



The City of Flint and F&V Operations and Resource Management are submitting the following report(s) to Michigan Department of Environment, Great Lakes and Energy:

MOR April 2021

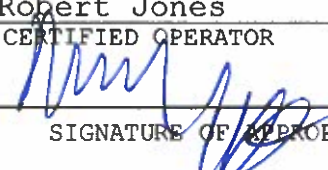
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"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons or persons who manage the system or those persons directly responsible for gathering such information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

City of Flint Representative: Scott Dungee
Signature: Scott Dungee Date: 5/6/21
F&V Operations Representative: Robert Jones
Signature: [Signature] Date: 5/6/21

**MONTHLY OPERATION REPORT
OF
WATER TREATMENT PLANT**

For Month of April 2021

<u>Flint Water Plant</u>	<u>2310</u>	<u>Genesee</u>
NAME OF WATER SYSTEM	WSSN	COUNTY
<u>Robert Jones</u>		<u>D-1</u>
CERTIFIED OPERATOR		CLASSIFICATION
		
SIGNATURE OF APPROPRIATE OFFICIAL		

TREATMENT RATE AND FILTER DATA

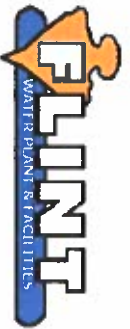
1. Treatment Rate, Maximum 11.62 Million Gallons Per Day
2. Treatment Rate, Approved Rated Plant Capacity 36 Million Gallons per Day
3. Average Filter Run N/A Hours, Average Head Loss N/A Feet
4. Average Filtration Rate N/A Gallons per Square Ft. per Minute
5. Maximum Filtration Rate N/A Gallons per Square Ft. per Minute
6. Average Wash Water Use N/A percent of Treated Water

CHEMICAL DATA

7. Sodium Hypochlorite on hand at CS2 3685 gal.: Estimated supply 72 days
8. Sodium Hypochlorite on hand at outstations 401 gal: Estimated supply 118 days.
9. Phosphoric Acid on hand 449 gal.: Estimated supply 22 days
10. Sodium Hydroxide on hand 4220 gal.: Estimated supply 39 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-21

D A T E	Fluoride Applied F mg/l	Fluoride Analyses mg/l					Chlorine App. Mg/l					Chlorine Residual mg/l				
		Raw	Tap	Dist	Chlorine App. Mg/l	Chlorine (prior to filtration) mg/L OCl ⁻	Post Chlorine mg/L	Sta II	Dort	3MG Well	Tap	Free	Free	Free	Free	
																Free
1	0.74	0.68			0.94			1.2							1.8	
2	0.84	0.71			0.82			1.1							1.7	
3	0.73	0.75			0.86			1.0							1.7	
4	0.67	0.56			0.80			1.1							1.7	
5	0.66	0.67			0.78			1.2							1.6	
6	0.53	0.61			0.80			1.1							1.6	
7	0.70	0.84			0.79			1.1							1.6	
8	0.85	0.76			0.76			1.0							1.7	
9	0.74	0.72			0.73			1.0							1.7	
10	0.64	0.65			0.86			1.1							1.7	
11	0.64	0.61			0.87			0.9							1.7	
12	0.60	0.77			0.76			1.1							1.7	
13	0.53	0.66			0.81			1.1							1.7	
14	0.70	0.85			0.75			1.1							1.7	
15	0.41	0.47			0.80			1.0							1.6	
16	0.62	0.60			0.79			1.1							1.5	
17	0.68	0.77			0.77			1.2							1.8	
18	0.58	0.69			0.83			1.2							1.8	
19	0.69	0.73			0.68			1.2							1.7	
20	0.51	0.59			0.67			1.2							1.8	
21	0.90	0.91			0.74			1.3							1.6	
22	0.64	0.72			0.69			1.3							1.7	
23	0.70	0.79			0.78			1.2							1.6	
24	0.66	0.69			0.81			1.0							1.7	
25	0.80	0.82			0.78			1.2							1.7	
26	0.73	0.68			0.78			1.1							1.7	
27	0.61	0.62			0.81			1.1							1.7	
28	0.76	0.78			0.83			1.0							1.7	
29	0.39	0.32			0.83			1.2							1.7	
30	0.55	0.66			0.82			1.1							1.7	
31																
AVG					0.69			1.1							1.7	
MAX					0.91			1.3							1.8	
MIN					0.32			0.9							1.5	



Chemical Analyses

WSSN 2310

Apr-21

DATE	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 ⁺⁺ , 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		
1	7.22	7.49	102		78		30	0.02	0.02		28.9		7.3		15			
2	7.31	7.73	102		82		32	0.01	0.00		28.1		7.8		15			
3	7.23	7.48	102		80		30	0.00	0.00		28.9		7.3		14			
4	7.22	7.49	102		80		32	0.03	0.04		29.7		7.8		15			
5	7.19	7.48	100		74		30	0.00	0.01		28.1		7.3		15			
6	7.20	7.43	100		80		30	0.01	0.01	28.1	28.1	7.3	7.3	14	14			
7	7.20	7.45	100		80		30	0.02	0.02		28.1		7.3		15			
8	7.26	7.52	102		78		30	0.03	0.03		28.9		7.3		15			
9	7.25	7.54	102		82		34	0.04	0.05		27.3		8.3		15			
10	7.39	7.70	100		82		32	0.03	0.01		27.3		7.8		15			
11	7.29	7.58	98		80		30	0	0.00		27.3		7.3		15			
12	7.24	7.52	100		80		32	0	0.01		27.3		7.8		16			
13	7.26	7.54	100		78		28	0	0.02	28.9	28.9	6.8	6.8	13	14			
14	7.26	7.56	100		82		28	0.01	0.02		28.9		6.8		16			
15	7.24	7.51	100		80		28	0.02	0.00		28.9		6.8		15			
16	7.27	7.54	100		82		30	0	0.00		28.1		7.3		15			
17	7.30	7.60	100		78		30	0.01	0.02		28.1		7.3		14			
18	7.30	7.61	102		80		32	0.01	0.01		28.1		7.8		14			
19	7.16	7.59	98		78		24	0.01	0.01		29.7		5.8		16			
20	7.24	7.53	96		76		30	0	0.00	26.5	28.9	7.3	7.3	14	14			
21	7.24	7.33	102		78		32	0.02	0.00		29.7		7.8		15			
22	7.31	7.54	100		80		34	0	0.04		26.5		8.3		15			
23	7.29	7.53	102		82		32	0.01	0.01		28.1		7.8		15			
24	7.40	7.65	100		80		30	0.03	0.02		28.1		7.3		17			
25	7.38	7.40	102		80		34	0.01	0.01		26.5		8.3		17			
26	7.26	7.54	100		82		30	0.01	0.02		28.1		7.3		15			
27	7.28	7.60	100		98		76	80	28	28	0	0.01	28.9	28.1	6.8	6.8	15	13
28	7.30	7.57	100		82		82	30	0.06	0.00		28.1		7.3		15		
29	7.27	7.55	100		82		30	0.01	0.05		28.1		7.3		15			
30	7.27	7.57	102		80		32	0	0.02		28.1		7.8		16			
31																		
AVG	7.27	7.54			101		80		0.02		28.2		7.4		15			
MAX	7.40	7.73			102		82		0.05		29.7		8.3		17.0			
MIN	7.16	7.33			98		78		0.00		26.5		5.8		13.0			



WSSN 2310

Apr-21

D A T E	Total Coliform					Standard Plate Count		Conductivity (ms)	Temp deg C	Color		Odor		
	Plant Tap					Raw	Tap			Raw	Tap	Raw	Tap	
	60	61	Dort	3MG Well	Sa II	Lab Tap	66	67	68	69	71	72	73	74
1					2/0				0.23	9.7				
2					2/0				0.23	8.2				
3					2/0				0.23	8.5				
4					2/0	2/0			0.23	9.7				
5					2/0	2/0			0.23	9.6				
6					2/0	2/0			0.23	9.6				
7					2/0	2/0			0.23	11.0				
8					2/0	2/0			0.23	10.0				
9					2/0	2/0			0.23	8.2				
10					2/0	2/0			0.22	8.7				
11					2/0	2/0			0.22	8.6				
12					2/0	2/0			0.22	10.4				
13					2/0	2/0			0.22	9.5				
14					2/0	2/0			0.22	9.0				
15					2/0	2/0			0.22	8.5				
16					2/0	2/0			0.22	7.6				
17					2/0	2/0			0.22	9.4				
18					2/0	2/0			0.22	9.7				
19					2/0	2/0			0.22	10.5				
20					2/0	2/0			0.22	9.0				
21					2/0	2/0			0.22	8.3				
22					2/0	2/0			0.22	8.9				
23					2/0	2/0			0.22	8.1				
24					2/0	2/0			0.21	9.7				
25					2/0	2/0			0.18	9.9				
26					2/0	2/0			0.22	9.8				
27					2/0	2/0			0.22	9.5				
28					2/0	2/0			0.23	10.5				
29					2/0	2/0			0.23	10.4				
30					2/0	2/0								
31														
AVG									0.22	9.3				
MAX									0.23	11.0				
MIN									0.18	7.6				



Distribution System Monitoring WSSN 2310

Apr-21

D A T E	Free Chlorine Residual at Bacteriological Monitoring Stations mg/l																									Number of Samples									
	1	2	3	4	CS	6	7	8B	9	10	WR	12	13	14	15	16	17	18	19B	20	26	27	28	29	30		21	22	23	24	25				
1	1.38			1.36	1.63						1.20	0.85							1.39	1.57					1.29								1.27		
2													1.65																						
3																																			
4																																			
5	1.62	1.06		1.46	1.20	1.41																													
6																																			
7																																			
8	1.48			1.03	1.52						1.18	1.21																							
9													1.60																						
10																																			
11																																			
12	1.13	1.68		1.62	1.52	1.52																													
13																																			
14																																			
15	1.31			1.45	1.56																														
16																																			
17																																			
18																																			
19	1.40			1.07	1.62	1.21																													
20																																			
21																																			
22	1.34			0.98	1.69																														
23																																			
24																																			
25																																			
26	1.45	1.64		1.56	0.91	1.59																													
27																																			
28																																			
29																																			
30																																			
31																																			
Monthly Cl ₂ Avg.																										1.37									
Total Samples																										120									

Chlorine only sites mg/l



Distribution System Monitoring

WSSN 2310

Apr-21

DATE	Total Chlorine Residual at Bacteriological Monitoring Stations mg/l																									Number of Samples									
	1	2	3	4	CS	6	7	8B	9	10	WR	12	13	14	15	16	17	18	19B	20	26	27	28	29	30		21	22	23	24	25				
1	1.64			1.68	1.88						1.65	1.24									1.43														8
2																																		4	
3																																		0	
4																																		0	
5	1.79	1.75		1.61	1.68	1.62																												8	
6																																		6	
7																																			9
8	1.71			1.65	1.76																													9	
9																																		4	
10																																		0	
11																																		0	
12	1.44	1.84		1.74	1.65	1.71																												8	
13																																		6	
14																																		7	
15	1.55			1.70	1.80																													8	
16																																		4	
17																																		0	
18																																		0	
19	1.61			1.75	1.89	1.58																												7	
20																																		6	
21																																		8	
22	1.70			1.70	1.79																													8	
23																																		4	
24																																		0	
25																																		0	
26	1.63	1.72		1.74	1.09	1.70																												8	
27																																		6	
28																																		9	
29																																		0	
30																																		3	
31																																		0	
Monthly Cl ₂ Avg.																										1.65									
Total Samples																										120									

Chlorine only sites mg/l



ROUTINE POSITIVE DISTRIBUTION SAMPLES

Apr-21

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	Revert of Station, Upstream & Downstream	Total Coliform	E. coli Bacteria	Free	Total
Total number of routine distribution samples analyzed:				120						
Total number of routine distribution samples required:				100						