

**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

For Month of July 2016

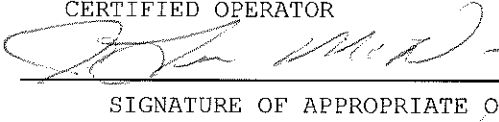
Flint Water Plant
NAME OF WATER SYSTEM

2310
WSSN

Genesee
COUNTY

JoLisa McDay
CERTIFIED OPERATOR

F-1
CLASSIFICATION


SIGNATURE OF APPROPRIATE OFFICIAL

TREATMENT RATE AND FILTER DATA

1. Treatment Rate, Maximum ___ 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: 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

Jul-16

DATE	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	Post Chlorine mg/L	Sta II	Dort	3MG Well	Tap					
		Raw	Tap	Dist							Free	Free	Free	Free	Free	
		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1			0.80		0.43				0.7						1.0	
2			0.71		0.68				0.8						1.2	
3			0.69		0.69				0.8						1.2	
4			0.74		0.69				0.8						1.2	
5			0.73		0.69				0.8						0.9	
6			0.72		0.69				0.8						1.3	
7			0.73		0.70				0.7						1.4	
8			0.74		0.70				0.8						1.3	
9			0.74		0.70				0.8						1.3	
10			0.75		0.70				0.8						1.3	
11			0.75		0.69				0.8						1.3	
12			0.77		0.70				0.8						1.2	
13			0.78		0.70				0.7						1.3	
14			0.77		0.69				0.7						1.3	
15			0.87		0.75				0.7						1.2	
16			0.84		0.89				0.7						1.4	
17			0.82		0.94				0.8						1.4	
18			0.84		1.16				0.8						1.6	
19			0.85		1.12				0.7						1.6	
20			0.84		1.12				0.7						1.4	
21			0.82		1.11				0.7						1.5	
22			0.85		1.12				0.8						1.7	
23			0.88		1.11				0.7						1.6	
24			0.88		1.12				0.8						1.6	
25			0.86		1.11				0.8						1.6	
26			0.86		1.11				0.8						1.6	
27			0.78		1.11				0.7						1.7	
28			0.83		1.11				0.7						1.6	
29			0.82		1.11				0.8						1.7	
30			0.81		1.11				0.7						1.7	
31			0.83		1.12				0.7						1.5	
AVG			0.80		0.89				0.8						1.4	
MAX			0.88		1.16				0.8						1.7	
MIN			0.69		0.43				0.7						0.9	



Chemical Analyses

WSSN 2310

Jul-16

D A T E	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
	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
1	7.44	7.39		102		74		28		0.02		29.7		6.8		12
2	7.48	7.39		102		74		28		0.02		33.7		3.9		12
3	7.44	7.30		102		76		26		0.02		32.9		4.9		13
4	7.41	7.30		102		76		26		0.02		30.5		6.3		13
5	7.41	7.31		98		74		24		0.03		33.7		3.4		13
6	7.41	7.35		100		74		26		0.01		33.7		3.9		13
7	7.45	7.31		100		74		26		0.02		33.7		3.9		13
8	7.49	7.38		100		74		26		0.02		29.7		6.3		13
9	7.49	7.40		102		74		28		0.02		32.9		4.9		12
10	7.47	7.34		100		74		26		0.02		33.7		3.9		13
11	7.47	7.32		102		74		28		0.03		34.5		3.9		13
12	7.33	7.32		104		72		32		0.02		33.7		4.9		13
13	7.45	7.33		102		72		30		0.02		34.5		3.9		13
14	7.44	7.33		104		72		32		0.02		32.9		5.3		13
15	7.47	7.32		102		72		30		0.02		34.5		3.9		13
16	7.45	7.35		102		72		30		0.01		34.5		3.9		13
17	7.45	7.33		102		72		30		0.03		32.9		4.9		13
18	7.43	7.33		102		74		28		0.01		36.1		2.9		14
19	7.42	7.34		102		74		28		0.02		32.9		2.9		14
20	7.46	7.34		98		72		26		0.01		36.1		1.9		13
21	7.47	7.34		102		68		34		0.02		36.9		2.4		13
22	7.46	7.40		102		72		30		0.02		35.3		3.4		13
23	7.46	7.37		102		72		30		0.01		32.9		4.9		13
24	7.45	7.36		100		72		28		0.02		32.9		4.4		13
25	7.44	7.35		102		72		30		0.02		32.9		4.9		13
26	7.43	7.34		102		70		32		0.01		32.9		4.9		13
27	7.45	7.41		98		72		26		0.01		33.7		3.4		13
28	7.46	7.36		104		70		34		0.01		32.9		5.3		13
29	7.50	7.35		100		74		26		0.01		30.5		5.8		13
30	7.50	7.37		98		74		24		0.01		33.7		3.4		13
31	7.47	7.40		100		74		26		0.02		28.9		6.8		14
AVG	7.45	7.35		101		73		28		0.02		33.2		4.4		13
MAX	7.50	7.41		104		76		34		0.03		36.9		6.8		14.0
MIN	7.33	7.30		98		68		24		0.01		28.9		1.9		12.0



WSSN 2310

Jul-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	16.9					
2					2/0	2/0			0.21	18.2					
3					2/0	2/0			0.21	18.3					
4					2/0	2/0			0.21	18.1					
5					2/0	2/0			0.21	18.8					
6					2/0	2/0		< 2	0.21	18.4					
7					2/0	2/0			0.21	18.4					
8					2/0	2/0			0.21	18.3					
9					2/0	2/0			0.21	18.2					
10					2/0	2/0			0.21	18.4					
11					2/0	2/0			0.21	18.0					
12					2/0	2/0		< 2	0.21	18.9					
13					2/0	2/0			0.21	19.0					
14					2/0	2/0			0.21	19.2					
15					2/0	2/0			0.21	19.4					
16					2/0	2/0			0.21	19.2					
17					2/0	2/0			0.21	18.7					
18					2/0	2/0		< 2	0.21	18.2					
19					2/0	2/0		< 2	0.21	18.9					
20					2/0	2/0			0.21	18.9					
21					2/0	2/0			0.21	18.5					
22					2/0	2/0			0.21	19.1					
23					2/0	2/0			0.21	19.2					
24					2/0	2/0			0.21	18.8					
25					2/0	2/0			0.21	18.5					
26					2/0	2/0			0.21	18.5					
27					2/0	2/0			0.21	18.9					
28					2/0	2/0			0.21	18.4					
29					2/0	2/0			0.21	18.5					
30					2/0	2/0			0.21	18.6					
31					2/0	2/0			0.21	18.6					
AVG									0.21	18.6					
MAX									0.21	19.4					
MIN									0.21	16.9					



Distribution System Monitoring WSSN 2310 Jul-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											0
2											0
3											0
4											0
5	1.00	1.03	1.05	0.84	0.75	0.26	1.04	1.22	0.84	0.98	10
6	1.18	0.99	0.98	0.75	0.65	0.27	0.97	1.03	0.78	1.06	10
7	1.16	1.06	0.98	0.77	0.68	0.34	0.92	1.18	0.83	1.02	10
8											0
9											0
10											0
11											0
12	1.17	0.81	1.01	0.82	0.83	0.42	0.94	1.14	0.95	1.21	10
13	1.17	1.08	1.04	0.86	0.71	0.26	0.91	1.07	0.83	1.16	10
14	1.02	0.93	1.01	0.80	0.73	0.30	0.88	1.03	1.65	1.04	10
15											0
16											0
17											0
18											0
19	1.30	1.16	1.29	1.04	0.92	0.27	1.10	1.34	0.94	1.51	10
20	1.35	1.07	1.13	1.04	0.90	0.23	1.14	1.32	1.18	1.29	10
21	0.96	1.15	1.38	1.16	0.97	0.29	1.16	1.36	1.14	1.31	10
22											0
23											0
24											0
25											0
26	1.33	1.19	1.32	1.14	0.97	0.30	1.16	1.32	1.41	1.41	10
27	1.34	1.39	1.19	1.08	1.01	0.29	0.96	1.53	1.10	1.63	10
28	1.37	1.11	1.03	1.22	1.00	0.50	1.26	1.55	1.27	1.24	10
29			1.07			0.57					2
30											0
31											0
Monthly Cl₂ Avg.				1.009							
Total Samples				122							



Distribution System Monitoring WSSN 2310 Jul-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	1.38	1.22	1.16	0.97	0.84	0.38	1.14	1.34	0.94	1.22	10
6	1.34	1.16	1.21	0.95	0.82	0.41	1.04	1.18	0.92	1.22	10
7	1.27	1.19	1.22	0.86	0.82	0.41	1.02	1.39	0.90	1.24	10
8											0
9											0
10											0
11											0
12	1.30	0.95	1.06	0.98	0.90	0.54	1.05	1.12	1.05	1.35	10
13	1.24	1.15	1.22	0.98	0.92	0.41	1.00	1.24	1.00	1.33	10
14	1.29	1.15	1.15	1.00	0.92	0.38	1.04	1.19	1.77	1.21	10
15											0
16											0
17											0
18											0
19	1.38	1.27	1.36	1.23	1.03	0.39	1.24	1.50	1.14	1.68	10
20	1.50	1.22	1.33	1.24	1.02	0.30	1.21	1.54	1.37	1.39	10
21	1.53	1.21	1.47	1.35	1.11	0.39	1.34	1.58	1.27	1.41	10
22											0
23											0
24											0
25											0
26	1.48	1.22	1.48	1.29	1.10	0.38	1.27	1.56	1.51	1.57	10
27	1.59	1.53	1.50	1.34	1.11	0.34	1.19	1.66	1.31	1.76	10
28	1.53	1.34	1.41	1.30	1.07	0.63	1.39	1.64	1.34	1.36	10
29			1.48			0.71					2
30											0
31											0
Monthly Cl₂ Avg.				1.159							
Total Samples				122							



ROUTINE POSITIVE DISTRIBUTION SAMPLES

Jul-16

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:				122						
Total number of routine distribution samples required:				100						