

**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

For Month of May 2016

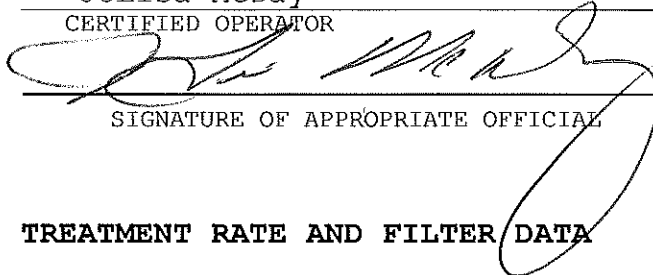
Flint Water Plant
NAME OF WATER SYSTEM

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:

There are 35 days of phosphoric acid on hand


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

**DEQ
RESOURCE MANAGEMENT DIVISION**

JUN 10 2016

LANSING DISTRICT



Fluoridation & Chlorination

WSSN 2310

May-16

DATE	Fluoride Applied F ⁻ mg/l	Fluoride Analyses mg/l			Chlorine App. Mg/l			Chlorine Residual 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		
		14	15	16	17	18	19	20	21	22	23	24	25	26	27
1			0.60						0.9						0.8
2			0.63						0.9						0.8
3			0.62						0.8						0.7
4			0.64						0.9						0.8
5			0.61						0.9						0.8
6			0.59						0.9						0.8
7			0.59						0.9						0.8
8			0.61						0.9						0.8
9			0.59						0.9						0.9
10			0.60						0.9						0.8
11			0.59						0.9						0.8
12			0.60						0.8						0.8
13			0.59						0.8						0.8
14			0.57						0.9						0.8
15			0.60						0.9						0.6
16			0.62						0.9						0.8
17			0.62						1.0						0.8
18			0.63						0.9						0.9
19			0.70						1.0						0.8
20			0.74						0.9						0.9
21			0.60						1.2						0.9
22			0.66						1.0						1.0
23			0.69						1.1						0.9
24			0.69						1.0						0.9
25			0.70						1.0						0.7
26			0.70						0.9						0.8
27			0.69						0.8						0.8
28			0.73						0.7						0.8
29			0.70						0.9						0.8
30			0.71						0.9						0.8
31			0.71						0.9						0.9
AVG			0.64						0.9						0.8
MAX			0.74						1.2						1.0
MIN			0.57						0.7						0.6



Chemical Analyses

WSSN 2310

May-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	7.34	7.24		96		72		24		0.03		33.7		2.9		11
2	7.36	7.25		102		73		29		0.05		29.7		6.8		11
3	7.36	7.23		102		76		26		0.03		32.1		5.3		11
4	7.35	7.24		102		70		32		0.02		36.1		2.9		13
5	7.33	7.24		100		72		28		0.02		33.7		3.9		12
6	7.48	7.25		102		74		28		0.02		33.7		4.4		12
7	7.44	7.28		100		72		28		0.01		33.7		3.9		12
8	7.38	7.27		100		74		26		0.03		33.7		3.9		12
9	7.39	7.27		100		74		26		0.03		35.3		2.9		12
10	7.38	7.27		104		74		30		0.04		33.7		4.9		13
11	7.38	7.26		100		74		26		0.03		34.5		3.4		13
12	7.41	7.28		102		74		28		0.03		34.5		3.9		12
13	7.45	7.30		102		76		26		0.02		33.7		4.4		11
14	7.64	7.29		104		76		28		0.03		33.7		4.9		11
15	7.39	7.25		98		72		26		0.05		32.1		4.4		12
16	7.43	7.25		100		72		28		0.03		33.7		3.9		12
17	7.60	7.26		102		74		28		0.02		33.7		4.4		12
18	7.40	7.23		102		72		30		0.03		35.3		3.4		12
19	7.37	7.26		100		72		28		0.04		32.1		4.9		11
20	7.44	7.28		102		72		30		0.02		32.9		4.9		12
21	7.58	7.29		98		70		28		0.03		33.7		3.4		11
22	7.41	7.29		102		70		32		0.02		32.9		4.9		12
23	7.39	7.25		98		70		28		0.02		33.7		3.4		11
24	7.45	7.24		100		70		30		0.03		30.5		5.8		12
25	7.37	7.26		98		72		26		0.02		32.1		4.4		12
26	7.38	7.28		96		70		26		0.02		35.3		1.9		12
27	7.45	7.29		102		72		30		0.01		33.7		4.4		12
28	7.43	7.32		98		70		28		0.02		32.1		4.4		12
29	7.41	7.25		104		78		26		0.04		32.9		5.3		13
30	7.35	7.25		104		74		30		0.03		32.1		5.8		12
31	7.36	7.23		100		72		28		0.01		33.7		3.9		12
AVG	7.42	7.26		101		73		28		0.03		33.4		4.3		12
MAX	7.64	7.32		104		78		32		0.05		36.1		6.8		13.0
MIN	7.33	7.23		96		70		24		0.01		29.7		1.9		11.0



WSSN 2310

May-16

D A T E	Total Coliform						66	Standard Plate Count		Conductivity (mS)	Temp deg.C	Color		Odor						
	Plant Tap							Raw	Tap			71	72	Raw	Tap					
	60	61	Dort 62	3MG Well 63	Sta II 64	Lab Tap 65										67	68	69	73	74
1				2/0	2/0			0.19	9.7											
2				2/0	2/0			0.19	10.9											
3				2/0	2/0		< 2	0.21	11.8											
4				2/0	2/0			0.21	11.7											
5				2/0	2/0			0.21	11.1											
6				2/0	2/0			0.21	11.2											
7				2/0	2/0			0.21	11.9											
8				2/0	2/0			0.19	10.1											
9				2/0	2/0			0.19	10.1											
10				2/0	2/0		< 2	0.19	11.1											
11				2/0	2/0			0.19	10.9											
12				2/0	2/0			0.20	11.2											
13				2/0	2/0			0.21	10.7											
14				2/0	2/0			0.21	11.4											
15				2/0	2/0			0.20	11.7											
16				2/0	2/0			0.19	10.7											
17				2/0	2/0		< 2	0.21	12.3											
18				2/0	2/0			0.21	11.9											
19				2/0	2/0			0.21	12.1											
20				2/0	2/0			0.19	11.6											
21				2/0	2/0			0.19	11.6											
22				2/0	2/0			0.19	10.9											
23				2/0	2/0			0.19	11.3											
24				2/0	2/0		< 2	0.19	11.5											
25				2/0	2/0			0.21	11.9											
26				2/0	2/0			0.19	12.8											
27				2/0	2/0			0.19	12.5											
28				2/0	2/0			0.19	13.1											
29				2/0	2/0			0.20	13.9											
30				2/0	2/0			0.20	13.9											
31				2/0	2/0		< 2	0.19	12.7											
AVG								0.20	11.6											
MAX								0.21	13.9											
MIN								0.19	9.7											



Distribution System Monitoring WSSN 2310 May-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	0.83	0.69	0.69	0.83	0.58	0.26	0.65	0.75	1.13	2.07	10
4	0.84	0.60	0.76	0.64	0.50	0.24	0.66	0.83	1.10	2.18	10
5	0.79	0.70	0.79	0.73	0.55	0.29	0.73	0.84	0.77	1.97	10
6											0
7											0
8											0
9											0
10	0.75	0.67	0.69	0.81	0.59	0.24	0.65	0.69	1.03	1.69	10
11	0.78	0.64	0.67	0.71	0.52	0.26	0.67	0.77	0.76	1.43	10
12	0.77	0.67	0.65	0.61	0.61	0.29	0.61	0.75	0.85	1.61	10
13											0
14											0
15											0
16											0
17	0.80	0.70	0.75	0.69	0.65	0.25	0.69	0.81	1.45	1.35	10
18	0.77	0.64	0.72	0.71	0.67	0.27	0.79	0.92	1.40	1.21	10
19	0.77	0.63	0.72	1.19	0.68	0.34	0.68	0.86	1.47	1.36	10
20											0
21											0
22											0
23											0
24	0.81	0.64	0.89	0.66	0.71	0.34	0.82	1.44	1.28	2.67	10
25	0.95	0.87	0.70	0.67	0.70	0.38	0.73	0.97	1.07	3.10	10
26	0.87	0.71	0.75	0.75	0.61	0.25	0.77	0.81	1.88	3.47	10
27											0
28											0
29											0
30											0
31	0.77	0.58	0.69	0.93	0.60	0.20	0.61	0.73	2.23	0.87	10
Monthly Cl₂ Avg.				0.860							
Total Samples				130							



Distribution System Monitoring WSSN 2310 May-16

D A T E	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	0.97	0.83	1.09	0.94	0.71	0.36	0.85	0.94	1.24	2.27	10
4	0.97	0.76	0.84	0.75	0.67	0.30	0.85	0.93	1.16	2.28	10
5	0.96	0.81	0.88	0.94	0.67	0.37	0.78	0.97	0.90	2.24	10
6											0
7											0
8											0
9											0
10	0.86	0.81	0.79	0.94	0.74	0.33	0.79	0.81	1.19	1.80	10
11	0.88	0.77	0.77	0.85	0.63	0.36	0.75	0.89	1.01	1.88	10
12	0.86	0.81	0.74	0.71	0.69	0.40	0.77	0.79	0.98	1.69	10
13											0
14											0
15											0
16											0
17	1.00	0.80	0.94	0.78	0.77	0.34	0.83	0.95	1.62	1.51	10
18	1.00	0.77	0.91	0.83	0.78	0.39	0.88	1.02	1.62	1.50	10
19	0.99	0.82	0.87	1.38	0.83	0.46	0.87	1.01	1.57	1.47	10
20											0
21											0
22											0
23											0
24	0.93	0.80	1.02	0.85	0.88	0.44	0.97	1.59	1.44	2.73	10
25	1.04	0.94	0.97	0.72	0.77	0.46	0.94	1.06	1.13	3.20	10
26	0.99	0.91	0.86	0.81	0.70	0.38	0.86	0.91	1.89	3.57	10
27											0
28											0
29											0
30											0
31	0.88	0.70	0.83	1.04	0.69	0.31	0.76	0.89	2.29	0.98	10
Monthly Cl₂ Avg.				0.994							
Total Samples				130							



ROUTINE POSITIVE DISTRIBUTION SAMPLES

May-16

Total number of positive routine samples:				Total Coliform: <u>0</u>			Fecal Coliform: <u>0</u>		Chlorine Residual (mg/L)	
Date	Monitoring Station	Total Coliform	Fecal Coliform	Date	Time	Retest of Station, Upstream & Downstream	Total Coliform	Fecal Coliform	Free	Total
Total number of routine distribution samples analyzed:				130						
Total number of routine distribution samples required:				100						