

**MONTHLY OPERATION REPORT  
OF  
WATER TREATMENT PLANT**

**For Month of December 2016**

Flint Water Plant  
NAME OF WATER SYSTEM

2310  
WSSN

Genesee  
COUNTY

JoLisa McDay  
CERTIFIED OPERATOR

F-1  
CLASSIFICATION

  
SIGNATURE OF APPROPRIATE OFFICIAL

**TREATMENT RATE AND FILTER DATA**

1. Treatment Rate, Maximum 14.74 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 1173 gal.: Estimated supply 82 days
8. Sodium Hypochlorite on hand at outstations 852gal: Estimated supply 175.6 days
9. Phosphoric Acid on hand 723 gal.: Estimated supply 30 days
9. Sodium Hydroxide on hand 1365 gal.: Estimated supply (not being used) days

**Remarks:**

The distribution run was not performed on Tuesday, December 27, 2016. The utility collected the required number of samples for compliance.

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**

**Dec-16**

D A T E	Fluoride Applied F <sup>-</sup> mg/l	Fluoride Analyses mg/l			Chlorine App. Mg/l			Chlorine Residual mg/l								
					Chlori ne 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			0.79		1.11					0.8					1.7	
2			0.79		1.06					0.9					1.6	
3			0.81		1.07					0.7					1.8	
4			0.77		1.10					0.9					1.7	
5			0.78		1.12					0.9					1.8	
6			0.73		1.11					0.9					1.6	
7			0.77		1.04					0.8					1.7	
8			0.81		1.04					0.9					1.7	
9			0.77		1.05					0.8					1.7	
10			0.80		1.07					0.9					1.7	
11			0.76		1.06					0.9					1.6	
12			0.78		1.13					0.9					1.7	
13			0.77		1.02					0.8					1.6	
14			0.76		1.03					0.9					1.7	
15			0.76		1.07					0.9					1.7	
16			0.79		1.09					0.9					1.7	
17			0.77		1.23					0.8					1.8	
18			0.77		1.16					1.0					1.9	
19			0.74		1.08					1.0					1.7	
20			0.75		1.07					0.9					1.7	
21			0.75		1.16					0.8					1.7	
22			0.77		1.10					0.9					1.7	
23			0.85		1.09					0.9					1.8	
24			0.78		1.05					0.9					1.7	
25			0.77		1.02					1.0					1.8	
26			0.72		1.11					0.8					1.6	
27			0.74		1.11					0.9					1.7	
28			0.73		1.10					0.9					1.7	
29			0.78		1.08					0.9					1.7	
30			0.89		1.05					0.9					1.8	
31			0.83		1.02					0.9					1.8	
AVG			0.78		1.08					0.9					1.7	
MAX			0.89		1.23					1.0					1.9	
MIN			0.72		1.02					0.7					1.6	



**Chemical Analyses**

**WSSN 2310**

**Dec-16**

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	7.38	7.36		100		70		30		0.01		32.9		4.4		13
2	7.38	7.28		100		68		32		0.01		32.9		4.4		13
3	7.33	7.25		98		70		28		0.01		32.1		4.4		12
4	7.40	7.27		98		70		28		0.01		32.1		4.4		12
5	7.39	7.34		96		70		26		0.01		35.3		1.9		12
6	7.34	7.31		96		68		28		0.01		32.1		3.4		12
7	7.36	7.29		96		70		26		0.01		30.5		4.9		13
8	7.38	7.29		96		70		26		0.01		32.9		3.4		13
9	7.40	7.28		96		68		28		0.01		32.1		3.9		13
10	7.37	7.28		96		70		26		0.01		33.7		2.9		13
11	7.36	7.25		98		68		30		0.01		33.7		3.4		12
12	7.50	7.33		98		70		28		0.01		31.3		4.9		13
13	7.39	7.29		96		70		26		0.01		31.3		4.4		13
14	7.48	7.30		96		70		26		0.02		33.7		2.9		13
15	7.51	7.32		100		72		28		0.01		33.7		3.9		13
16	7.54	7.35		98		70		28		0.02		33.7		3.4		13
17	7.38	7.25		98		70		28		0.01		30.5		5.3		13
18	7.32	7.26		98		72		26		0.01		32.1		4.4		13
19	7.49	7.30		96		70		26		0.01		32.1		3.9		13
20	7.35	7.28		96		70		26		0.02		32.9		3.4		13
21	7.41	7.25		96		70		26		0.01		34.5		2.4		12
22	7.38	7.29		98		72		26		0.01		32.9		3.9		13
23	7.48	7.35		100		70		30		0.01		33.7		3.9		12
24	7.37	7.22		100		68		32		0.01		33.7		3.9		12
25	7.43	7.29		98		68		30		0.01		33.7		3.4		12
26	7.40	7.28		96		68		28		0.01		33.7		2.9		13
27	7.47	7.30		98		68		30		0.01		31.3		4.9		13
28	7.47	7.30		94		68		26		0.01		30.5		4.4		13
29	7.40	7.30		96		72		24		0.01		33.7		2.9		13
30	7.42	7.33		98		70		28		0.01		32.9		3.9		13
31	7.30	7.21		98		68		30		0.01		32.9		3.9		12
AVG	7.41	7.29		97		70		28		0.01		32.7		3.8		13
MAX	7.54	7.36		100		72		32		0.02		35.3		5.3		13.0
MIN	7.30	7.21		94		68		24		0.01		30.5		1.9		12.0



WSSN 2310

Dec-16

DATE	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			0.21	12.9					
2					2/0	2/0			0.20	13.0					
3					2/0	2/0			0.20	12.9					
4					2/0	2/0			0.21	12.9					
5					2/0	2/0			0.21	12.5					
6					2/0	2/0		< 2	0.20	12.7					
7					2/0	2/0			0.21	12.5					
8					2/0	2/0			0.21	12.0					
9					2/0	2/0			0.20	12.0					
10					2/0	2/0			0.20	12.0					
11					2/0	2/0			0.20	11.8					
12					2/0	2/0			0.20	11.9					
13					2/0	2/0		< 2	0.20	12.9					
14					2/0	2/0			0.20	12.4					
15					2/0	2/0			0.20	10.8					
16					2/0	2/0			0.21	10.5					
17					2/0	2/0			0.20	10.7					
18					2/0	2/0			0.20	10.5					
19					2/0	2/0			0.20	11.0					
20					2/0	2/0			0.21	10.3					
21					2/0	2/0		< 2	0.21	10.3					
22					2/0	2/0			0.21	9.7					
23					2/0	2/0			0.20	8.8					
24					2/0	2/0			0.21	8.5					
25					2/0	2/0			0.21	8.9					
26					2/0	2/0			0.20	10.3					
27					2/0	2/0			0.20	10.0					
28					2/0	2/0		< 2	0.20	10.9					
29					2/0	2/0			0.21	10.2					
30					2/0	2/0			0.21	8.7					
31					2/0	2/0			0.21	8.8					
AVG									0.20	11.1					
MAX									0.21	13.0					
MIN									0.20	8.5					



**Distribution System Monitoring      WSSN 2310      Dec-16**

D A T E	Free Chlorine Residual at Bacteriological Monitoring Stations mg/l										
	1	2	3	4	5	6	7	8	CS	WR**	Number of Samples
1	1.65	1.44	1.54	1.33	1.13	0.46	1.57	1.62	1.19	0.83	10
2											0
3											0
4											0
5											0
6	1.56	1.42	1.41	1.32	1.04	0.48	1.33	1.35	1.62	1.27	10
7	1.57	1.52	1.37	1.29	1.18	0.53	1.42	1.52	1.54	1.16	10
8	1.58	1.54	1.41	1.35	1.16	0.48	1.38	1.60	1.26	0.83	10
9											10
10											0
11											0
12											0
13	1.54	1.40	1.46	1.40	1.24	0.45	1.50	1.49	1.30	0.85	10
14	1.54	1.30	1.50	1.35	1.21	0.60	1.48	1.44	1.55	1.19	10
15	1.57	1.58	1.45	1.45	1.21	0.66	1.39	1.55	1.32	0.92	10
16											0
17											0
18											0
19				1.51	1.28				1.59		3
20							1.61	1.60		1.13	3
21	1.68	1.46	1.45			0.55					4
22											0
23											0
24											0
25											0
26											0
27											0
28	1.68	1.43	1.54	1.47	1.35	0.98	1.65	1.58	1.55	1.35	10
29	1.58	0.90	1.46	1.36	1.23	0.91	1.03	1.54	1.47	1.30	10
30											0
31											0
<b>Monthly Cl<sub>2</sub> Avg.</b>				<b>1.31</b>		**Midway Market is being used until West Side Reservoir activities are complete and until further notice (11/15/2016)				*On 12/8/16, Premier Insurance was used. Water was shut of at Liquor Palace.	
<b>Total Samples</b>				<b>100</b>							



**Distribution System Monitoring      WSSN 2310      Dec-16**

D A T E	Total Chlorine Residual at Bacteriological Monitoring Stations mg/l										
	1	2	3	4	5	6	7	8	CS	WR **	Number of Samples
1	1.83	1.59	1.66	1.53	1.30	0.61	1.80	1.75	1.32	0.92	10
2											0
3											0
4											0
5											0
6	1.68	1.62	1.69	1.51	1.33	0.63	1.50	1.60	1.80	1.40	10
7	1.77	1.65	1.56	1.41	1.35	0.73	1.69	1.72	1.74	1.31	10
8	1.82	1.66	1.68	1.47	1.37	0.67	1.66	1.74	1.40	0.99	10
9											0
10											0
11											0
12											0
13	1.74	1.65	1.70	1.66	1.41	0.55	1.63	1.67	1.57	1.27	10
14	1.80	1.40	1.76	1.63	1.46	0.74	1.65	1.69	1.81	1.46	10
15	1.79	1.70	1.69	1.62	1.39	0.80	1.54	1.70	1.49	1.09	10
16											0
17											0
18											0
19				1.67	1.44				1.71		3
20							1.75	1.69		1.31	3
21	1.79	1.61	1.63			0.72					4
22											0
23											0
24											0
25											0
26											0
27											0
28	1.80	1.57	1.71	1.58	1.48	1.09	1.78	1.71	1.69	1.47	10
29	1.73	1.07	1.64	1.49	1.46	1.06	1.16	1.72	1.60	1.41	10
30											0
31											0
<b>Monthly Cl<sub>2</sub> Avg.</b>				<b>1.49</b>		**Midway Market is being used until West Side Reservoir activities are complete and until further notice (11/15/2016)				*On 12/8/16, Premier Insurance was used. Water was shut of at Liquor Palace.	
<b>Total Samples</b>				<b>100</b>							

