

**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

For Month of April 2017

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 14.40 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 1038 gal.: Estimated supply 12 days
8. Sodium Hypochlorite on hand at outstations 467 gal: Estimated supply 139 days
9. Phosphoric Acid on hand 1505 gal.: Estimated supply 58 days
9. Sodium Hydroxide on hand 1372 gal.: Estimated supply 16 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

Apr-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 ⁻	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
1			0.80		1.09				1.0					1.8	
2			0.86		1.03				0.9					1.8	
3			0.85		1.07				0.9					1.8	
4			1.07		1.13				0.9					1.9	
5			0.93		1.09				0.9					1.8	
6			0.96		1.12				0.9					1.8	
7			0.71		1.13				0.9					1.8	
8			0.74		1.15				0.9					1.8	
9			0.81		1.22				0.8					1.8	
10			0.74		1.23				0.9					1.8	
11			0.81		1.20				0.8					1.8	
12			0.80		1.17				0.9					1.7	
13			0.77		1.18				0.9					1.7	
14			0.75		1.22				0.8					1.8	
15			0.70		1.21				0.9					1.8	
16			0.73		1.19				0.9					1.8	
17			0.64		1.17				0.9					1.8	
18			0.71		1.14				0.9					1.7	
19			0.70		1.17				0.9					1.9	
20			0.68		1.13				0.9					1.7	
21			0.64		1.17				1.0					1.7	
22			0.70		1.09				0.8					1.9	
23			0.71		1.06				1.0					1.9	
24			0.58		1.14				0.9					1.9	
25			0.72		1.17				0.9					1.8	
26			0.73		1.15				0.8					1.8	
27			0.71		1.18				0.9					1.8	
28			0.68		1.12				0.9					1.9	
29			0.66		1.17				0.8					1.8	
30			0.71		1.15				0.9					1.9	
AVG			0.75		1.15				0.9					1.8	
MAX			1.07		1.23				1.0					1.9	
MIN			0.58		1.03				0.8					1.7	



Chemical Analyses

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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	7.42	7.48		98		72		26		0.02		31.3		4.9		12
2	7.36	7.44		100		72		28		0.03		32.1		4.9		13
3	7.45	7.47		98		68		30		0.00		29.7		5.8		13
4	7.25	7.29		100		70		30		0.02		31.3		5.3		13
5	7.21	7.20		98		74		24		0.02		30.5		5.3		13
6	7.25	7.20		100		72		28		0.02		32.1		4.9		13
7	7.30	7.32		100		72		28		0.02		31.3		5.3		14
8	7.25	7.21		98		68		30		0.01		30.5		5.3		12
9	7.35	7.28		102		74		28		0.01		31.3		5.8		13
10	7.34	7.27		100		70		30		0.01		32.1		4.9		13
11	7.28	7.26		100		72		28		0.01		31.3		5.3		13
12	7.20	7.24		104		76		28		0.02		31.3		6.3		14
13	7.27	7.29		100		70		30		0.01		32.1		4.9		12
14	7.30	7.34		100		72		28		0.02		32.1		4.9		13
15	7.25	7.37		102		68		34		0.02		32.9		4.9		13
16	7.33	7.32		102		68		34		0.01		32.9		4.9		13
17	7.22	7.31		96		68		28		0.01		29.7		5.3		13
18	7.31	7.34		100		74		26		0.02		31.3		5.3		13
19	7.25	7.22		98		72		26		0.02		32.1		4.4		13
20	7.34	7.22		100		70		30		0.01		31.3		5.3		13
21	7.27	7.30		100		70		30		0.01		30.5		5.8		13
22	7.39	7.34		98		70		28		0.01		30.5		5.3		13
23	7.29	7.37		98		72		26		0.01		31.3		4.9		12
24	7.32	7.40		98		72		26		0.01		31.3		4.9		13
25	7.34	7.31		100		68		32		0.01		32.1		4.9		13
26	7.27	7.51		100		72		28		0.02		32.9		4.4		13
27	7.26	7.34		100		70		30		0.01		32.1		4.9		13
28	7.38	7.39		98		70		28		0.01		30.5		5.3		13
29	7.25	7.33		100		72		28		0.01		32.1		4.9		13
30	7.46	7.50		100		68		32		0.01		33.7		3.9		13
AVG	7.31	7.33		100		71		29		0.01		31.5		5.1		13
MAX	7.46	7.51		104		76		34		0.03		33.7		6.3		14.0
MIN	7.20	7.20		96		68		24		0.00		29.7		3.9		12.0



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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	5.9					
2					2 / 0	2 / 0			0.21	6.4					
3					2 / 0	2 / 0			0.21	6.4					
4					2 / 0	2 / 0		<2	0.21	6.5					
5					2 / 0	2 / 0			0.21	6.0					
6					2 / 0	2 / 0			0.21	6.1					
7					2 / 0	2 / 0			0.21	6.4					
8					2 / 0	2 / 0			0.21	6.3					
9					2 / 0	2 / 0			0.21	6.2					
10					2 / 0	2 / 0			0.21	6.8					
11					2 / 0	2 / 0		<2	0.22	6.6					
12					2 / 0	2 / 0			0.22	6.4					
13					2 / 0	2 / 0			0.22	6.8					
14					2 / 0	2 / 0			0.22	7.2					
15					2 / 0	2 / 0			0.22	6.8					
16					2 / 0	2 / 0			0.22	6.6					
17					2 / 0	2 / 0			0.22	6.4					
18					2 / 0	2 / 0		<2	0.22	6.8					
19					2 / 0	2 / 0			0.22	6.6					
20					2 / 0	2 / 0			0.22	6.8					
21					2 / 0	2 / 0			0.21	7.1					
22					2 / 0	2 / 0			0.22	6.5					
23					2 / 0	2 / 0			0.21	6.7					
24					2 / 0	2 / 0			0.22	6.7					
25					2 / 0	2 / 0		<2	0.21	7.5					
26					2 / 0	2 / 0			0.21	7.9					
27					2 / 0	2 / 0			0.21	7.3					
28					2 / 0	2 / 0			0.22	6.9					
29					2 / 0	2 / 0			0.21	7.8					
30					2 / 0	2 / 0			0.21	7.2					
AVG									0.21	6.7					
MAX									0.22	7.9					
MIN									0.21	5.9					



Distribution System Monitoring WSSN 2310

Apr-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				
2																											0			
3	1.30	1.19	1.40	1.37	1.60	0.87															1.13					7				
4							1.40	1.71	1.12	1.65		1.53										1.28				6				
5													1.52	0.92	1.34	1.63	1.58	1.09					1.59			7				
6					1.71	0.81						1.39							0.75	1.35				1.44		6				
7													1.46	1.69	1.18	1.60	1.58	0.96							1.42	7				
8																										0				
9																										0				
10	1.33	1.09	1.44	1.42	1.66	0.58															0.97					7				
11							1.34	1.70	1.66	1.63		1.53										0.99				6				
12													1.08	1.26	0.83	1.55	1.55	1.23					1.62			7				
13							1.45	1.62	1.69	1.65									0.63	1.29				1.44		7				
14																										0				
15																										0				
16																										0				
17	1.27	1.26	1.40	1.47	1.33	1.26																1.18				7				
18							1.43	1.65	1.14	1.61		1.15										1.33				6				
19													1.02	1.07	1.10	1.67	1.52	1.21					1.80			7				
20					1.77							1.08							0.73							3				
21						0.72							1.14	1.57	0.95	1.60	1.51	1.03		1.28				1.39	1.40	10				
22																										0				
23																										0				
24	1.27	1.28	1.43	1.47	1.35	1.32																1.16				7				
25							1.37	1.65	1.66	1.71		1.19										1.41				6				
26													1.22	1.57	1.00	1.55	1.59	0.88					1.71			7				
27								1.66	1.68	1.70									0.75	1.44				1.36		6				
28	1.36	1.26	1.53	1.53															1.13	1.46					1.50	7				
29																										0				
30																										0				
Monthly Cl₂ Avg.				1.35																										
Total Samples				126																										

**Westside reservoir will not be sampled until repairs are finished



Distribution System Monitoring

WSSN 2310

Apr-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																										0
2																										0
3	1.48	1.32	1.60	1.60	1.74	1.03															1.25					7
4							1.54	1.83	1.23	1.78		1.69										1.40				6
5												1.67	1.06	1.53	1.76	1.75	1.44						1.83			7
6					1.82	0.94						1.50							0.89	1.54				1.60		6
7												1.62	1.83	1.41	1.75	1.71	1.16								1.53	7
8																										0
9																										0
10	1.51	1.23	1.59	1.61	1.79	0.76															1.14					7
11							1.56	1.82	1.84	1.77		1.64										1.35				6
12													1.27	1.39	0.94	1.69	1.73	1.35					1.80			7
13							1.56	1.74	1.84	1.79									0.80	1.43				1.56		7
14																										0
15																										0
16																										0
17	1.42	1.34	1.59	1.61	1.46	1.43															1.33					7
18							1.58	1.82	1.24	1.77		1.38										1.55				6
19													1.20	1.19	1.38	1.78	1.65	1.33					1.95			7
20					1.88							1.28							0.86							3
21						0.92							1.40	1.79	1.15	1.74	1.70	1.18		1.53				1.55	1.59	10
22																										0
23																										0
24	1.44	1.42	1.63	1.62	1.52	1.47															1.27					7
25							1.53	1.78	1.85	1.78		1.45										1.52				6
26													1.35	1.76	1.12	1.67	1.71	1.05					1.86			7
27								1.83	1.84	1.81									0.91	1.60				1.50		6
28	1.48	1.38	1.68	1.65															1.27	1.64					1.62	7
29																										0
30																										0
Monthly Cl₂ Avg.					1.51																					
Total Samples					126																					

**Westside reservoir will not be sampled until repairs are finished



ROUTINE POSITIVE DISTRIBUTION SAMPLES

Apr-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:				126						
Total number of routine distribution samples required:				100						