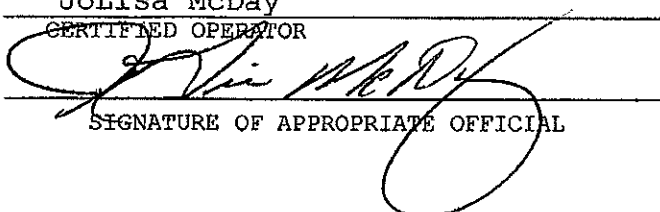


**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

For Month of August 2016

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

TREATMENT RATE AND FILTER DATA

1. Treatment Rate, Maximum 15.81 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. Sodium Hypochlorite on hand 3137 gal.: Estimated supply 33 days
8. Phosphoric Acid on hand 1311 gal.: Estimated supply 73 days
9. Sodium Hydroxide on hand 1365 gal.: Estimated supply N/A days
10. Cost of All Chemicals per Million Gallons
11. Total Power Cost per Million Gallons

Remarks:

DEQ
RESOURCE MANAGEMENT DIVISION

SEP 12 2016

LANSING DISTRICT

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-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 OCl ⁻	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			0.85		1.11				0.7					1.5	
2			0.83		1.12				0.7					1.5	
3			0.81		1.12				0.7					1.3	
4			0.81		1.11				0.6					1.3	
5			0.84		1.04				0.6					1.4	
6			0.78		0.93				0.7					1.5	
7			0.79		0.93				0.8					1.5	
8			0.77		0.88				0.8					1.4	
9			0.79		0.85				0.7					1.4	
10			0.81		0.84				0.7					1.5	
11			0.80		0.86				0.7					1.4	
12			0.76		0.91				0.8					1.4	
13			0.80		0.90				0.7					1.4	
14			0.83		0.93				0.6					1.3	
15			0.82		0.91				0.7					1.3	
16			0.81		0.89				0.7					1.3	
17			0.82		0.93				0.6					1.3	
18			0.86		0.91				0.8					1.4	
19			0.84		0.87				0.8					1.4	
20			0.88		0.89				0.7					1.2	
21			0.84		0.90				0.7					1.4	
22			0.87		0.94				0.8					1.5	
23			0.86		0.92				0.7					1.4	
24			0.86		0.90				0.7					1.4	
25			0.85		1.01				0.7					1.4	
26			0.81		0.98				0.8					1.5	
27			0.80		1.01				0.9					1.5	
28			0.80		0.82				0.9					1.6	
29			0.80		0.86				0.8					1.4	
30			0.78		0.84				0.7					1.3	
31			0.81		0.79				1.1					1.5	
AVG			0.82		0.93				0.7					1.4	
MAX			0.88		1.12				1.1					1.6	
MIN			0.76		0.79				0.6					1.2	



Chemical Analyses

WSSN 2310

Aug-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	
	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	7.41	7.35		98		72		26		0.03		34.5		2.9		14
2	7.45	7.35		98		72		26		0.01		32.1		4.4		13
3	7.41	7.30		102		72		30		0.01		34.5		3.9		13
4	7.49	7.32		100		70		30		0.01		32.9		4.4		13
5	7.40	7.29		100		70		30		0.01		33.7		3.9		13
6	7.48	7.30		102		72		30		0.01		33.7		4.4		13
7	7.49	7.30		100		70		30		0.01		32.9		4.4		13
8	7.53	7.34		100		74		26		0.01		30.5		6.3		13
9	7.53	7.29		100		70		30		0.01		32.9		4.4		13
10	7.37	7.25		102		74		28		0.01		34.5		3.9		13
11	7.33	7.20		102		72		30		0.01		32.9		4.9		13
12	7.31	7.25		104		70		34		0.01		32.9		5.3		13
13	7.47	7.30		102		70		32		0.01		33.7		4.4		13
14	7.46	7.34		104		72		32		0.01		34.5		4.4		12
15	7.44	7.32		100		70		30		0.01		33.7		3.9		13
16	7.53	7.36		100		72		28		0.01		34.5		3.4		13
17	7.51	7.35		100		74		26		0.01		34.5		3.4		12
18	7.44	7.33		100		70		30		0.01		34.5		3.4		13
19	7.45	7.32		102		72		30		0.01		34.5		3.9		13
20	7.49	7.42		100		72		28		0.01		30.5		5.8		13
21	7.45	7.33		100		70		30		0.01		34.5		3.4		13
22	7.52	7.44		100		70		30		0.01		35.3		2.9		13
23	7.45	7.35		100		72		28		0.01		34.5		3.4		13
24	7.53	7.36		100		74		26		0.01		34.5		3.4		13
25	7.52	7.37		100		70		30		0.01		34.5		3.4		13
26	7.53	7.41		104		72		32		0.01		34.5		4.4		13
27	7.55	7.38		100		74		26		0.01		34.5		3.4		13
28	7.47	7.37		102		74		28		0.01		33.7		4.4		13
29	7.55	7.39		102		70		32		0		34.5		3.9		13
30	7.56	7.36		100		70		30		0.01		34.5		3.4		13
31	7.57	7.31		100		72		28		0.01		35.3		2.9		13
AVG	7.47	7.33		101		72		29		0.01		33.8		4.0		13
MAX	7.57	7.44		104		74		34		0.03		35.3		6.3		14.0
MIN	7.31	7.20		98		70		26		0.00		30.5		2.9		12.0



WSSN 2310

Aug-16

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	73	74
1									0.21	19.9					
2									0.21	21.1					
3									0.21	21.6					
4									0.21	21.9					
5									0.21	22.1					
6									0.21	22.4					
7									0.21	22.3					
8									0.21	20.4					
9									0.21	19.9					
10									0.21	21.6					
11									0.21	22.3					
12									0.21	22.9					
13									0.21	22.9					
14									0.21	21.9					
15									0.21	19.9					
16									0.21	19.3					
17									0.20	19.0					
18									0.21	19.2					
19									0.21	19.5					
20									0.21	19.8					
21									0.21	19.4					
22									0.21	19.6					
23									0.21	19.1					
24									0.21	18.8					
25									0.21	18.2					
26									0.21	17.8					
27									0.21	17.2					
28									0.21	17.2					
29									0.21	16.7					
30									0.21	16.9					
31									0.21	15.9					
AVG									0.21	19.9					
MAX									0.21	22.9					
MIN									0.20	15.9					



Distribution System Monitoring WSSN 2310 Aug-16

DATE	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	1.36	1.25	1.17	0.95	0.56	0.43	1.04	1.15	1.19	1.53	10
3	1.27	1.12	1.15	0.98	0.84	0.51	1.12	1.39	1.56	1.42	10
4	1.32	1.10	1.18	1.01	0.94	0.56	1.19	1.28	0.90	1.24	10
5											0
6											0
7											0
8											0
9	1.20	1.14	1.26	1.04	0.72	0.36	0.99	1.21	1.02	1.43	10
10	1.22	1.26	1.06	0.92	1.05	0.49	0.93	1.11	0.89	1.55	10
11	1.11	0.98	1.15	0.91	0.76	0.40	1.06	1.27	0.98	1.12	10
12											0
13											0
14											0
15											0
16	1.12	1.02	1.08	1.04	0.94	0.28	1.17	1.14	1.08	1.22	10
17	1.27	1.12	1.08	0.91	0.74	0.21	1.14	1.14	1.29	1.76	10
18	1.22	1.12	1.14	0.98	0.87	0.34	1.26	1.25	1.05	1.44	10
19											0
20											0
21											0
22											0
23	1.12	1.06	1.14	0.96	0.82	0.17	1.26	1.05	0.81	1.34	10
24	1.14	1.20	1.13	0.96	1.01	0.63	1.13	1.10	1.03	1.43	10
25	1.18	1.14	1.12	0.83	0.71	0.20	1.08	1.17	1.00	1.39	10
26											0
27											0
28											0
29											0
30	1.32	1.24	1.30	1.01	0.93	0.26	1.42	1.28	1.45	1.43	10
31	1.32	1.15	1.25	1.00	0.92	0.31	1.01	1.32	1.11	1.23	10
Monthly Cl ₂ Avg.				1.052							
Total Samples				140							



Distribution System Monitoring WSSN 2310 Aug-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	1.43	1.39	1.32	1.12	0.65	0.56	1.21	1.44	1.36	1.61		10
3	1.37	1.33	1.31	1.07	0.98	0.64	1.30	1.56	1.78	1.61		10
4	1.46	1.41	1.34	1.14	1.01	0.63	1.33	1.45	1.14	1.46		10
5												0
6												0
7												0
8												0
9	1.45	1.39	1.43	1.17	0.97	0.45	1.15	1.46	1.21	1.56		10
10	1.43	1.37	1.19	1.14	1.21	0.68	1.11	1.35	1.18	1.62		10
11	1.30	1.18	1.28	1.01	0.81	0.47	1.16	1.48	1.15	1.55		10
12												0
13												0
14												0
15												0
16	1.28	1.29	1.34	1.14	1.13	0.39	1.35	1.20	1.14	1.48		10
17	1.35	1.31	1.32	1.17	1.03	0.32	1.29	1.27	1.43	1.90		10
18	1.38	1.31	1.34	1.15	0.95	0.44	1.39	1.42	1.11	1.75		10
19												0
20												0
21												0
22												0
23	1.37	1.28	1.37	1.13	0.94	0.29	1.42	1.32	1.16	1.46		10
24	1.47	1.33	1.34	1.13	1.31	0.77	1.41	1.25	1.18	1.65		10
25	1.36	1.36	1.31	1.16	1.04	0.32	1.38	1.42	1.33	1.57		10
26												0
27												0
28												0
29												0
30	1.53	1.44	1.49	1.27	1.07	0.38	1.53	1.51	1.60	1.56		10
31	1.45	1.41	1.43	1.30	1.16	0.59	1.34	1.49	1.34	1.57		10
Monthly Cl ₂ Avg.				1.236								
Total Samples				140								



ROUTINE POSITIVE DISTRIBUTION SAMPLES

Aug-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:				140						
Total number of routine distribution samples required:				100						