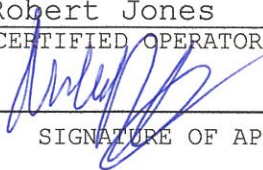


**MONTHLY OPERATION REPORT  
OF  
WATER TREATMENT PLANT**

**For Month of August 2017**

<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
 <u>9/8/17</u>		
SIGNATURE OF APPROPRIATE OFFICIAL		

**TREATMENT RATE AND FILTER DATA**

1. Treatment Rate, Maximum 14.40 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 2350 gal.: Estimated supply 22 days
8. Sodium Hypochlorite on hand at outstations 385 gal: Estimated supply 29 days
9. Phosphoric Acid on hand 1599 gal.: Estimated supply 63 days
9. Sodium Hydroxide on hand 4045 gal.: Estimated supply 28 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-17**

D A T E	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 OCI <sup>-</sup>	Post Chlorine mg/L	Sta II	Dort	3MG Well	Tap				
		Free	Free	Free				Free							
		Raw	Tap	Dist	18	19	20	21	22	23	24	25	26	27	28
1		0.74		1.53				0.7						1.9	
2		0.79		1.34				0.7						1.8	
3		0.83		1.47				0.7						1.8	
4		0.77		1.63				0.7						1.9	
5		0.74		1.58				0.7						1.8	
6		0.70		1.47				0.7						1.9	
7		0.82		1.36				0.7						1.9	
8		0.77		1.49				0.7						1.8	
9		0.73		1.51				0.8						1.8	
10		0.69		1.56				0.7						1.7	
11		0.62		1.44				0.7						1.7	
12		0.75		1.39				0.8						1.9	
13		0.75		1.51				0.7						1.9	
14		0.65		1.62				0.6						1.8	
15		0.71		1.69				0.7						1.8	
16		0.71		1.69				0.7						1.8	
17		0.61		1.67				0.7						1.8	
18		0.68		1.48				0.7						1.8	
19		0.61		1.46				0.7						1.7	
20		0.67		1.88				0.6						1.8	
21		0.64		1.84				0.6						1.7	
22		0.74		1.53				0.7						1.7	
23		0.63		1.28				0.9						1.9	
24		0.64		1.33				0.8						1.9	
25		0.66		1.49				0.8						2.0	
26		0.74		1.38				0.7						1.9	
27		0.73		1.50				0.7						1.8	
28		0.71		1.33				0.8						2.0	
29		0.77		1.41				0.7						1.8	
30		0.71		1.37				0.7						1.9	
31		0.71		1.67				0.7						1.7	
AVG		0.71		1.51				0.7						1.8	
MAX		0.83		1.88				0.9						2.0	
MIN		0.61		1.28				0.6						1.7	



**Chemical Analyses      WSSN 2310      Aug-17**

D A T E	pH		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	
	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	39	40	41	42	43	44
1	7.33	7.41		102		78		24		0.01		30.5		6.3		15
2	7.34	7.57		102		80		22		0.01		30.5		6.3		15
3	7.34	7.55		102		78		24		0.01		30.5		6.3		15
4	7.40	7.62		104		78		26		0.01		30.5		6.8		14
5	7.40	7.51		104		80		24		0.01		31.3		6.3		15
6	7.35	7.50		104		80		24		0.01		31.3		6.3		15
7	7.44	7.55		104		80		24		0.01		31.3		6.3		15
8	7.46	7.60		104		80		24		0.01		31.3		6.3		14
9	7.42	7.51		100		80		20		0.01		30.5		5.8		15
10	7.33	7.48		100		80		20		0.01		31.3		5.3		14
11	7.45	7.56		100		78		22		0.01		31.3		5.3		15
12	7.37	7.50		100		78		22		0.01		31.3		5.3		15
13	7.38	7.55		102		78		24		0.01		30.5		6.3		14
14	7.30	7.59		100		78		22		0.01		31.3		5.3		15
15	7.44	7.56		100		76		24		0.01		30.5		5.8		14
16	7.30	7.58		98		78		20		0.01		27.9		5.8		13
17	7.39	7.52		98		78		20		0.01		27.9		5.8		14
18	7.37	7.56		98		78		20		0.01		30.5		5.3		13
19	7.30	7.56		96		78		18		0.01		30.5		4.9		13
20	7.37	7.56		100		78		22		0.02		31.3		5.3		14
21	7.36	7.45		98		80		18		0.01		29.7		5.8		14
22	7.40	7.51		98		78		20		0.01		30.5		5.3		13
23	7.32	7.60		100		78		22		0.01		30.5		5.8		13
24	7.35	7.48		104		80		24		0.01		30.5		6.8		13
25	7.40	7.60		100		78		22		0.01		31.3		5.3		14
26	7.41	7.46		96		78		30		0.02		26.5		7.3		16
27	7.48	7.53		92		78		26		0		26.5		6.3		16
28	7.34	7.48		94		74		28		0		26.4		6.8		18
29	7.41	7.43		96		78		30		0.01		26.4		7.3		12
30	7.45	7.58		94		80		30		0.02		25.7		7.3		18
31	7.27	7.57		94		76		26		0.03		27.3		6.3		17
AVG	7.38	7.53		99		78		23		0.01		29.8		6.0		15
MAX	7.48	7.62		104		80		30		0.03		31.3		7.3		18.0
MIN	7.27	7.41		92		74		18		0.00		25.7		4.9		12.0



WSSN 2310

Aug-17

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
1					2/0	2/0		<2	0.24	20.2					
2					2/0	2/0			0.24	20.4					
3					2/0	2/0			0.24	20.4					
4					2/0	2/0			0.24	20.3					
5					2/0	2/0			0.24	20.1					
6					2/0	2/0			0.24	20.1					
7					2/0	2/0			0.23	19.9					
8					2/0	2/0		<2	0.24	19.9					
9					2/0	2/0			0.24	20.0					
10					2/0	2/0			0.24	20.0					
11					2/0	2/0			0.23	20.1					
12					2/0	2/0			0.24	20.2					
13					2/0	2/0			0.24	20.0					
14					2/0	2/0			0.23	20.3					
15					2/0	2/0		2	0.24	19.5					
16					2/0	2/0			0.24	19.4					
17					2/0	2/0			0.24	20.0					
18					1/0	2/0			0.23	19.7					
19					2/0	2/0			0.24	19.8					
20					2/0	2/0			0.24	20.1					
21					2/0	2/0			0.24	19.9					
22					2/0	2/0		2	0.23	19.3					
23					2/0	2/0			0.23	19.4					
24					2/0	2/0			0.23	18.7					
25					2/0	2/0			0.24	18.4					
26					2/0	2/0			0.21	20.0					
27					2/0	2/0			0.23	19.6					
28					2/0	2/0			0.23	20.3					
29					2/0	2/0			0.23	21.6					
30					2/0	2/0			0.23	20.6					
31					2/0	2/0			0.23	20.7					
AVG									0.24	20.0					
MAX									0.24	21.6					
MIN									0.21	18.4					



Distribution System Monitoring WSSN 2310

Aug-17

DATE	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	21	22	23	24	25			
1							0.95	1.50	1.48	1.33		1.33										1.02				6		
2													0.86	1.28	0.94	1.35	1.35	0.60					1.70			7		
3							0.92	1.39	1.38	1.42									0.26	0.94				0.99		7		
4	1.07		1.06	1.15								0.82							0.57						1.06	6		
5																										0		
6																										0		
7				1.20	1.29	1.19																				3		
8		1.23											0.93	1.45	0.95			0.74			0.97		1.63			7		
9	1.06			1.23				1.46	1.45						1.33	1.45			0.45		1.22					8		
10							1.05	1.43	1.32	1.51									0.48	0.98				1.00		7		
11	0.98	1.58	1.25	1.15															0.77						0.99	6		
12																										0		
13																										0		
14	0.92	0.93	1.17	1.13	1.68	0.78															0.89					7		
15							1.28	1.50	1.25	1.22		0.89										1.03				6		
16													1.04	1.46	0.57	1.33	1.39	0.33					1.65			7		
17							1.03	1.50	1.43	1.55									0.52					0.84		6		
18	0.95		1.38	1.44								1.47							0.73						1.41	6		
19																										0		
20																										0		
21	0.91		1.01	1.16	1.50	0.68																				5		
22							1.06	1.54	1.19	1.50		1.48						0.86			0.95					7		
23													0.83	0.90	1.08	0.87	1.38						1.72		1.20	7		
24							0.99	1.44	0.71	1.54									0.14					0.92		6		
25																										0		
26																										0		
27																										0		
28	1.00	1.18	1.32	1.29	1.39	1.18															1.08					7		
29							1.07	1.63	1.46	1.57		1.32										1.07				6		
30													0.90	0.79	1.25	0.81	1.53	0.77					1.28			7		
31							1.14	1.27	0.83	1.53									0.23	0.90				1.20		7		
<b>Monthly Cl<sub>2</sub> Avg.</b>				<b>1.13</b>																								
<b>Total Samples</b>				<b>141</b>																								



Distribution System Monitoring

WSSN 2310

Aug-17

DATE	Total 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	21	22	23	24	25					
1							1.09	1.64	1.60	1.62		1.45										1.21				6				
2													1.04	1.54	1.19	1.55	1.53	0.81					1.87			7				
3							1.19	1.63	1.59	1.67										0.42	1.20				1.22	7				
4	1.24		1.38	1.34								0.97								0.74					1.22	6				
5																										0				
6																										0				
7				1.44	1.52	1.44																				3				
8		1.29											1.17	1.68	0.95			0.89			1.06		1.82			7				
9	1.20		1.41					1.58	1.57						1.66	1.61			0.61			1.46				8				
10							1.25	1.61	1.51	1.61									0.67	1.14				1.17		7				
11	1.15	1.71	1.36	1.36															0.94						1.14	6				
12																										0				
13																										0				
14	1.10	1.22	1.34	1.39	1.81	0.89																0.98				7				
15							1.42	1.67	1.46	1.41		1.06											1.24			6				
16													1.25	1.59	0.79	1.59	1.57	0.53					1.79			7				
17							1.30	1.69	1.58	1.69										0.70				1.22		6				
18	1.16		1.54	1.60								1.60								0.88					1.55	6				
19																										0				
20																										0				
21	1.12		1.41	1.37	1.67	0.78																				5				
22							1.22	1.68	1.62	1.69		1.63						0.97				1.23				7				
23													1.08	1.10	1.30	1.14	1.55						1.94		1.37	7				
24							1.16	1.67	0.91	1.69										0.29				1.27		6				
25																										0				
26																										0				
27																										0				
28	1.17	1.33	1.40	1.41	1.51	1.26																1.20				7				
29							1.18	1.72	1.60	1.69		1.44											1.21			6				
30													1.07	1.05	1.37	1.01	1.69	0.94					1.42			7				
31							1.26	1.57	1.00	1.65										0.32	1.07			1.41		7				
<b>Monthly Cl<sub>2</sub> Avg.</b>				<b>1.31</b>																										
<b>Total Samples</b>				<b>141</b>																										



**ROUTINE POSITIVE DISTRIBUTION SAMPLES**

**Aug-17**

Total number of positive routine samples:				Total Coliform: <u>0</u>			E.coli Bacteria: <u>0</u>		Chlorine Residual (mg/L)	
Date	Monitoring Station	Total Coliform	E.coli Bacteria	Date	Time	Retest of Station, Upstream & Downstream	Total Coliform	E.coli Bacteria	Free	Total
Total number of routine distribution samples analyzed:				<b>119</b>						
Total number of routine distribution samples required:				<b>100</b>						