73	0.75		1.32				0.9					1.6	
27		0.73	0.73		1.18				0.9					1.7	
28		0.69	0.73		1.26				0.9					1.6	
29		0.77	0.80		1.25				0.9					1.7	
30		0.73	0.73		1.33				0.9					1.7	
AVG		0.69	0.71		1.24				0.9					1.7	
MAX		0.77	0.80		1.38				1.0					1.9	
MIN		0.60	0.62		1.08				0.8					1.5	



Chemical Analyses

WSSN 2310

Sep-18

DATE	CSII	Tap	Total Hardness as CaCO <sub>3</sub> mg/l		Total Alkalinity as CaCO <sub>3</sub> mg/l		NonCarbonate Hardness as CaCO <sub>3</sub> mg/l		Iron mg/l		Calcium Ca <sup>2+</sup> mg/l		Magnesium as Mg <sup>2+</sup> mg/l		Chloride as Cl <sup>-</sup> mg/l	
			Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap	Raw	Tap
1	7.42	7.65	98	81	32	0.01	0.01	26.5	7.8	13						
2	7.44	7.61	98	80	30	0.01	0.01	27.3	7.3	14						
3	7.40	7.56	98	82	28	0.01	0.01	28.1	6.8	14						
4	7.42	7.69	100	78	80	32	34	0.03	0.02	27.5	26.5	7.8	8.3	13	13	
5	7.47	7.66	100	80	80	32	34	0.00	0.01	27.3						
6	7.46	7.68	102	82	82	34	0.01	0.01	27.3	8.3	13					
7	7.54	7.72	100	82	30	0.02	0.01	28.1	7.3	13						
8	7.53	7.63	104	84	34	0.01	0.00	28.1	8.3	13						
9	7.52	7.59	104	84	36	0.01	0.01	27.3	8.7	14						
10	7.53	7.61	100	82	32	0.00	0.00	27.3	7.8	12						
11	7.51	7.54	102	80	34	0.01	0.02	27.3	8.3	12	13					
12	7.50	7.54	102	80	34	0.01	0.00	27.3	8.3	13						
13	7.55	7.51	100	80	30	0.01	0.01	28.1	7.3	13						
14	7.51	7.54	102	82	32	0.01	0.01	28.1	7.8	14						
15	7.53	7.49	94	76	26	0.01	0.02	27.3	6.3	14						
16	7.47	7.49	102	76	32	0.01	0.01	28.1	7.8	14						
17	7.53	7.52	102	78	34	0.01	0.01	27.3	8.3	13						
18	7.49	7.53	98	80	28	32	0.02	0.01	28.1	7.3	13	12				
19	7.54	7.52	104	82	34	0.01	0.00	28.1	8.3	13						
20	7.52	7.51	100	80	30	0.01	0.01	28.1	7.3	12						
21	7.57	7.56	104	82	34	0.01	0.00	28.1	8.3	13						
22	7.59	7.58	104	82	34	0	0.02	28.1	8.3	14						
23	7.60	7.57	104	84	34	0	0.00	28.1	8.3	14						
24	7.56	7.58	104	80	34	0.01	0.01	28.1	8.3	14						
25	7.55	7.54	102	80	32	34	0.01	0.01	28.1	7.8	8.3	12	13			
26	7.53	7.52	104	80	34	0.01	0.02	28.1	8.3	14						
27	7.57	7.57	106	80	36	0.02	0.01	28.1	8.7	14						
28	7.51	7.54	106	84	36	0.02	0.01	28.1	8.7	13						
29	7.53	7.54	100	76	28	0.01	0.01	28.9	6.8	15						
30	7.61	7.59	102	82	32	0.01	0.00	28.1	7.8	14						
AVG	7.52	7.57	102	81	33	0.01	0.01	27.8	7.9	13						
MAX	7.61	7.72	106	84	36	0.02	0.02	28.9	8.7	15.0						
MIN	7.40	7.49	94	76	26	0.00	0.00	26.5	6.3	12.0						



WSSN 2310

Sep-18

DATE	Total Coliform					Standard Plate Count	Conductivity (ms)	Temp deg C	Color		Odor	
	Plant Tap								Raw Tap	Raw Tap	Raw Tap	Raw Tap
	Dort	3MG Well	Sta II	Lab Tap	60							
1					2/0		0.23	20.5				
2					2/0		0.23	19.9				
3					2/0		0.22	18.9				
4					2/0		0.23	19.2				
5					2/0		0.23	20.0				
6					2/0		0.23	20.2				
7					2/0		0.22	19.1				
8					2/0		0.22	18.1				
9					2/0		0.22	17.2				
10					2/0		0.22	16.9				
11					2/0		0.22	16.1				
12					2/0		0.22	16.9				
13					2/0		0.22	18.3				
14					2/0		0.22	19.0				
15					2/0		0.22	19.4				
16					2/0		0.22	20.3				
17					2/0		0.22	19.3				
18					2/0		0.22	19.2				
19					2/0		0.22	19.0				
20					2/0		0.22	19.1				
21					2/0		0.22	18.0				
22					2/0		0.22	17.2				
23					2/0		0.22	17.0				
24					2/0		0.22	17.4				
25					2/0		0.22	18.0				
26					2/0		0.22	18.3				
27					2/0		0.22	18.2				
28					2/0		0.22	18.3				
29					2/0		0.22	19.3				
30					2/0		0.22	18.0				
AVG							0.22	18.5				
MAX							0.23	20.5				
MIN							0.22	16.1				



Distribution System Monitoring WSSN 2310

Sep-18

Free Chlorine Residual at Bacteriological Monitoring Stations mg/l

D A T E	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																																	0
4	1.17				1.76		1.42	1.51	1.56	1.50		1.28	0.84		1.50	1.06	1.41	1.55	0.80	0.81		1.25										11	
5				1.35											1.50	1.06	1.41	1.55	0.80	0.81												9	
6	1.01	1.12	0.97		1.81												1.26	1.51	0.99	0.90												7	
7																																	0
8																																	0
9																																	0
10	1.36	1.11	1.30	1.32	1.95	1.42																											8
11																																	8
12																																	8
13	1.19	1.12	1.33	1.34	1.92																												8
14																																	7
15																																	0
16																																	0
17	0.98	1.12		1.24	1.46	1.58																											7
18																																	8
19																																	8
20																																	0
21				1.33	1.83																												9
22																																	0
23																																	0
24	1.04	1.16	1.28	1.29	1.95	1.40																											8
25																																	8
26																																	7
27	1.11	0.98	1.32	1.26	1.87																												8
28																																	6
29																																	0
30																																	0
Monthly Cl <sub>2</sub> Avg.																										1.28							
Total Samples																										125							



**ROUTINE POSITIVE DISTRIBUTION SAMPLES**

Sep-18

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	Rate of Station, Upstream & Downstream	Total Coliform	E.coli Bacteria	Free	Total
Total number of routine distribution samples analyzed:									125	
Total number of routine distribution samples required:									100	