

Bay Area WTP

Monthly Operations Report



July, 2020

Water Systems Serial Number: 0465



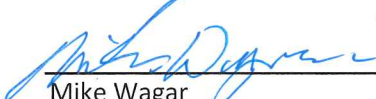
Ryan Goebel

Water Plant Superintendent

Title

F-1

Classification



Mike Wagar

Operations Supervisor

Title

F-2

Classification

Bay Area Water Treatment Plant

Monthly Operations Report

Supply Name: Bay Area Water System
 WSSN: 0465

Ryan Goebel
 Operator-in-charge

July, 2020
 Month, Year

F-1
 Certification of Operator-in-charge

F-1
 Water Plant Classification

Bay
 County

Treatment Rate and Membrane Data

Treatment Rate, Approved Rated Plant Capacity	<u>17.4</u>	Millions of Gallons per Day
Treatment Rate, Maximum	<u>13.6</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>11.76</u>	PSI
Maximum Approved Flux Rate	<u>36.25</u>	gpd/sq.ft.
Maximum Operating Flux Rate	<u>29.88</u>	gpd/sq.ft.

Chemical Data

Sodium Hypochlorite on hand:	<u>6,151</u>	Gallons	Estimated Supply:	<u>51.5</u>	days
Caustic Soda on hand:	<u>1,793</u>	Gallons	Estimated Supply:	<u>120.8</u>	days
Corrosion Inhibitor on hand:	<u>1,243</u>	Gallons	Estimated Supply:	<u>36.8</u>	days
Hydrofluosilicic Acid on hand:	<u>1,643</u>	Gallons	Estimated Supply:	<u>55.2</u>	days
Aluminum Chlorohydrate on hand:	<u>847</u>	Gallons	Estimated Supply:	<u>57.5</u>	days
Sulfuric Acid on hand:	<u>596</u>	Gallons	Estimated Supply:	<u>168.4</u>	days
Sodium Bisulfite on hand:	<u>855</u>	Gallons	Estimated Supply:	<u>172.5</u>	days
Citric Acid on hand:	<u>2,641</u>	Gallons	Estimated Supply:	<u>255.2</u>	days
Cost of All Chemicals per Million Gallons:	<u>68.33</u>	Dollars			
Estimated Electrical Cost per Million Gallons:	<u>69.52</u>	Dollars			
Estimated Natural Gas Cost per Million Gallons:	<u>0.05</u>	Dollars			

Remarks

Number of periods of filter confluence turbidity samples > 0.3 NTU 0

Percent of membrane period confluence samples > 0.3 NTU: 0.00%

Was continuous (every 15 minutes) filter monitoring equipment off-line during the month? No
 If yes, indicate date(s), duration, and individual filter grab sampling frequency on a separate sheet.

Did POE disinfectant residual fall below 0.2 ppm during the month? No
 If yes, indicate date(s) and duration on a separate sheet.

Was minimum C*T credit achieved for the entire month? Yes
 If no, indicate on a separate sheet the date(s) not achieved.

Was continuous POE chlorine residual monitoring equipment off-line during the month? No
 If yes, date(s) and duration will be indicated on the rule page.



Notes

Filter #5 was out of service from Friday 7/10/20 until Monday 7/13 because of a stuck Feed Flow Control valve. The valve was repaired Monday morning. No AHT were run on #5 during that time.

Bay Area WTP Monthly Operating Report

Date	Flows								
	Raw Water (MG)			Clarified (MG)	Sludge (MG)	Treated (MG)	Finished Water Pumped (MG)		
	North	South	Total	Total	Total	Total	N. Euclid	Lauria Road	Total
	FIT-1000-1	FIT-1000-2	Calculated	FIT-5520-1	FIT-5180	FIT-4000-1	FIT-4040-1	FIT-4040-2	Calculated
7/1/2020	5.07	6.13	11.20	0.44	0.04	12.16	6.19	5.78	11.97
7/2/2020	5.49	6.34	11.83	0.43	0.04	12.40	6.27	5.91	12.18
7/3/2020	5.48	7.54	13.03	0.44	0.08	12.86	6.45	6.06	12.51
7/4/2020	5.53	8.10	13.63	0.41	0.08	11.76	5.89	5.55	11.44
7/5/2020	5.17	7.20	12.37	0.42	0.09	12.65	6.45	6.08	12.53
7/6/2020	5.04	7.04	12.08	0.41	0.08	13.58	6.78	6.41	13.19
7/7/2020	5.34	7.76	13.10	0.40	0.08	12.20	6.17	5.75	11.92
7/8/2020	5.63	7.49	13.12	0.45	0.06	12.56	6.41	5.98	12.39
7/9/2020	5.73	7.22	12.96	0.43	0.07	12.56	6.41	5.89	12.30
7/10/2020	4.60	5.66	10.26	0.34	0.06	10.28	5.38	4.81	10.19
7/11/2020	3.77	5.10	8.86	0.37	0.05	9.28	4.87	4.25	9.12
7/12/2020	4.76	5.46	10.22	0.30	0.08	10.55	5.51	4.88	10.39
7/13/2020	5.63	5.94	11.57	0.37	0.08	11.09	5.58	5.26	10.84
7/14/2020	5.22	5.99	11.21	0.38	0.08	11.49	5.73	5.45	11.18
7/15/2020	5.32	5.66	10.98	0.39	0.08	11.23	5.66	5.37	11.03
7/16/2020	4.82	5.69	10.51	0.34	0.05	9.42	4.60	4.38	8.98
7/17/2020	4.43	4.88	9.31	0.33	0.08	9.80	4.88	4.64	9.52
7/18/2020	4.52	5.24	9.76	0.33	0.08	10.45	5.23	4.96	10.19
7/19/2020	4.47	5.52	9.99	0.29	0.10	9.08	4.54	4.35	8.89
7/20/2020	4.23	5.67	9.90	0.38	0.08	10.13	5.06	4.79	9.85
7/21/2020	4.15	6.11	10.26	0.35	0.08	9.84	4.93	4.67	9.60
7/22/2020	4.00	6.07	10.08	0.33	0.08	9.96	4.98	4.74	9.72
7/23/2020	4.02	5.38	9.40	0.31	0.08	9.70	4.95	4.50	9.45
7/24/2020	4.14	5.06	9.20	0.34	0.06	9.69	5.08	4.46	9.54
7/25/2020	4.18	6.05	10.23	0.35	0.09	9.75	5.02	4.50	9.52
7/26/2020	4.15	6.54	10.69	0.36	0.09	10.22	5.36	4.72	10.08
7/27/2020	3.86	6.32	10.18	0.37	0.08	10.11	5.12	4.72	9.84
7/28/2020	3.67	5.74	9.41	0.29	0.07	9.76	5.13	4.50	9.63
7/29/2020	3.60	5.49	9.09	0.32	0.09	9.17	4.81	4.19	9.00
7/30/2020	3.35	5.08	8.43	0.30	0.08	9.34	4.87	4.25	9.12
7/31/2020	3.51	5.63	9.14	0.29	0.08	9.47	4.99	4.38	9.38
Total	142.89	189.11	332.00	11.25	2.31	332.53	169.31	156.20	325.52
Avg	4.61	6.10	10.71	0.36	0.07	10.73	5.46	5.04	10.50
Min	3.35	4.88	8.43	0.29	0.04	9.08	4.54	4.19	8.89
Max	5.73	8.10	13.63	0.45	0.10	13.58	6.78	6.41	13.19



Raw Water Analysis								
Date	Temp	pH	Turbidity		F	Free Cl	Bacti	
	Average	Average	Average	Maximum	Grab	Average	Positive/Negative	
	°C		NTU		mg/L	mg/L	Total Coliform	E. coli
	TIT-1000	AIT-1000-2	AIT-1000-1		Lab	AIT-1035-2	Lab	
7/1/2020	14.2	8.16	0.36	1.14	0.09	0.48	Negative	Negative
7/2/2020	14.9	8.19	0.45	1.40	0.08	0.42	Negative	Negative
7/3/2020	15.8	8.22	0.42	1.19	0.08	0.51	Negative	Negative
7/4/2020	15.7	8.16	0.34	0.74	0.08	0.68	Negative	Negative
7/5/2020	15.9	8.16	0.40	0.75	0.08	0.61	Negative	Negative
7/6/2020	16.4	8.23	0.37	0.85	0.08	0.57	Negative	Negative
7/7/2020	16.7	8.23	0.33	0.65	0.08	0.63	Negative	Negative
7/8/2020	16.5	8.15	0.63	23.43	0.08	0.70	Negative	Negative
7/9/2020	16.3	8.05	0.48	5.71	0.08	0.68	Negative	Negative
7/10/2020	16.9	7.99	0.32	0.99	0.06	0.71	Negative	Negative
7/11/2020	17.2	7.98	0.30	0.77	0.06	0.65	Negative	Negative
7/12/2020	17.1	8.00	0.31	0.78	0.06	0.51	Negative	Negative
7/13/2020	17.3	8.04	0.37	0.89	0.06	0.47	Negative	Negative
7/14/2020	17.6	8.10	0.36	0.63	0.06	0.36	Negative	Negative
7/15/2020	18.2	8.04	0.33	1.11	0.06	0.36	Negative	Negative
7/16/2020	18.7	8.04	0.40	2.21	0.09	0.42	Negative	Negative
7/17/2020	19.3	8.13	0.53	1.25	0.09	0.18	Negative	Negative
7/18/2020	19.8	8.14	0.55	1.01	0.09	0.19	Negative	Negative
7/19/2020	20.1	8.07	0.50	0.82	0.08	0.37	Negative	Negative
7/20/2020	20.0	7.96	0.52	1.06	0.08	0.56	Negative	Negative
7/21/2020	19.7	7.97	0.44	1.96	0.08	0.53	Negative	Negative
7/22/2020	20.0	7.97	0.33	1.23	0.08	0.52	Negative	Negative
7/23/2020	20.2	8.02	0.34	0.67	0.10	0.36	Negative	Negative
7/24/2020	20.3	8.06	0.55	2.92	0.09	0.29	Negative	Negative
7/25/2020	20.6	8.09	0.66	2.03	0.09	0.28	Negative	Negative
7/26/2020	20.9	8.10	0.54	1.03	0.09	0.28	Negative	Negative
7/27/2020	21.0	8.12	0.61	1.41	0.09	0.23	Negative	Negative
7/28/2020	21.0	8.10	0.50	1.58	0.09	0.27	Negative	Negative
7/29/2020	21.0	8.08	0.50	1.95	0.09	0.30	Negative	Negative
7/30/2020	20.8	8.02	0.45	4.86	0.09	0.40	Negative	Negative
7/31/2020	20.3	7.96	0.46	1.79	0.09	0.47	Negative	Negative
Avg	18.4	8.08	0.44	2.22	0.08	0.45	NA	NA
Min	14.2	7.96	0.30	0.63	0.06	0.18	NA	NA
Max	21.0	8.23	0.66	23.43	0.10	0.71	NA	NA



Finished Water Analysis																		
Date	Temp	pH	Phosphate	Fluoride		Free Cl ₂	Alkalinity (as CaCO ₃)		Chloride	Sulfate	Calcium (as CaCO ₃)	Dissolved Oxygen	Conductivity	Langelier Saturation Index	Chloride: Sulfate Mass Ratio	Larson-Skold Index	Bacti	
	Average	Average	Average	Tap	Dist	Average	Carbonate	Bicarbonate	Grab	Grab	Grab	Grab	Grab				Positive/Negative	
	°C		mg/L	mg/L		mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	uS/cm				Total Coliform	E. coli
	AIT-4040-1	AIT-4050-2	AIT-4040-5	Lab		AIT-4050-1	Lab		Lab	Lab	Lab	Lab	Lab	Calculated			Lab	
7/1/2020	10.3	7.62	3.42	0.75		1.16	0	74	11	12	74	11.0	251	-0.84	0.92	0.47	Negative	Negative
7/2/2020	11.2	7.63	3.43	0.75		1.21	0	78	11	10	78	10.3	255	-0.76	1.10	0.41	Negative	Negative
7/3/2020	13.6	7.65	3.42	0.74		1.20	0	79	11	10	76	9.3	260	-0.69	1.10	0.40	Negative	Negative
7/4/2020	13.5	7.64	3.42	0.75		1.22	0	77	11	10	74	9.8	254	-0.73	1.10	0.41	Negative	Negative
7/5/2020	13.1	7.62	3.42	0.76		1.21	0	77	11	9	74	10.1	255	-0.75	1.20	0.39	Negative	Negative
7/6/2020	13.9	7.63	3.43	0.75	0.76	1.19	0	78	11	10	77	9.7	258	-0.70	1.10	0.41	Negative	Negative
7/7/2020	14.3	7.63	3.43	0.79		1.20	0	76	11	9	72	9.8	254	-0.73	1.22	0.40	Negative	Negative
7/8/2020	14.1	7.63	3.42	0.80		1.21	0	74	11	10	84	8.8	251	-0.68	1.10	0.43	Negative	Negative
7/9/2020	13.9	7.52	3.42	0.79		1.21	0	78	10	13	78	9.8	253	-0.80	0.77	0.44	Negative	Negative
7/10/2020	14.9	7.57	3.42	0.75		1.21	0	78	11	13	78	9.9	253	-0.73	0.85	0.46	Negative	Negative
7/11/2020	15.6	7.54	3.41	0.75		1.20	0	80	10	13	80	9.8	271	-0.73	0.77	0.42	Negative	Negative
7/12/2020	15.1	7.52	3.40	0.75		1.17	0	78	9	15	74	10.5	270	-0.80	0.60	0.45	Negative	Negative
7/13/2020	15.0	7.51	3.40	0.74	0.73	1.19	0	75	9	11	74	10.5	271	-0.83	0.82	0.40	Negative	Negative
7/14/2020	15.4	7.52	3.39	0.78		1.20	0	78	11	14	72	9.8	275	-0.81	0.79	0.47	Negative	Negative
7/15/2020	16.5	7.52	3.39	0.74		1.19	0	75	11	11	74	9.9	275	-0.79	1.00	0.44	Negative	Negative
7/16/2020	17.7	7.49	3.39	0.75		1.20	0	79	12	10	76	8.9	241	-0.74	1.20	0.43	Negative	Negative
7/17/2020	18.6	7.50	3.39	0.76		1.19	0	79	12	10	76	8.7	253	-0.72	1.20	0.43	Negative	Negative
7/18/2020	19.8	7.53	3.39	0.76		1.20	0	82	14	11	76	8.7	253	-0.64	1.27	0.47	Negative	Negative
7/19/2020	20.6	7.55	3.40	0.75		1.21	0	81	12	11	78	8.4	251	-0.61	1.09	0.43	Negative	Negative
7/20/2020	20.5	7.51	3.39	0.77	0.75	1.21	0	79	12	11	76	8.4	241	-0.67	1.09	0.44	Negative	Negative
7/21/2020	19.9	7.48	3.37	0.76		1.22	0	76	12	10	74	8.8	234	-0.73	1.20	0.44	Negative	Negative
7/22/2020	19.5	7.57	3.40	0.75		1.22	0	77	10	11	72	8.8	231	-0.65	0.91	0.41	Negative	Negative
7/23/2020	20.1	7.58	3.39	0.79		1.20	0	76	10	13	72	8.5	233	-0.64	0.77	0.45	Negative	Negative
7/24/2020	20.4	7.60	3.41	0.78		1.20	0	75	10	14	72	8.1	236	-0.62	0.71	0.47	Negative	Negative
7/25/2020	20.9	7.61	3.41	0.77		1.20	0	75	11	13	70	8.3	239	-0.61	0.85	0.48	Negative	Negative
7/26/2020	21.5	7.63	3.41	0.76		1.20	0	76	12	9	72	8.2	240	-0.56	1.33	0.43	Negative	Negative
7/27/2020	21.8	7.64	3.41	0.77	0.74	1.19	0	75	11	14	72	8.3	241	-0.55	0.79	0.49	Negative	Negative
7/28/2020	21.5	7.66	3.41	0.78		1.20	0	75	11	14	72	8.5	242	-0.54	0.79	0.49	Negative	Negative
7/29/2020	21.4	7.66	3.41	0.76		1.20	0	78	12	12	76	8.2	241	-0.50	1.00	0.46	Negative	Negative
7/30/2020	21.0	7.65	3.41	0.79		1.20	0	80	11	13	76	8.3	242	-0.51	0.85	0.45	Negative	Negative
7/31/2020	20.2	7.63	3.41	0.76		1.23	0	75	12	11	74	8.2	232	-0.58	1.09	0.47	Negative	Negative
Avg	17.3	7.58	3.41	0.76	0.75	1.20	0	77	11	12	75	9.2	250	-0.68	0.99	0.44	NA	NA
Min	10.3	7.48	3.37	0.74	0.73	1.16	0	74	9	9	70	8.1	231	-0.84	0.60	0.39	NA	NA
Max	21.8	7.66	3.43	0.80	0.76	1.23	0	82	14	15	84	11.0	275	-0.50	1.33	0.49	NA	NA



Turbidity										
Date	Raw Water		Clarified Water	Membrane Feed Water	Combined Membrane Filtrate					Finished Water
	Avg	Max	Avg	Avg	Avg	Max	# Samples	# > 0.3	% Exceeded	Avg
	NTU									
	AIT-1000-1		AIT-5030-1	AIT-1035-3	AIT-4000-1				Calculated	
7/1/2020	0.36	1.14	1.61	0.33	0.021	0.021	96	0	0.0	0.017
7/2/2020	0.45	1.40	1.83	0.40	0.021	0.021	96	0	0.0	0.017
7/3/2020	0.42	1.19	1.90	0.45	0.021	0.021	96	0	0.0	0.017
7/4/2020	0.34	0.74	1.35	0.42	0.021	0.021	96	0	0.0	0.017
7/5/2020	0.40	0.75	1.25	0.42	0.021	0.021	96	0	0.0	0.017
7/6/2020	0.37	0.85	1.11	0.43	0.021	0.021	96	0	0.0	0.017
7/7/2020	0.33	0.65	1.41	0.38	0.020	0.021	96	0	0.0	0.017
7/8/2020	0.63	4.86	1.69	0.39	0.021	0.021	96	0	0.0	0.017
7/9/2020	0.48	5.71	1.11	0.39	0.021	0.021	96	0	0.0	0.018
7/10/2020	0.32	0.99	0.86	0.37	0.021	0.035	96	0	0.0	0.017
7/11/2020	0.30	0.77	0.85	0.35	0.021	0.021	96	0	0.0	0.017
7/12/2020	0.31	0.78	0.82	0.32	0.021	0.021	96	0	0.0	0.017
7/13/2020	0.37	0.89	0.89	0.37	0.021	0.021	96	0	0.0	0.017
7/14/2020	0.36	0.63	1.03	0.40	0.021	0.021	96	0	0.0	0.017
7/15/2020	0.33	1.11	1.36	0.43	0.021	0.021	96	0	0.0	0.017
7/16/2020	0.40	2.21	1.05	0.37	0.021	0.021	96	0	0.0	0.017
7/17/2020	0.53	1.25	1.80	0.46	0.021	0.021	96	0	0.0	0.017
7/18/2020	0.55	1.01	2.43	0.55	0.021	0.021	96	0	0.0	0.017
7/19/2020	0.50	0.82	2.08	0.55	0.021	0.021	96	0	0.0	0.017
7/20/2020	0.52	1.06	1.91	0.55	0.021	0.021	96	0	0.0	0.017
7/21/2020	0.44	1.96	1.90	0.53	0.021	0.021	96	0	0.0	0.017
7/22/2020	0.33	1.23	1.40	0.41	0.021	0.021	96	0	0.0	0.017
7/23/2020	0.34	0.67	1.23	0.34	0.021	0.021	96	0	0.0	0.017
7/24/2020	0.55	2.92	0.91	0.44	0.021	0.021	96	0	0.0	0.017
7/25/2020	0.66	2.03	1.19	0.61	0.021	0.021	96	0	0.0	0.017
7/26/2020	0.54	1.03	1.36	0.63	0.021	0.021	96	0	0.0	0.017
7/27/2020	0.61	1.41	1.43	0.65	0.021	0.022	96	0	0.0	0.017
7/28/2020	0.50	1.58	1.22	0.59	0.021	0.022	96	0	0.0	0.017
7/29/2020	0.50	1.95	1.17	0.58	0.021	0.022	96	0	0.0	0.017
7/30/2020	0.45	4.86	1.64	0.53	0.021	0.022	96	0	0.0	0.017
7/31/2020	0.46	1.79	1.45	0.48	0.021	0.022	96	0	0.0	0.017
Avg	0.44	1.62	1.39	0.46	0.021	0.021	96	0	0.0	0.017
Min	0.30	0.63	0.82	0.32	0.020	0.021	96	0	0.0	0.017
Max	0.66	5.71	2.43	0.65	0.021	0.035	96	0	0.0	0.018



Note: % Exceeded are 4 hr compliance periods where the average of samples are greater than 0.3 NTU

Date	Membrane LRV/Integrity/Max Turbidity																									
	Membrane 1			Membrane 2			Membrane 3			Membrane 4			Membrane 5			Membrane 6			Membrane 7			Membrane 8				
	LRV	Integrity	Turbidity	LRV	Integrity	Turbidity	LRV	Integrity	Turbidity	LRV	Integrity	Turbidity	LRV	Integrity	Turbidity	LRV	Integrity	Turbidity	LRV	Integrity	Turbidity	LRV	Integrity	Turbidity		
	Average	Max		Average	Max		Average	Max		Average	Max		Average	Max		Average	Max		Average	Max		Average	Max			
psi/min	Pass/Fail	NTU	psi/min	Pass/Fail	NTU	psi/min	Pass/Fail	NTU	psi/min	Pass/Fail	NTU	psi/min	Pass/Fail	NTU	psi/min	Pass/Fail	NTU	psi/min	Pass/Fail	NTU	psi/min	Pass/Fail	NTU	psi/min	Pass/Fail	NTU
7/1/2020	4.60	PASS	0.023	4.53	PASS	0.032	4.42	PASS	0.019	4.77	PASS	0.016	4.36	PASS	0.020	4.61	PASS	0.022	4.54	PASS	0.027	4.44	PASS	0.022		
7/2/2020	4.47	PASS	0.019	4.56	PASS	0.032	4.41	PASS	0.019	4.74	PASS	0.017	4.35	PASS	0.020	4.59	PASS	0.022	4.59	PASS	0.029	4.43	PASS	0.022		
7/3/2020	4.56	PASS	0.019	4.51	PASS	0.032	4.42	PASS	0.019	4.80	PASS	0.017	4.36	PASS	0.023	4.57	PASS	0.021	4.61	PASS	0.028	4.37	PASS	0.022		
7/4/2020	4.45	PASS	0.019	4.45	PASS	0.044	4.44	PASS	0.019	4.78	PASS	0.017	4.43	PASS	0.021	4.61	PASS	0.022	4.53	PASS	0.027	4.37	PASS	0.022		
7/5/2020	4.43	PASS	0.019	4.44	PASS	0.031	4.43	PASS	0.019	4.75	PASS	0.017	4.38	PASS	0.020	4.58	PASS	0.021	4.55	PASS	0.028	4.37	PASS	0.022		
7/6/2020	4.43	PASS	0.019	4.43	PASS	0.033	4.41	PASS	0.019	4.79	PASS	0.017	4.32	PASS	0.020	4.53	PASS	0.021	4.59	PASS	0.029	4.35	PASS	0.022		
7/7/2020	4.45	PASS	0.020	4.45	PASS	0.031	4.39	PASS	0.020	4.63	PASS	0.017	4.30	PASS	0.020	4.54	PASS	0.021	4.58	PASS	0.028	4.35	PASS	0.022		
7/8/2020	4.42	PASS	0.019	4.45	PASS	0.032	4.46	PASS	0.019	4.56	PASS	0.016	4.31	PASS	0.021	4.57	PASS	0.021	4.51	PASS	0.029	4.37	PASS	0.022		
7/9/2020	4.42	PASS	0.025	4.42	PASS	0.033	4.47	PASS	0.019	4.59	PASS	0.020	4.35	PASS	0.021	4.59	PASS	0.022	4.52	PASS	0.029	4.37	PASS	0.023		
7/10/2020	4.42	PASS	0.020	4.42	PASS	0.031	4.45	PASS	0.019	4.57	PASS	0.016	4.35	PASS	0.027	4.61	PASS	0.021	4.54	PASS	0.026	4.35	PASS	0.024		
7/11/2020	4.50	PASS	0.021	4.44	PASS	0.031	4.45	PASS	0.019	4.59	PASS	0.017	filter 5 out on 7/10			4.59	PASS	0.022	4.53	PASS	0.029	4.37	PASS	0.023		
7/12/2020	4.45	PASS	0.020	4.44	PASS	0.032	4.51	PASS	0.020	4.61	PASS	0.017	Filter 5 back in on 7/13			4.55	PASS	0.022	4.52	PASS	0.029	4.36	PASS	0.024		
7/13/2020	4.54	PASS	0.020	4.44	PASS	0.031	4.46	PASS	0.019	4.62	PASS	0.017	4.33	PASS	0.024	4.56	PASS	0.023	4.51	PASS	0.029	4.37	PASS	0.024		
7/14/2020	4.42	PASS	0.020	4.44	PASS	0.032	4.41	PASS	0.019	4.56	PASS	0.017	4.32	PASS	0.025	4.57	PASS	0.023	4.50	PASS	0.029	4.34	PASS	0.022		
7/15/2020	4.39	PASS	0.020	4.41	PASS	0.033	4.40	PASS	0.019	4.56	PASS	0.017	4.41	PASS	0.022	4.58	PASS	0.021	4.50	PASS	0.029	4.35	PASS	0.022		
7/16/2020	4.40	PASS	0.019	4.41	PASS	0.032	4.56	PASS	0.019	4.59	PASS	0.017	4.40	PASS	0.020	4.60	PASS	0.022	4.51	PASS	0.027	4.34	PASS	0.022		
7/17/2020	4.41	PASS	0.019	4.41	PASS	0.031	4.68	PASS	0.019	4.58	PASS	0.017	4.48	PASS	0.020	4.59	PASS	0.021	4.52	PASS	0.029	4.34	PASS	0.022		
7/18/2020	4.41	PASS	0.019	4.39	PASS	0.031	4.52	PASS	0.019	4.60	PASS	0.017	4.42	PASS	0.020	4.57	PASS	0.021	4.51	PASS	0.027	4.32	PASS	0.023		
7/19/2020	4.41	PASS	0.019	4.40	PASS	0.032	4.41	PASS	0.019	4.58	PASS	0.017	4.38	PASS	0.024	4.58	PASS	0.021	4.53	PASS	0.028	4.33	PASS	0.023		
7/20/2020	4.42	PASS	0.019	4.40	PASS	0.031	4.41	PASS	0.019	4.62	PASS	0.017	4.49	PASS	0.023	4.64	PASS	0.021	4.55	PASS	0.026	4.39	PASS	0.023		
7/21/2020	4.42	PASS	0.019	4.41	PASS	0.030	4.43	PASS	0.019	4.62	PASS	0.017	4.44	PASS	0.022	4.64	PASS	0.021	4.52	PASS	0.029	4.40	PASS	0.023		
7/22/2020	4.41	PASS	0.019	4.40	PASS	0.032	4.44	PASS	0.019	4.63	PASS	0.017	4.38	PASS	0.020	4.69	PASS	0.021	4.54	PASS	0.029	4.40	PASS	0.023		
7/23/2020	4.43	PASS	0.019	4.42	PASS	0.030	4.45	PASS	0.019	4.64	PASS	0.016	4.40	PASS	0.022	4.70	PASS	0.021	4.55	PASS	0.029	4.40	PASS	0.023		
7/24/2020	4.43	PASS	0.019	4.42	PASS	0.030	4.45	PASS	0.019	4.63	PASS	0.017	4.52	PASS	0.027	4.72	PASS	0.021	4.52	PASS	0.029	4.40	PASS	0.023		
7/25/2020	4.45	PASS	0.019	4.42	PASS	0.031	4.44	PASS	0.019	4.64	PASS	0.017	4.45	PASS	0.022	4.71	PASS	0.021	4.54	PASS	0.028	4.39	PASS	0.023		
7/26/2020	4.42	PASS	0.020	4.42	PASS	0.030	4.43	PASS	0.019	4.63	PASS	0.017	4.37	PASS	0.024	4.66	PASS	0.021	4.53	PASS	0.028	4.37	PASS	0.023		
7/27/2020	4.40	PASS	0.020	4.42	PASS	0.035	4.43	PASS	0.019	4.57	PASS	0.017	4.39	PASS	0.023	4.65	PASS	0.022	4.50	PASS	0.029	4.35	PASS	0.023		
7/28/2020	4.41	PASS	0.021	4.61	PASS	0.032	4.43	PASS	0.019	4.60	PASS	0.017	4.39	PASS	0.023	4.66	PASS	0.023	4.49	PASS	0.028	4.31	PASS	0.023		
7/29/2020	4.51	PASS	0.020	4.77	PASS	0.031	4.42	PASS	0.020	4.60	PASS	0.017	4.37	PASS	0.023	4.65	PASS	0.023	4.50	PASS	0.031	4.28	PASS	0.023		
7/30/2020	4.51	PASS	0.020	4.50	PASS	0.031	4.42	PASS	0.020	4.56	PASS	0.018	4.37	PASS	0.023	4.64	PASS	0.023	4.52	PASS	0.030	4.32	PASS	0.023		
7/31/2020	4.49	PASS	0.018	4.48	PASS	0.031	4.42	PASS	0.019	4.56	PASS	0.017	4.37	PASS	0.023	4.66	PASS	0.023	4.51	PASS	0.029	4.32	PASS	0.023		
Avg	4.45		0.020	4.45		0.032	4.45		0.019	4.63		0.017	4.39		0.022	4.61		0.022	4.53		0.028	4.36		0.023		
Min	4.39		0.018	4.39		0.030	4.39		0.019	4.56		0.016	4.30		0.020	4.53		0.021	4.49		0.026	4.28		0.022		
Max	4.60		0.025	4.77		0.044	4.68		0.020	4.80		0.020	4.52		0.027	4.72		0.023	4.61		0.031	4.44		0.024		



*LRV not to exceed Upper Control Limit of 3.32 psi/min

Treatment Chemical Dosages											
Date	Treated Water	Sodium Hypochlorite					Phosphoric Acid		Hydrofluorosilicic Acid		
		Raw Water	Membrane Feed Water	Dose pre-FW Tanks	Treated Water	Post FW Tanks	Dose pre-FW Tanks	Post FW Tanks	Raw Water	Dose pre-FW Tanks	Post FW Tanks
	Volume	Free Cl ₂					PO4		F		
	MG	mg/L					mg/L		mg/L		
	FIT-4000-1	AIT-1035-2	AIT-1035-4	Added	AIT-4030-1	AIT-4050-1	Added	AIT-4040-5	Lab	Added	Lab
7/1/2020	12.2	0.48	0.46	1.04	1.26	1.16	3.23	3.42	0.09	0.60	0.75
7/2/2020	12.4	0.42	0.36	1.15	1.30	1.21	3.23	3.43	0.08	0.60	0.75
7/3/2020	12.9	0.51	0.34	1.10	1.32	1.20	3.23	3.42	0.08	0.62	0.74
7/4/2020	11.8	0.68	0.46	0.97	1.33	1.22	3.23	3.42	0.08	0.62	0.75
7/5/2020	12.6	0.61	0.49	0.97	1.30	1.21	3.23	3.42	0.08	0.62	0.76
7/6/2020	13.6	0.57	0.42	1.18	1.32	1.19	3.23	3.43	0.08	0.62	0.75
7/7/2020	12.2	0.63	0.45	1.11	1.34	1.20	3.23	3.43	0.08	0.61	0.79
7/8/2020	12.6	0.70	0.51	1.02	1.34	1.21	3.23	3.42	0.08	0.60	0.80
7/9/2020	12.6	0.68	0.52	1.04	1.33	1.21	3.23	3.42	0.08	0.59	0.79
7/10/2020	10.3	0.71	0.52	1.10	1.33	1.21	3.23	3.42	0.06	0.59	0.75
7/11/2020	9.3	0.65	0.51	1.20	1.28	1.20	3.23	3.41	0.06	0.59	0.75
7/12/2020	10.5	0.51	0.43	1.18	1.32	1.17	3.23	3.40	0.06	0.59	0.75
7/13/2020	11.1	0.47	0.37	1.28	1.32	1.19	3.23	3.40	0.06	0.59	0.74
7/14/2020	11.5	0.36	0.30	1.10	1.33	1.20	3.23	3.39	0.06	0.58	0.78
7/15/2020	11.2	0.36	0.25	1.15	1.32	1.19	3.23	3.39	0.06	0.57	0.74
7/16/2020	9.4	0.42	0.29	1.22	1.35	1.20	3.23	3.39	0.09	0.59	0.75
7/17/2020	9.8	0.18	0.18	1.36	1.35	1.19	3.23	3.39	0.09	0.59	0.76
7/18/2020	10.4	0.19	0.09	1.42	1.40	1.20	3.23	3.39	0.09	0.59	0.76
7/19/2020	9.1	0.37	0.13	1.38	1.43	1.21	3.23	3.40	0.08	0.59	0.75
7/20/2020	10.1	0.56	0.26	1.35	1.38	1.21	3.23	3.39	0.08	0.59	0.77
7/21/2020	9.8	0.53	0.33	1.26	1.38	1.22	3.23	3.37	0.08	0.59	0.76
7/22/2020	10.0	0.52	0.35	1.22	1.34	1.22	3.23	3.40	0.08	0.59	0.75
7/23/2020	9.7	0.36	0.31	1.28	1.34	1.20	3.24	3.39	0.10	0.58	0.79
7/24/2020	9.7	0.29	0.21	1.41	1.38	1.20	3.24	3.41	0.09	0.58	0.78
7/25/2020	9.8	0.28	0.16	1.38	1.36	1.20	3.24	3.41	0.09	0.58	0.77
7/26/2020	10.2	0.28	0.16	1.36	1.37	1.20	3.24	3.41	0.09	0.58	0.76
7/27/2020	10.1	0.23	0.12	1.45	1.37	1.19	3.24	3.41	0.09	0.58	0.77
7/28/2020	9.8	0.27	0.11	1.48	1.39	1.20	3.24	3.41	0.09	0.58	0.78
7/29/2020	9.2	0.30	0.13	1.45	1.37	1.20	3.24	3.41	0.09	0.58	0.76
7/30/2020	9.3	0.40	0.17	1.38	1.38	1.20	3.24	3.41	0.09	0.58	0.79
7/31/2020	9.5	0.47	0.24	1.37	1.37	1.23	3.24	3.41	0.09	0.58	0.76
Avg	10.7	0.45	0.31	1.24	1.35	1.20	3.23	3.41	0.08	0.59	0.76
Min	9.1	0.18	0.09	0.97	1.26	1.16	3.23	3.37	0.06	0.57	0.74
Max	13.6	0.71	0.52	1.48	1.43	1.23	3.24	3.43	0.10	0.62	0.80



Date	Disinfection CT														
	Pipeline CT				FW Tank CT							Compliance			
	Whitestone	Travel Time	Residual	CT	FW Tank 1	FW Tank 2	Plant	Contact Time	Free Cl ₂	CT	Total CT	Temp	CT	CT	
	Flow	Min	RW	Achieved	Min Level	Min Level	Flow	Min	Min	Achieved	Achieved	Avg	Required	Met	
	MGD	Minutes	mg/L	mg-min/L	ft	ft	MGD	Minutes	mg/L	mg-min/L	mg-min/L	°C	mg-min/L	Y/N	
Entry	Calculated	AIT-1035-2	Calculated	LIT-4005-1	LIT-4005-2	Calculated	Calculated	Calculated	Calculated	Calculated	TIT-1000	Calculated	Calculated		
7/1/2020	68.5	1,827	0.48	884	29.4	21.5	12.0	291	1.11	322.21	1,206.28	14.2	6.00	Y	
7/2/2020	76.2	1,642	0.42	691	29.4	22.8	12.2	294	1.19	349.25	1,040.56	14.9	6.00	Y	
7/3/2020	79.6	1,572	0.51	809	29.6	22.2	12.5	284	1.15	325.49	1,134.88	15.8	4.00	Y	
7/4/2020	80.2	1,559	0.68	1055	29.3	25.0	11.4	325	1.20	388.88	1,443.56	15.7	4.00	Y	
7/5/2020	80.3	1,558	0.61	943	29.3	23.7	12.5	290	1.16	336.62	1,279.64	15.9	4.00	Y	
7/6/2020	79.6	1,571	0.57	892	29.5	24.0	13.2	278	1.17	324.34	1,216.20	16.4	4.00	Y	
7/7/2020	80.2	1,559	0.63	979	29.4	25.3	11.9	315	1.16	365.82	1,345.08	16.7	4.00	Y	
7/8/2020	80.4	1,555	0.70	1085	29.5	24.0	12.4	296	1.14	337.41	1,422.36	16.5	4.00	Y	
7/9/2020	80.5	1,553	0.68	1053	29.3	23.4	12.3	294	1.13	331.15	1,384.21	16.3	4.00	Y	
7/10/2020	80.2	1,560	0.71	1109	29.1	21.1	10.2	338	1.18	399.06	1,508.37	16.9	4.00	Y	
7/11/2020	67.0	1,868	0.65	1222	29.1	23.7	9.1	397	1.11	442.01	1,663.56	17.2	4.00	Y	
7/12/2020	70.1	1,784	0.51	903	29.2	24.2	10.4	352	1.08	380.23	1,283.59	17.1	4.00	Y	
7/13/2020	71.4	1,751	0.47	823	29.2	23.4	10.8	332	1.17	388.19	1,211.24	17.3	4.00	Y	
7/14/2020	71.4	1,751	0.36	633	29.3	23.9	11.2	326	1.18	383.05	1,016.09	17.6	4.00	Y	
7/15/2020	71.8	1,742	0.36	626	29.2	23.2	11.0	325	1.15	375.61	1,001.78	18.2	4.00	Y	
7/16/2020	72.1	1,734	0.42	726	29.1	23.3	9.0	400	1.17	467.08	1,193.26	18.7	4.00	Y	
7/17/2020	69.3	1,806	0.18	328	29.2	24.1	9.5	384	1.10	421.93	750.23	19.3	4.00	Y	
7/18/2020	69.4	1,804	0.19	346	29.2	25.0	10.2	365	1.15	421.16	767.05	19.8	4.00	Y	
7/19/2020	69.7	1,796	0.37	667	29.1	25.0	8.9	417	1.11	464.13	1,130.84	20.1	2.00	Y	
7/20/2020	69.4	1,804	0.56	1004	29.2	24.7	9.9	375	1.16	435.54	1,439.50	20.0	4.00	Y	
7/21/2020	64.7	1,933	0.53	1026	29.1	24.5	9.6	383	1.11	423.46	1,449.51	19.7	4.00	Y	
7/22/2020	63.2	1,980	0.52	1039	29.0	24.1	9.7	374	1.16	434.94	1,473.50	20.0	4.00	Y	
7/23/2020	59.6	2,100	0.36	757	29.1	23.2	9.5	379	1.15	434.57	1,191.45	20.2	2.00	Y	
7/24/2020	65.5	1,910	0.29	550	29.2	24.1	9.5	383	1.15	439.26	989.13	20.3	2.00	Y	
7/25/2020	78.9	1,586	0.28	438	29.1	24.2	9.5	384	1.17	448.03	886.05	20.6	2.00	Y	
7/26/2020	79.3	1,578	0.28	448	29.2	23.3	10.1	357	1.17	416.68	864.93	20.9	2.00	Y	
7/27/2020	76.7	1,631	0.23	369	29.1	24.0	9.8	370	1.15	426.77	795.33	21.0	2.00	Y	
7/28/2020	69.2	1,808	0.27	484	29.1	24.6	9.6	382	1.18	449.63	933.44	21.0	2.00	Y	
7/29/2020	66.5	1,880	0.30	570	29.1	24.4	9.0	407	1.13	461.16	1,030.72	21.0	2.00	Y	
7/30/2020	61.6	2,032	0.40	818	29.1	24.2	9.1	401	1.17	467.99	1,286.20	20.8	2.00	Y	
7/31/2020	58.3	2,147	0.47	1,006	29.2	24.0	9.4	389	1.19	462.08	1,468.20	20.3	2.00	Y	
Avg	72.0	1,754	0.45	783	29.2	23.8	10.5	351	1.15	403.99	1,187.31	18.4	3.48	NA	
Min	58.3	1,553	0.18	328	29.0	21.1	8.9	278	1.08	322.21	750.23	14.2	2.00	NA	
Max	80.5	2,147	0.71	1,222	29.6	25.3	13.2	417	1.20	467.99	1,663.56	21.0	6.00	NA	



Notes:

Pipeline volume factor in SMMWSC to RW tank: 125,090 MG-min/day

Distribution System Monitoring

Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl₂)

WSSN: Date	0390 Bangor Twp.					0400 Bangor Monitor Dist.			0470 Bay City							0485 Bay County					0517 Beaver Rd	0518 Beaver Twp		2180 Essexville
	1	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18	19	20	22	24	26	29	30	32
7/1/2020																								
7/2/2020									0.78	0.21	0.57	0.62	0.16	0.96	0.60									
7/3/2020																								
7/4/2020																								
7/5/2020																								
7/6/2020																								
7/7/2020	0.27	0.91	0.63	0.93	1.11											0.80	0.86	0.87		0.65		0.67		0.92
7/8/2020									0.91	0.52	0.73	0.90	0.38	1.07	0.73									
7/9/2020							0.81	0.99											0.75					
7/10/2020																								
7/11/2020																								
7/12/2020																								
7/13/2020																								
7/14/2020				1.08	1.10				0.83	0.41	0.69	0.81	0.38	1.07	0.67					0.97		0.49		1.10
7/15/2020																								
7/16/2020								0.84	0.83	0.45	0.58	0.80	0.33	0.98	0.70	0.80	0.94	0.89	0.75	0.70				
7/17/2020																								
7/18/2020																								
7/19/2020																								
7/20/2020																								1.11
7/21/2020		0.89	0.39	0.82	1.13																			
7/22/2020									0.74	0.35	0.52	0.81	0.31	1.04	0.58									
7/23/2020																								
7/24/2020																								
7/25/2020																								
7/26/2020																								
7/27/2020																								1.07
7/28/2020									0.74	0.27	0.43	0.74	0.16	1.02	0.51									
7/29/2020																								
7/30/2020									0.70	0.22	0.33	0.76	0.16	0.96	0.46									
7/31/2020																								
Average	0.27			0.90				0.88						0.62					0.80		0.97		0.58	1.05
Min	0.27			0.39				0.81						0.16					0.65		0.97		0.49	0.92
Max	0.27			1.13				0.99						1.07					0.94		0.97		0.67	1.11



MONITORING STATION ADDRESSES

- | | | |
|--|---|---|
| 1. Sample station at corner of 5758 M-25 & F | 11. Number 1 Fire Station, 1401 Center Ave | 19. Dore's M-84 Party Store, 6183 WS Saginaw Rd |
| 3. Bangor Fire Station, 3921 Wheeler | 12. Number 2 Fire Station, 1000 Fremont Ave | 20. Pump Station #13, 6000 WS Saginaw Rd |
| 4. BCDWS Admin. Bldg. 3933 Patterson Rd. | 13. Skizak's Sport Shop, 807 Salzburg Ave | 22. Duce's Char House, 432 N. Tuscola Rd |
| 5. 7-11, 3543 S. Old Kawkawlin Rd. | 14. Number 4 Fire Station, 212 S. Dean St | 24. Little Learners Daycare, 1694 Cass Ave. |
| 6. Admiral Petroleum, 314 S Euclid Ave. | 15. Number 5 Fire Station, 1209 Smith St | 26. Wieland Contracting, 2443 S Mackinaw Rd |
| 7. Sequin Lumber, 3881 Euclid Ave | 16. Bay City Hall, 301 Washington Ave | 29. Sample Station, 2515 S. 11 Mile Rd |
| 9. B's Boutique, 2981 Midland Rd | 17. Skipper Buds Marina, 1809 S Water St | 30. Sample Station, 340 W. Beaver Rd |
| 10. Little Caesars, 3475 E North Union Rd | 18. Bay Valley Animal Hospital 6015 WS Saginaw Rd | 32. Essexville City Hall, 1107 Woodside Ave |

Distribution System Monitoring

Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl₂)

WSSN: Date	2465 Fraser Twp.		2960 Hampton Twp.			3565 Kawkawlin Twp.			3570 Kawkawlin Met.		4280 Merritt Twp.		4440 Monitor Twp.			5330 City Pinconning		5335 Pinconning Twp.		5540 Portsmouth	7125 Williams Twp.			7134 Wisner
	34	35	37	38	39	40	41	42	43	45	46	48	49	52	55	58	59	61	63	65	68	69	70	72
	7/1/2020																							
7/2/2020																								
7/3/2020																								
7/4/2020																								
7/5/2020																								
7/6/2020																								
7/7/2020										0.43									0.67		0.35	0.80	0.41	0.39
7/8/2020																								
7/9/2020	0.87	0.94	0.61	0.82	0.63	1.05	0.84		0.94				1.06	0.63	0.75	0.54		0.87	0.65					
7/10/2020																								
7/11/2020																								
7/12/2020																								
7/13/2020																								
7/14/2020			0.67	0.45	0.63			0.92	0.89							0.67					0.60	0.83	0.83	
7/15/2020																								
7/16/2020										0.53			1.02	0.82	0.79									
7/17/2020																								
7/18/2020																								
7/19/2020																								
7/20/2020			0.46	0.48	0.42																			
7/21/2020																								
7/22/2020																								
7/23/2020																								
7/24/2020																								
7/25/2020																								
7/26/2020																								
7/27/2020			0.45																					
7/28/2020																								
7/29/2020																								
7/30/2020																								
7/31/2020																								
Average	0.91		0.56			0.94			0.92	0.48			0.85			0.61		0.76		0.67		0.64		0.39
Min	0.87		0.42			0.84			0.89	0.43			0.63			0.54		0.65		0.67		0.35		0.39
Max	0.94		0.82			1.05			0.94	0.53			1.06			0.67		0.87		0.67		0.83		0.39



MONITORING STATION ADDRESSES

- 34. Fraser Elevated Tank, 2949 1/2 N. Huron Rd
- 35. Lloyd's Cabinet, 1947 N Huron Rd
- 37. Hampton DPW, 950 Wagner Rd.
- 38. Bay County Golf Course, 584 W Hampton Rd.
- 39. Sewer Lift Station, 902 Nebobish Rd.
- 40. Bay Co. Road Commission, 2600 E Beaver Rd
- 41. Parish Rd. Elevated Tank, 1770 E. Parish Rd
- 42. Linwood Tile, 205 S Huron Rd

- 43. Kawkawlin Party Store, 105 Grove St
- 45. Kawkawlin Restaurant, 103 S Huron Rd
- 46. John's Bar, 1476 S Tuscola Rd
- 48. Tool Shed Bar, 12 W Munger Rd
- 49. Wilder Rd Party Store, 2951 E Wilder Rd
- 52. Monitor Twp. Elevated Tank, 1611 E. Midland Rd
- 55. Auburn Fertilizer, 4640 S 7 Mile Rd
- 58. Pinconning City Hall, 208 S Manitou St

- 59. Marathon Gas Station, 511 S Mabel St
- 61. Pinconning Meter Pit, 3005 N Huron Rd
- 63. Master Meter Pit, 2865 Pinconning Rd
- 65. Ike's Welding, 50 N Finn Rd
- 68. Williams Township Hall, 1080 W Midland Rd
- 69. Pump Station, 490 W. Salzburg & 9 Mile Rd
- 70. 11 Mile Elevated Tank, 5003 S. 11 Mile Rd
- 72. Lindy's Sales, 9051 M-25

Distribution System Bacteriological							
Water Supplier Bacteriological Analysis Report							
MICHIGAN DEPARTMENT OF PUBLIC HEALTH Bureau of Environmental Health Water Supplier Bacteriological Analysis Report				Name of Water Supply Bay Area Water Treatment Plant			
				July, 2020			
COUNTY	COMMUNITY	WSSN NUMBER	DISTRIBUTION SYSTEM SAMPLES				
			avg free cl2 mg/L	NUMBER REQUIRED	NUMBER COLLECTED	NUMBER POSITIVE	NUMBER REPEAT SAMPLES
Tuscola	Akron	0072	0.27	1	1	0	0
BAY	Bangor Township	0390	0.90	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	0.88	3	3	0	0
BAY	Bay City	0470	0.62	40	49	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.80	10	10	0	0
BAY	Beaver Road Area	0517	0.97	1	1	0	0
BAY	Beaver Township	0518	0.58	2	2	0	0
BAY	Essexville	2180	1.05	4	4	0	0
BAY	Fraser Township	2465	0.91	2	2	0	0
BAY	Hampton Township	2960	0.56	10	10	0	0
BAY	Kawkawlin Township	3565	0.94	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.92	2	2	0	0
BAY	Merritt Township	4280	0.48	2	2	0	0
BAY	Monitor Township	4440	0.85	6	6	0	0
BAY	City of Pinconning	5330	0.61	2	2	0	0
BAY	Pinconning Township	5335	0.76	2	2	0	0
BAY	Portsmouth Township	5540	0.67	1	1	0	0
BAY	Williams Township	7125	0.64	6	6	0	0
Tuscola	Wisner	7134	0.39	1	1	0	0
Average Free Cl2 Residual of All Distribution Sites			0.73	mg/L			
1. Total distribution samples			117				
2. Total distribution samples with detectable free cl2 residual			117				
3. Total distribution samples with no detectable free cl2 residual			0				
4. Total distribution samples with no detectable free cl2 residual and HPC was <500			0				
5. Total distribution samples with no detectable free cl2 residual and HPC was >500			0				
6. Percent of distribution samples with no detectable free cl2 residual			0.00%				
7. Percent shown line #6 in previous monthly report			0.00%				

