


**MONTHLY OPERATION REPORT  
OF  
WATER TREATMENT PLANT**

For Month of January 2016

<u>Flint Water Plant</u> NAME OF WATER SYSTEM	<u>2310</u> WSSN	<u>Genesee</u> COUNTY
<u>Michael Glasgow</u> CERTIFIED OPERATOR		<u>F-1R</u> CLASSIFICATION
 SIGNATURE OF APPROPRIATE OFFICIAL		

**TREATMENT RATE AND FILTER DATA**

1. Treatment Rate, Maximum \_\_\_\_\_ Million Gallons Per Day
2. Treatment Rate, Approved Rated Plant Capacity \_\_\_\_\_ Million Gallons per Day
3. Average Filter Run \_\_\_\_\_ Hours, Average Head Loss \_\_\_\_\_ Feet
4. Average Filtration Rate \_\_\_\_\_ Gallons per Square Ft. per Minute
5. Maximum Filtration Rate \_\_\_\_\_ Gallons per Square Ft. per Minute
6. Average Wash Water Use \_\_\_\_\_ percent of Treated Water

**CHEMICAL DATA**

7. Chlorine on hand \_\_\_\_\_ lbs.: Estimated supply \_\_\_\_\_ days
8. Lime (CaO) on hand \_\_\_\_\_ lbs.: Estimated supply \_\_\_\_\_ days
9. Alum (Al3+) on hand \_\_\_\_\_ lbs.: Estimated supply \_\_\_\_\_ days
10. Cost of All Chemicals per Million Gallons
11. Total Power Cost per Million Gallons

Remarks:

Submit to: Mike Prysby, P.E.  
MDEQ-Water Division-Lansing District  
P.O. Box 30242  
Lansing, MI 48909





**Chemical Analyses**

**WSSN 2310**

**Jan-16**

D A T E	pH		Total Hard as CaCO <sub>3</sub> mg/l		Total Alk as CaCO <sub>3</sub> mg/l		NonCarbonate Hardness as CaCO <sub>3</sub> mg/l				Calcium Ca ++ mg/l		Magnesium as Mg ++ mg/l		Chloride as Cl - mg/l	
	CSH	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	7.36	7.23		100		70		30				32.9		4.4		14
2	7.42	7.24		106		68		38				32.9		5.8		14
3	7.34	7.25		102		70		32				30.5		6.3		11
4	7.39	7.27		96		72		24				30.5		4.9		11
5	7.38	7.28		98		70		28				31.3		4.9		15
6	7.72	7.38		104		70		34				32.1		5.8		14
7	7.41	7.25		104		68		36				32.1		4.9		14
8	7.55	7.27		100		70		30				32.1		4.9		14
9	7.40	7.30		100		68		32				33.7		3.9		15
10	7.38	7.27		104		72		32				31.3		6.3		11
11	7.36	7.25		104		72		32				31.3		6.3		11
12	7.38	7.28		102		70		32				32.9		4.9		14
13	7.38	7.31		106		68		38				34.5		7.3		14
14	7.39	7.33		100		70		30				34.5		3.4		14
15	7.38	7.35		100		72		28				33.7		3.9		14
16	7.41	7.35		100		70		30				33.7		3.9		15
17	7.41	7.26		100		72		28				32.1		4.9		12
18	7.39	7.25		100		72		28				31.3		5.3		11
19	7.43	7.27		104		70		34				36.1		3.4		14
20	7.08	7.28		100		70		30				36.1		2.4		15
21	7.66	7.26		102		72		30				37.7		2.0		15
22	7.62	7.23		100		70		30				37.7		1.5		13
23	7.42	7.30		100		70		30				30.5		5.8		13
24	7.43	7.25		102		72		30				30.5		6.3		11
25	7.30	7.25		98		70		28				31.3		4.9		11
26	7.56	7.24		100		72		28				37.7		1.5		14
27	7.37	7.29		104		72		32				30.5		6.8		13
28	7.38	7.27		98		70		28				36.1		2.0		14
29	7.55	7.29		98		70		28				32.1		4.4		14
30	7.31	7.21		100		70		30				32.1		4.9		14
31	7.38	7.23		102		70		32				33.7		4.4		11
AVG	7.42	7.27		101		70		31				33.1		4.6		13.2
MAX	7.72	7.38		106		72		38				37.7		7.3		15.0
MIN	7.08	7.21		96		68		24				30.5		1.5		11.0



**Flouridation & Chlorination**

**WSSN 2310**

**Jan-16**

D A T E	Fluorid e Applied F- mg/l	Fluoride Analyses mg/l			Chlorine App. Mg/l			Chlorine Residual mg/l								
					Raw	Tap	Dist	Chlorine (prior to filtration ) mg/L OCI-	Post Chlorin e mg/L	Sta II	Dort	3MG Well	Tap			
		Free	Free	Free						Free						
		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1			0.67						1.0						0.9	
2			0.70						1.0						0.7	
3			0.70						1.0						0.9	
4			0.68						1.0						0.9	
5			0.70						1.0						0.9	
6			0.71						1.0						0.9	
7			0.75						1.0						0.9	
8			0.74						1.0						0.9	
9			0.73						1.1						1.0	
10			0.69						1.0						1.0	
11			0.63						1.0						0.9	
12			0.63						0.9						0.8	
13			0.67						1.0						1.0	
14			0.64						1.0						0.9	
15			0.62						1.0						0.9	
16			0.63						1.0						1.0	
17			0.65						1.1						0.9	
18			0.62						1.1						1.0	
19			0.65						1.0						1.0	
20			0.63						1.0						0.9	
21			0.67						1.0						1.0	
22			0.66						0.9						0.8	
23			0.67						0.9						0.9	
24			0.65						1.0						1.0	
25			0.65						1.1						1.1	
26			0.68						1.1						1.0	
27			0.71						1.0						1.0	
28			0.73						1.1						1.0	
29			0.75						1.0						1.0	
30			0.74						1.0						0.9	
31			0.71						1.0						1.0	
AVG			0.68						1.0						0.9	
MAX			0.75						1.1						1.1	
MIN			0.62						0.9						0.7	



Bacteriological & Physical Parameters

WSSN 2310

Jan-16

D A T E	Total Coliform						66	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									
1					2/0	2/0			0.21	17.1					
2					2/0	2/0			0.21	13.5					
3					2/0	2/0			0.21	15.1					
4					2/0	2/0			0.21	15.6					
5					2/0	2/0		< 2	0.21	14.8					
6					2/0	2/0			0.21	13.6					
7					2/0	2/0			0.21	15.1					
8					2/0	2/0			0.21	14.8					
9					2/0	2/0			0.21	14.8					
10					2/0	2/0			0.21	12.4					
11					2/0	2/0			0.21	13.9					
12					2/0	2/0		< 2	0.21	14.3					
13					2/0	2/0			0.21	12.8					
14					2/0	2/0			0.21	13.9					
15					2/0	2/0			0.21	13.9					
16					2/0	2/0			0.21	15.8					
17					2/0	2/0			0.21	13.8					
18					2/0	2/0			0.21	13.1					
19					2/0	2/0			0.21	13.3					
20					2/0	2/0			0.21	12.7					
21					2/0	2/0		< 2	0.21	12.5					
22					2/0	2/0			0.21	12.0					
23					2/0	2/0			0.21	12.2					
24					2/0	2/0			0.21	13.1					
25					2/0	2/0			0.21	12.3					
26					2/0	2/0		< 2	0.21	11.8					
27					2/0	2/0			0.21	11.6					
28					2/0	2/0			0.21	11.6					
29					2/0	2/0			0.21	10.1					
30					2/0	2/0			0.21	11.3					
31					2/0	2/0			0.20	12.0					
									0.21	13.4					
									0.21	17.1					
									0.20	10.1					



Distribution System Monitoring WSSN 2310 Jan-16

DATE	Free Chlorine Residual at Bacteriological Monitoring Stations mg/l										Number of Samples
	1	2	3	4	5	6	7	8	CS	WR	
1											0
2											0
3											0
4											0
5	0.3	0.9	0.8	0.8	1.0	0.2	0.7	0.8	0.8	2.2	10
6	0.4	1.0	0.9	2.0	0.8	0.2	0.8	0.8	1.7	2.4	10
7	0.4	0.9	0.9	1.0	0.9	0.2	0.8	0.9	1.5	1.7	10
8											0
9											0
10											0
11											0
12	0.5	0.7	0.5	0.6	0.5	0.2	0.5	0.7	0.8	1.4	10
13	0.4	0.9	0.6	0.6	0.7	0.2	0.7	0.8	0.8	1.5	10
14	0.2	1.0	0.8	0.8	0.5	0.2	0.6	0.8	1.3	1.7	10
15											0
16											0
17											0
18											0
19	0.2	0.8	0.8	0.8	0.7	0.4	0.5	0.9	2.3	1.1	10
20	0.4	1.0	0.9	0.8	0.9	0.4	0.8	0.9	1.4	1.3	10
21											0
22											0
23											0
24											0
25											0
26	0.3	1.2	1.1	1.2	1.0	0.5	0.6	1.0	1.2	2.4	10
27	0.4	1.0	0.9	1.5	0.9	0.4	0.9	0.9	1.6	2.4	10
28											0
29											0
30											0
31											0
Monthly Cl <sub>2</sub> Avg.				0.889							
Total Samples				100							



Distribution System Monitoring WSSN 2310 Jan-16

DATE	Total Chlorine Residual at Bacteriological Monitoring Stations mg/l										Number of Samples
	1	2	3	4	5	6	7	8	CS	WR	
1											0
2											0
3											0
4											0
5	0.5	1.1	1.0	1.0	1.2	0.4	0.9	1.0	1.0	2.4	10
6	0.6	1.2	1.1	2.2	1.0	0.4	1.0	1.0	2.0	2.7	10
7	0.6	1.1	1.1	1.2	1.1	0.4	1.0	1.1	1.7	2.0	10
8											0
9											0
10											0
11											0
12	0.7	0.9	0.7	0.8	0.7	0.4	0.7	0.9	1.0	1.6	10
13	0.6	1.1	0.8	0.8	0.9	0.4	0.9	1.0	1.0	1.7	10
14	0.4	1.2	1.0	1.0	0.7	0.4	0.8	1.0	1.5	1.9	10
15											0
16											0
17											0
18											0
19	0.4	1.0	1.0	1.0	0.9	0.6	0.7	1.1	2.6	1.3	10
20	0.6	1.2	1.1	1.0	1.1	0.6	1.0	1.1	1.6	1.6	10
21											0
22											0
23											0
24											0
25											0
26	0.5	1.4	1.3	1.4	1.2	0.7	0.8	1.2	1.4	2.6	10
27	0.5	1.2	1.1	1.7	1.1	0.6	1.1	1.1	1.8	2.6	10
28											0
29											0
30											0
31											0
Monthly Cl <sub>2</sub> Avg.				1.093							
Total Samples				100							

