

# Bay Area WTP


## Monthly Operations Report



October, 2020

Water Systems Serial Number:

0465

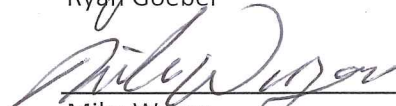
  
\_\_\_\_\_  
Ryan Goebel

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

October, 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>8.0</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>14.26</u>	PSI
Maximum Approved Flux Rate	<u>36.25</u>	gpd/sq.ft.
Maximum Operating Flux Rate	<u>29.75</u>	gpd/sq.ft.

### Chemical Data

Sodium Hypochlorite on hand:	<u>5,020</u>	Gallons	Estimated Supply:	<u>68.2</u>	days
Caustic Soda on hand:	<u>3,651</u>	Gallons	Estimated Supply:	<u>139.8</u>	days
Corrosion Inhibitor on hand:	<u>910</u>	Gallons	Estimated Supply:	<u>43.0</u>	days
Hydrofluosilicic Acid on hand:	<u>2,436</u>	Gallons	Estimated Supply:	<u>133.3</u>	days
Aluminum Chlorohydrate on hand:	<u>578</u>	Gallons	Estimated Supply:	<u>34.6</u>	days
Sulfuric Acid on hand:	<u>638</u>	Gallons	Estimated Supply:	<u>195.5</u>	days
Sodium Bisulfite on hand:	<u>794</u>	Gallons	Estimated Supply:	<u>145.8</u>	days
Citric Acid on hand:	<u>1,510</u>	Gallons	Estimated Supply:	<u>69.0</u>	days
Cost of All Chemicals per Million Gallons:	<u>85.63</u>	Dollars			
Estimated Electrical Cost per Million Gallons:	<u>87.82</u>	Dollars			
Estimated Natural Gas Cost per Million Gallons:	<u>1.23</u>	Dollars			

### Remarks

Number of periods of filter confluence turbidity samples > 0.3 NTU	<u>0</u>
Percent of membrane period confluence samples > 0.3 NTU:	<u>0.00%</u>
Was continuous (every 15 minutes) filter monitoring equipment off-line during the month? If yes, indicate date(s), duration, and individual filter grab sampling frequency on a separate sheet.	<u>No</u>
Did POE disinfectant residual fall below 0.2 ppm during the month? If yes, indicate date(s) and duration on a separate sheet.	<u>No</u>
Was minimum C*T credit achieved for the entire month? If no, indicate on a separate sheet the date(s) not achieved.	<u>Yes</u>
Was continuous POE chlorine residual monitoring equipment off-line during the month? If yes, date(s) and duration will be indicated on the rule page.	<u>No</u>



### Notes

10 MG Raw Water tank out for inspection Monday 9/28/20 to Friday 10/2/20.

# 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
10/1/2020	0.17	7.61	7.78	0.25	0.08	7.61	3.66	3.52	7.18
10/2/2020	0.11	10.23	10.34	0.22	0.07	6.49	3.22	3.03	6.26
10/3/2020	0.00	13.26	13.26	0.27	0.08	7.54	3.54	3.39	6.93
10/4/2020	0.00	6.00	6.00	0.34	0.08	7.20	3.51	3.43	6.94
10/5/2020	0.00	7.37	7.37	0.23	0.08	6.97	3.37	3.21	6.57
10/6/2020	0.00	7.36	7.36	0.23	0.08	7.07	3.50	3.34	6.84
10/7/2020	0.00	6.72	6.72	0.23	0.08	7.11	3.41	3.27	6.69
10/8/2020	0.00	7.04	7.04	0.25	0.09	6.74	3.39	3.25	6.63
10/9/2020	0.00	7.38	7.38	0.24	0.09	7.19	3.46	3.32	6.79
10/10/2020	0.00	7.04	7.04	0.20	0.09	6.73	3.25	3.11	6.36
10/11/2020	0.00	6.31	6.31	0.22	0.09	6.85	3.42	3.29	6.71
10/12/2020	0.00	6.41	6.41	0.23	0.08	6.74	3.32	3.17	6.48
10/13/2020	0.00	6.59	6.59	0.24	0.08	6.40	3.11	2.95	6.06
10/14/2020	0.00	7.19	7.19	0.20	0.09	6.94	3.41	3.25	6.65
10/15/2020	0.00	6.86	6.86	0.23	0.09	6.81	3.37	3.30	6.67
10/16/2020	0.00	6.89	6.89	0.23	0.09	6.81	3.37	3.30	6.68
10/17/2020	0.00	5.54	5.54	0.24	0.09	6.27	3.03	2.94	5.97
10/18/2020	0.00	5.87	5.87	0.21	0.08	5.69	2.74	2.68	5.42
10/19/2020	0.00	6.24	6.24	0.21	0.09	7.48	3.70	3.57	7.27
10/20/2020	0.00	8.35	8.35	0.23	0.09	7.52	3.63	3.54	7.17
10/21/2020	0.00	6.43	6.43	0.16	0.08	5.05	2.77	2.68	5.44
10/22/2020	0.00	6.95	6.95	0.25	0.08	7.96	3.59	3.49	7.08
10/23/2020	0.00	7.22	7.22	0.22	0.08	6.64	3.26	3.11	6.37
10/24/2020	0.00	7.12	7.12	0.22	0.08	6.72	3.28	3.18	6.46
10/25/2020	0.00	6.43	6.43	0.22	0.08	6.81	3.33	3.18	6.50
10/26/2020	0.00	6.74	6.74	0.21	0.09	6.56	3.21	3.10	6.30
10/27/2020	0.00	7.16	7.16	0.20	0.09	6.55	3.15	3.02	6.17
10/28/2020	0.00	6.22	6.22	0.21	0.10	6.88	3.41	3.29	6.69
10/29/2020	0.00	6.59	6.59	0.23	0.08	6.28	3.06	2.95	6.01
10/30/2020	0.00	6.61	6.61	0.23	0.09	6.59	3.24	3.08	6.32
10/31/2020	0.00	6.37	6.37	0.21	0.09	6.29	3.01	2.92	5.93
Total	0.28	220.10	220.38	7.06	2.62	210.49	102.71	98.82	201.53
Avg	0.01	7.10	7.11	0.23	0.08	6.79	3.31	3.19	6.50
Min	0.00	5.54	5.54	0.16	0.07	5.05	2.74	2.68	5.42
Max	0.17	13.26	13.26	0.34	0.10	7.96	3.70	3.57	7.27



Raw Water Analysis								
Date	Temp	pH	Turbidity		F <sup>-</sup>	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	
10/1/2020	17.7	8.08	0.87	2.59	0.05	0.02	Negative	Negative
10/2/2020	17.0	7.96	1.38	25.10	0.06	0.37	Negative	Negative
10/3/2020	16.2	7.81	1.08	9.84	0.05	0.79	Negative	Negative
10/4/2020	16.0	7.87	0.80	2.15	0.05	0.61	Negative	Negative
10/5/2020	15.8	7.87	0.93	3.38	0.05	0.59	Negative	Negative
10/6/2020	15.7	7.88	0.90	1.94	0.06	0.55	Negative	Negative
10/7/2020	15.8	7.87	1.24	4.60	0.05	0.41	Negative	Negative
10/8/2020	15.5	7.83	0.88	2.39	0.09	0.64	Negative	Negative
10/9/2020	15.2	7.83	0.64	1.24	0.08	0.74	Negative	Negative
10/10/2020	15.2	7.82	0.97	1.54	0.08	0.80	Negative	Negative
10/11/2020	15.0	7.81	0.58	1.14	0.08	0.84	Negative	Negative
10/12/2020	15.0	7.85	1.11	7.31	0.08	0.75	Negative	Negative
10/13/2020	15.1	7.86	2.06	6.36	0.09	0.52	Negative	Negative
10/14/2020	15.1	7.88	1.46	5.68	0.10	0.50	Negative	Negative
10/15/2020	15.0	7.87	0.75	2.18	0.09	0.63	Negative	Negative
10/16/2020	14.8	7.86	0.71	1.88	0.09	0.67	Negative	Negative
10/17/2020	14.6	7.85	0.94	2.95	0.09	0.71	Negative	Negative
10/18/2020	14.4	7.82	0.77	2.09	0.09	0.75	Negative	Negative
10/19/2020	14.1	7.80	0.90	3.84	0.09	0.73	Negative	Negative
10/20/2020	13.9	7.80	0.76	1.94	0.09	0.66	Negative	Negative
10/21/2020	13.8	7.82	0.69	1.27	0.09	0.62	Negative	Negative
10/22/2020	13.6	7.85	0.88	5.43	0.08	0.55	Negative	Negative
10/23/2020	13.5	7.85	1.14	8.78	0.09	0.49	Negative	Negative
10/24/2020	13.4	7.85	0.98	2.41	0.09	0.55	Negative	Negative
10/25/2020	13.2	7.86	1.12	2.29	0.08	0.50	Negative	Negative
10/26/2020	13.1	7.88	0.89	1.64	0.08	0.45	Negative	Negative
10/27/2020	12.9	7.88	0.76	1.45	0.09	0.44	Negative	Negative
10/28/2020	12.8	7.90	0.84	2.91	0.09	0.41	Negative	Negative
10/29/2020	12.6	7.91	0.88	3.86	0.10	0.38	Negative	Negative
10/30/2020	12.4	7.87	0.90	3.25	0.10	0.45	Negative	Negative
10/31/2020	12.2	7.85	6.40	42.19	0.10	0.33	Negative	Negative
Avg	14.5	7.86	1.14	5.34	0.08	0.56	NA	NA
Min	12.2	7.80	0.58	1.14	0.05	0.02	NA	NA
Max	17.7	8.08	6.40	42.19	0.10	0.84	NA	NA



Finished Water Analysis																		
Date	Temp	pH	Phosphate	Fluoride		Free Cl <sub>2</sub>	Alkalinity (as CaCO <sub>3</sub> )		Chloride	Sulfate	Calcium (as CaCO <sub>3</sub> )	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	Index	Ratio	Index	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	
10/1/2020	17.0	7.59	3.37	0.78		1.23	0	77	10	10	70	9.3	235	-0.71	1.00	0.39	Negative	Negative
10/2/2020	16.0	7.57	3.36	0.77		1.22	0	76	11	10	70	10.0	228	-0.75	1.10	0.42	Negative	Negative
10/3/2020	14.7	7.55	3.35	0.81		1.22	0	76	10	11	68	10.1	223	-0.81	0.86	0.40	Negative	Negative
10/4/2020	14.4	7.55	3.36	0.76		1.20	0	77	10	10	70	9.9	226	-0.81	1.00	0.39	Negative	Negative
10/5/2020	14.4	7.57	3.36	0.77		1.21	0	77	10	11	68	9.8	230	-0.80	0.91	0.41	Negative	Negative
10/6/2020	14.6	7.58	3.37	0.75		1.19	0	77	11	13	70	9.0	225	-0.77	0.85	0.46	Negative	Negative
10/7/2020	14.8	7.58	3.37	0.78	0.68	1.19	0	74	11	11	70	9.4	230	-0.79	1.00	0.45	Negative	Negative
10/8/2020	14.5	7.58	3.37	0.75		1.21	0	79	12	9	76	9.7	230	-0.73	1.33	0.41	Negative	Negative
10/9/2020	14.2	7.56	3.37	0.78		1.23	0	76	11	10	72	9.9	225	-0.79	1.10	0.42	Negative	Negative
10/10/2020	14.0	7.55	3.37	0.76		1.22	0	76	12	11	74	9.9	223	-0.79	1.09	0.46	Negative	Negative
10/11/2020	13.8	7.56	3.37	0.78		1.21	0	76	11	10	72	9.8	220	-0.80	1.10	0.42	Negative	Negative
10/12/2020	13.8	7.55	3.37	0.78	0.73	1.21	0	78	10	11	72	9.6	226	-0.81	0.91	0.40	Negative	Negative
10/13/2020	13.8	7.55	3.37	0.79		1.19	0	78	11	11	70	9.7	216	-0.81	1.00	0.43	Negative	Negative
10/14/2020	13.9	7.57	3.37	0.79		1.19	0	80	12	11	76	9.6	225	-0.75	1.09	0.44	Negative	Negative
10/15/2020	13.9	7.58	3.36	0.81		1.21	0	77	10	11	68	9.8	227	-0.80	0.91	0.41	Negative	Negative
10/16/2020	13.7	7.58	3.36	0.80		1.21	0	77	10	10	72	10.1	234	-0.78	1.00	0.39	Negative	Negative
10/17/2020	13.5	7.58	3.35	0.80		1.20	0	77	10	10	68	9.6	233	-0.81	1.00	0.39	Negative	Negative
10/18/2020	13.5	7.58	3.35	0.81		1.20	0	75	10	11	66	9.8	231	-0.84	0.91	0.42	Negative	Negative
10/19/2020	13.3	7.56	3.36	0.76		1.22	0	77	10	10	68	9.8	232	-0.84	1.00	0.39	Negative	Negative
10/20/2020	13.1	7.55	3.37	0.77		1.21	0	75	10	12	66	10.1	231	-0.88	0.83	0.44	Negative	Negative
10/21/2020	12.9	7.57	3.36	0.78	0.77	1.19	0	69	10	10	64	10.2	230	-0.91	1.00	0.44	Negative	Negative
10/22/2020	12.9	7.57	3.38	0.77		1.23	0	75	12	11	76	10.2	233	-0.80	1.09	0.47	Negative	Negative
10/23/2020	12.9	7.56	3.39	0.75		1.20	0	76	11	10	76	10.2	236	-0.80	1.10	0.42	Negative	Negative
10/24/2020	12.5	7.58	3.39	0.76		1.21	0	75	11	11	76	10.1	236	-0.80	1.00	0.44	Negative	Negative
10/25/2020	12.4	7.57	3.39	0.75		1.20	0	77	11	11	74	10.2	236	-0.81	1.00	0.43	Negative	Negative
10/26/2020	12.5	7.58	3.39	0.76		1.19	0	77	11	9	74	10.5	236	-0.81	1.22	0.40	Negative	Negative
10/27/2020	12.2	7.58	3.39	0.76		1.19	0	76	12	9	74	10.3	236	-0.82	1.33	0.43	Negative	Negative
10/28/2020	12.1	7.60	3.39	0.77	0.71	1.20	0	86	12	10	88	11.7	234	-0.67	1.20	0.39	Negative	Negative
10/29/2020	12.1	7.60	3.39	0.80		1.19	0	77	10	9	68	10.2	238	-0.82	1.11	0.37	Negative	Negative
10/30/2020	11.8	7.61	3.38	0.80		1.20	0	75	9	12	68	10.4	237	-0.83	0.78	0.42	Negative	Negative
10/31/2020	11.6	7.60	3.38	0.76		1.21	0	75	10	11	66	10.6	234	-0.86	0.91	0.42	Negative	Negative
Avg	13.6	7.57	3.37	0.78	0.72	1.21	0	77	11	11	71	10.0	230	-0.80	1.02	0.42	NA	NA
Min	11.6	7.55	3.35	0.75	0.68	1.19	0	69	9	9	64	9.0	216	-0.91	0.78	0.37	NA	NA
Max	17.0	7.61	3.39	0.81	0.77	1.23	0	86	12	13	88	11.7	238	-0.67	1.33	0.47	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
10/1/2020	0.87	2.59	3.55	0.71	0.022	0.023	96	0	0.0	0.017
10/2/2020	1.38	25.10	1.14	1.09	0.023	0.030	96	0	0.0	0.017
10/3/2020	1.08	9.84	0.62	0.97	0.021	0.022	96	0	0.0	0.017
10/4/2020	0.80	2.15	2.03	1.12	0.022	0.022	96	0	0.0	0.017
10/5/2020	0.93	3.38	1.83	0.95	0.021	0.022	96	0	0.0	0.017
10/6/2020	0.90	1.94	2.58	0.90	0.021	0.022	96	0	0.0	0.017
10/7/2020	1.24	4.60	4.07	1.21	0.021	0.027	96	0	0.0	0.017
10/8/2020	0.88	2.39	2.73	1.15	0.021	0.021	96	0	0.0	0.017
10/9/2020	0.64	1.24	2.15	0.91	0.021	0.021	96	0	0.0	0.017
10/10/2020	0.97	1.54	1.14	1.03	0.021	0.021	96	0	0.0	0.017
10/11/2020	0.58	1.14	1.05	0.89	0.021	0.021	96	0	0.0	0.016
10/12/2020	1.11	7.31	2.65	0.81	0.021	0.021	96	0	0.0	0.017
10/13/2020	2.06	6.36	1.59	1.35	0.021	0.021	96	0	0.0	0.017
10/14/2020	1.46	5.68	1.70	1.72	0.021	0.021	96	0	0.0	0.017
10/15/2020	0.75	2.18	1.36	1.26	0.021	0.021	96	0	0.0	0.017
10/16/2020	0.71	1.88	1.31	1.01	0.021	0.021	96	0	0.0	0.017
10/17/2020	0.94	2.95	1.13	0.92	0.021	0.021	96	0	0.0	0.017
10/18/2020	0.77	2.09	0.96	0.92	0.021	0.021	96	0	0.0	0.017
10/19/2020	0.90	3.84	0.87	0.88	0.021	0.021	96	0	0.0	0.017
10/20/2020	0.76	1.94	2.02	0.90	0.021	0.021	96	0	0.0	0.017
10/21/2020	0.69	1.27	0.93	0.85	0.021	0.026	96	0	0.0	0.017
10/22/2020	0.88	5.43	1.65	1.27	0.021	0.022	96	0	0.0	0.017
10/23/2020	1.14	8.78	1.34	1.27	0.021	0.021	96	0	0.0	0.017
10/24/2020	0.98	2.41	1.82	1.02	0.021	0.021	96	0	0.0	0.017
10/25/2020	1.12	2.29	1.59	1.17	0.021	0.021	96	0	0.0	0.017
10/26/2020	0.89	1.64	1.70	1.05	0.021	0.022	96	0	0.0	0.017
10/27/2020	0.76	1.45	1.65	0.92	0.021	0.021	96	0	0.0	0.016
10/28/2020	0.84	2.91	1.94	0.88	0.021	0.021	96	0	0.0	0.017
10/29/2020	0.88	3.86	1.43	0.84	0.022	0.034	96	0	0.0	0.017
10/30/2020	0.90	3.25	1.51	0.84	0.021	0.021	96	0	0.0	0.016
10/31/2020	6.40	42.19	1.17	2.01	0.021	0.021	96	0	0.0	0.016
Avg	1.14	5.34	1.72	1.06	0.021	0.022	96	0	0.0	0.017
Min	0.58	1.14	0.62	0.71	0.021	0.021	96	0	0.0	0.016
Max	6.40	42.19	4.07	2.01	0.023	0.034	96	0	0.0	0.017

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	Max	Average	Max	Max	Average	Max	Max	Average	Max	Max	Average	Max	Max	Average	Max	Max	Average	Max	Max	Average	Max	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
10/1/2020	4.40	PASS	0.025	4.34	PASS	0.037	4.33	PASS	0.023	4.48	PASS	0.021	4.35	PASS	0.024	4.49	PASS	0.026	Out 9/30 for maint in on	10/2	4.24	PASS	0.029			
10/2/2020	4.40	PASS	0.024	4.36	PASS	0.037	4.36	PASS	0.023	4.47	PASS	0.020	4.40	PASS	0.027	4.57	PASS	0.026	4.43	PASS	0.035	4.24	PASS	0.028		
10/3/2020	4.47	PASS	0.023	4.36	PASS	0.040	4.39	PASS	0.022	4.48	PASS	0.019	4.37	PASS	0.027	4.54	PASS	0.025	4.59	PASS	0.033	4.20	PASS	0.028		
10/4/2020	4.44	PASS	0.023	4.34	PASS	0.037	4.37	PASS	0.022	4.49	PASS	0.020	4.37	PASS	0.027	4.49	PASS	0.024	4.65	PASS	0.035	4.33	PASS	0.027		
10/5/2020	4.43	PASS	0.021	4.34	PASS	0.038	4.36	PASS	0.022	4.47	PASS	0.021	4.37	PASS	0.026	4.53	PASS	0.025	4.60	PASS	0.035	4.30	PASS	0.027		
10/6/2020	4.44	PASS	0.022	4.31	PASS	0.040	4.36	PASS	0.022	4.38	PASS	0.020	4.34	PASS	0.024	4.47	PASS	0.025	4.50	PASS	0.033	4.37	PASS	0.026		
10/7/2020	4.42	PASS	0.087	4.29	PASS	0.034	4.41	PASS	0.073	4.41	PASS	0.020	4.35	PASS	0.023	4.54	PASS	0.025	4.52	PASS	0.033	4.21	PASS	0.027		
10/8/2020	4.44	PASS	0.019	4.48	PASS	0.035	4.38	PASS	0.022	4.42	PASS	0.020	4.39	PASS	0.026	4.43	PASS	0.025	4.53	PASS	0.034	4.26	PASS	0.026		
10/9/2020	4.43	PASS	0.022	4.43	PASS	0.035	4.48	PASS	0.022	4.44	PASS	0.019	4.40	PASS	0.022	4.45	PASS	0.025	4.55	PASS	0.034	4.26	PASS	0.026		
10/10/2020	4.45	PASS	0.023	4.41	PASS	0.034	4.46	PASS	0.022	4.45	PASS	0.020	4.35	PASS	0.025	4.50	PASS	0.025	4.54	PASS	0.034	4.27	PASS	0.026		
10/11/2020	4.44	PASS	0.021	4.52	PASS	0.033	4.46	PASS	0.022	4.46	PASS	0.019	4.38	PASS	0.026	4.58	PASS	0.024	4.55	PASS	0.033	4.28	PASS	0.026		
10/12/2020	4.43	PASS	0.022	4.55	PASS	0.033	4.45	PASS	0.021	4.56	PASS	0.020	4.38	PASS	0.021	4.49	PASS	0.024	4.53	PASS	0.035	4.26	PASS	0.026		
10/13/2020	4.45	PASS	0.018	4.48	PASS	0.033	4.42	PASS	0.021	4.66	PASS	0.019	4.38	PASS	0.022	4.58	PASS	0.024	4.79	PASS	0.034	4.30	PASS	0.026		
10/14/2020	4.42	PASS	0.018	4.70	PASS	0.033	4.39	PASS	0.022	4.55	PASS	0.019	4.38	PASS	0.022	4.46	PASS	0.024	4.83	PASS	0.035	4.29	PASS	0.026		
10/15/2020	4.43	PASS	0.022	4.49	PASS	0.033	4.61	PASS	0.021	4.58	PASS	0.019	4.35	PASS	0.021	4.54	PASS	0.024	4.58	PASS	0.034	4.32	PASS	0.026		
10/16/2020	4.43	PASS	0.018	4.48	PASS	0.033	4.73	PASS	0.021	4.58	PASS	0.019	4.42	PASS	0.024	4.57	PASS	0.024	4.53	PASS	0.036	4.32	PASS	0.026		
10/17/2020	4.41	PASS	0.021	4.52	PASS	0.033	4.44	PASS	0.021	4.63	PASS	0.019	4.48	PASS	0.020	4.53	PASS	0.024	4.58	PASS	0.035	4.32	PASS	0.026		
10/18/2020	4.42	PASS	0.017	4.59	PASS	0.033	4.45	PASS	0.021	4.64	PASS	0.019	4.43	PASS	0.024	4.54	PASS	0.024	4.59	PASS	0.033	4.35	PASS	0.026		
10/19/2020	4.41	PASS	0.019	4.47	PASS	0.033	4.43	PASS	0.022	4.58	PASS	0.020	4.41	PASS	0.025	4.51	PASS	0.024	4.54	PASS	0.033	4.33	PASS	0.026		
10/20/2020	4.39	PASS	0.018	4.45	PASS	0.035	4.51	PASS	0.022	4.51	PASS	0.019	4.37	PASS	0.024	4.49	PASS	0.024	4.52	PASS	0.035	4.31	PASS	0.026		
10/21/2020	4.38	PASS	0.020	4.43	PASS	0.033	4.66	PASS	0.022	4.52	PASS	0.019	4.35	PASS	0.028	4.50	PASS	0.024	4.53	PASS	0.034	4.31	PASS	0.026		
10/22/2020	4.44	PASS	0.017	4.52	PASS	0.032	4.40	PASS	0.022	4.59	PASS	0.021	4.31	PASS	0.028	4.45	PASS	0.025	4.50	PASS	0.035	4.30	PASS	0.026		
10/23/2020	4.39	PASS	0.017	4.46	PASS	0.033	4.37	PASS	0.022	4.52	PASS	0.020	4.35	PASS	0.024	4.56	PASS	0.024	4.48	PASS	0.035	4.28	PASS	0.026		
10/24/2020	4.46	PASS	0.017	4.43	PASS	0.032	4.38	PASS	0.022	4.48	PASS	0.019	4.33	PASS	0.024	4.56	PASS	0.024	4.48	PASS	0.036	4.25	PASS	0.026		
10/25/2020	4.46	PASS	0.018	4.44	PASS	0.033	4.39	PASS	0.022	4.52	PASS	0.019	4.33	PASS	0.024	4.54	PASS	0.024	4.48	PASS	0.035	4.25	PASS	0.025		
10/26/2020	4.44	PASS	0.189	4.44	PASS	0.033	4.43	PASS	0.022	4.58	PASS	0.022	4.31	PASS	0.024	4.51	PASS	0.024	4.51	PASS	0.035	4.24	PASS	0.027		
10/27/2020	4.43	PASS	0.023	4.45	PASS	0.032	4.39	PASS	0.022	4.59	PASS	0.019	4.32	PASS	0.024	4.48	PASS	0.022	4.56	PASS	0.033	4.23	PASS	0.024		
10/28/2020	4.41	PASS	0.022	4.41	PASS	0.031	4.38	PASS	0.022	4.59	PASS	0.020	4.33	PASS	0.024	4.49	PASS	0.022	4.49	PASS	0.032	4.26	PASS	0.024		
10/29/2020	4.42	PASS	0.023	4.40	PASS	0.033	4.37	PASS	0.025	4.56	PASS	0.020	4.34	PASS	0.024	4.54	PASS	0.022	4.48	PASS	0.034	4.28	PASS	0.024		
10/30/2020	4.43	PASS	0.022	4.40	PASS	0.031	4.36	PASS	0.022	4.57	PASS	0.019	4.29	PASS	0.033	4.47	PASS	0.021	4.63	PASS	0.032	4.28	PASS	0.023		
10/31/2020	4.42	PASS	0.021	4.40	PASS	0.031	4.36	PASS	0.022	4.70	PASS	0.019	4.39	PASS	0.024	4.48	PASS	0.022	4.45	PASS	0.034	4.32	PASS	0.024		
Avg	4.43		0.028	4.44		0.034	4.43		0.024	4.53		0.020	4.36		0.025	4.51		0.024	4.55		0.034	4.28		0.026		
Min	4.38		0.017	4.29		0.031	4.33		0.021	4.38		0.019	4.29		0.020	4.43		0.021	4.43		0.032	4.20		0.023		
Max	4.47		0.189	4.70		0.040	4.73		0.073	4.70		0.022	4.48		0.033	4.58		0.026	4.83		0.036	4.37		0.029		

\*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 <sub>2</sub>					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
10/1/2020	7.6	0.02	0.47	1.06	1.36	1.23	3.24	3.37	0.05	0.58	0.78
10/2/2020	6.5	0.37	0.66	0.72	1.30	1.22	3.24	3.36	0.06	0.58	0.77
10/3/2020	7.5	0.79	0.74	0.65	1.30	1.22	3.24	3.35	0.05	0.58	0.81
10/4/2020	7.2	0.61	0.56	0.81	1.31	1.20	3.24	3.36	0.05	0.58	0.76
10/5/2020	7.0	0.59	0.46	0.89	1.34	1.21	3.25	3.36	0.05	0.58	0.77
10/6/2020	7.1	0.55	0.42	0.94	1.31	1.19	3.25	3.37	0.06	0.58	0.75
10/7/2020	7.1	0.41	0.35	1.06	1.34	1.19	3.25	3.37	0.05	0.58	0.78
10/8/2020	6.7	0.64	0.35	1.00	1.36	1.21	3.25	3.37	0.09	0.58	0.75
10/9/2020	7.2	0.74	0.45	0.87	1.36	1.23	3.25	3.37	0.08	0.58	0.78
10/10/2020	6.7	0.80	0.51	0.82	1.34	1.22	3.25	3.37	0.08	0.58	0.76
10/11/2020	6.8	0.84	0.56	0.78	1.33	1.21	3.25	3.37	0.08	0.58	0.78
10/12/2020	6.7	0.75	0.57	0.80	1.33	1.21	3.25	3.37	0.08	0.58	0.78
10/13/2020	6.4	0.52	0.49	0.89	1.30	1.19	3.25	3.37	0.09	0.58	0.79
10/14/2020	6.9	0.50	0.37	1.04	1.36	1.19	3.25	3.37	0.10	0.58	0.79
10/15/2020	6.8	0.63	0.40	0.97	1.35	1.21	3.25	3.36	0.09	0.58	0.81
10/16/2020	6.8	0.67	0.44	0.90	1.35	1.21	3.25	3.36	0.09	0.58	0.80
10/17/2020	6.3	0.71	0.48	0.90	1.33	1.20	3.25	3.35	0.09	0.58	0.80
10/18/2020	5.7	0.75	0.51	0.88	1.34	1.20	3.26	3.35	0.09	0.57	0.81
10/19/2020	7.5	0.73	0.54	0.77	1.33	1.22	3.27	3.36	0.09	0.57	0.76
10/20/2020	7.5	0.66	0.54	0.84	1.32	1.21	3.27	3.37	0.09	0.57	0.77
10/21/2020	5.1	0.62	0.51	0.94	1.32	1.19	3.27	3.36	0.09	0.57	0.78
10/22/2020	8.0	0.55	0.39	0.92	1.32	1.23	3.29	3.38	0.08	0.57	0.77
10/23/2020	6.6	0.49	0.39	1.00	1.33	1.20	3.29	3.39	0.09	0.57	0.75
10/24/2020	6.7	0.55	0.40	0.97	1.31	1.21	3.29	3.39	0.09	0.57	0.76
10/25/2020	6.8	0.50	0.37	1.01	1.32	1.20	3.29	3.39	0.08	0.57	0.75
10/26/2020	6.6	0.45	0.36	1.04	1.32	1.19	3.29	3.39	0.08	0.57	0.76
10/27/2020	6.5	0.44	0.32	1.08	1.32	1.19	3.29	3.39	0.09	0.57	0.76
10/28/2020	6.9	0.41	0.30	1.08	1.32	1.20	3.29	3.39	0.09	0.57	0.77
10/29/2020	6.3	0.38	0.28	1.17	1.33	1.19	3.28	3.39	0.10	0.56	0.80
10/30/2020	6.6	0.45	0.29	1.11	1.32	1.20	3.28	3.38	0.10	0.56	0.80
10/31/2020	6.3	0.33	0.29	1.17	1.33	1.21	3.28	3.38	0.10	0.56	0.76
Avg	6.8	0.56	0.44	0.94	1.33	1.21	3.26	3.37	0.08	0.57	0.78
Min	5.1	0.02	0.28	0.65	1.30	1.19	3.24	3.35	0.05	0.56	0.75
Max	8.0	0.84	0.74	1.17	1.36	1.23	3.29	3.39	0.10	0.58	0.81





Disinfection CT														
Date	Pipeline CT				FW Tank CT						Compliance			
	Whitestone	Travel Time	Residual	CT	FW Tank 1	FW Tank 2	Plant	Contact Time	Free Cl <sub>2</sub>	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	Calculated	TIT-1000	Calculated	Calculated
10/1/2020	39.7	3,150	0.02	77	21.3	20.7	7.2	400	1.18	473.31	550.53	17.7	4.00	Y
10/2/2020	45.4	2,753	0.37	1009	19.7	19.1	6.3	425	1.10	466.81	1,476.08	17.0	4.00	Y
10/3/2020	60.2	2,078	0.79	1632	22.4	21.8	6.9	438	1.18	517.44	2,149.84	16.2	4.00	Y
10/4/2020	60.4	2,070	0.61	1265	24.4	23.8	6.9	477	1.18	563.76	1,828.91	16.0	4.00	Y
10/5/2020	49.4	2,530	0.59	1492	25.0	23.8	6.6	510	1.18	602.36	2,094.45	15.8	4.00	Y
10/6/2020	40.4	3,100	0.55	1689	28.9	20.7	6.8	497	1.11	553.18	2,242.67	15.7	4.00	Y
10/7/2020	41.8	2,993	0.41	1222	29.0	22.9	6.7	532	1.16	618.28	1,840.31	15.8	4.00	Y
10/8/2020	42.0	2,979	0.64	1922	28.9	22.5	6.6	532	1.20	635.68	2,557.20	15.5	4.00	Y
10/9/2020	47.2	2,652	0.74	1953	29.0	21.3	6.8	508	1.21	614.52	2,567.88	15.2	4.00	Y
10/10/2020	67.0	1,868	0.80	1502	29.0	24.8	6.4	580	1.20	693.19	2,194.96	15.2	4.00	Y
10/11/2020	67.3	1,860	0.84	1556	29.0	24.1	6.7	542	1.19	644.87	2,200.70	15.0	6.00	Y
10/12/2020	59.4	2,106	0.75	1570	29.0	23.6	6.5	555	1.20	668.02	2,237.84	15.0	4.00	Y
10/13/2020	44.5	2,810	0.52	1447	29.0	23.0	6.1	588	1.17	686.85	2,134.26	15.1	4.00	Y
10/14/2020	38.3	3,264	0.50	1627	29.0	24.3	6.7	550	1.16	638.39	2,265.03	15.1	4.00	Y
10/15/2020	37.5	3,340	0.63	2108	29.0	22.3	6.7	527	1.20	629.90	2,738.34	15.0	6.00	Y
10/16/2020	40.0	3,125	0.67	2106	29.0	22.3	6.7	527	1.18	619.08	2,724.76	14.8	6.00	Y
10/17/2020	51.1	2,448	0.71	1742	29.0	23.6	6.0	603	1.18	712.74	2,454.67	14.6	6.00	Y
10/18/2020	51.3	2,440	0.75	1837	28.9	24.5	5.4	676	1.18	794.23	2,630.76	14.4	6.00	Y
10/19/2020	45.3	2,764	0.73	2017	28.9	23.5	7.3	494	1.18	580.29	2,597.12	14.1	6.00	Y
10/20/2020	39.8	3,144	0.66	2076	29.0	24.0	7.2	507	1.15	584.78	2,661.22	13.9	6.00	Y
10/21/2020	38.9	3,217	0.62	2008	28.5	10.1	5.4	486	1.13	547.91	2,556.03	13.8	6.00	Y
10/22/2020	36.2	3,453	0.55	1912	29.0	11.9	7.1	396	1.20	473.61	2,385.44	13.6	6.00	Y
10/23/2020	37.3	3,350	0.49	1646	29.0	23.8	6.4	568	1.18	671.50	2,317.48	13.5	6.00	Y
10/24/2020	45.7	2,734	0.55	1509	29.0	24.0	6.5	562	1.19	669.07	2,178.56	13.4	6.00	Y
10/25/2020	45.9	2,726	0.50	1372	29.0	23.3	6.5	551	1.18	651.64	2,023.27	13.2	6.00	Y
10/26/2020	39.8	3,143	0.45	1410	29.0	24.0	6.3	576	1.18	676.43	2,086.85	13.1	6.00	Y
10/27/2020	38.2	3,271	0.44	1427	29.0	23.7	6.2	586	1.17	684.52	2,111.37	12.9	6.00	Y
10/28/2020	38.4	3,260	0.41	1324	29.0	24.1	6.7	544	1.18	642.65	1,966.99	12.8	6.00	Y
10/29/2020	40.4	3,094	0.38	1188	29.0	23.5	6.0	600	1.18	704.67	1,892.60	12.6	6.00	Y
10/30/2020	40.6	3,081	0.45	1391	29.0	23.6	6.3	569	1.19	676.61	2,068.10	12.4	6.00	Y
10/31/2020	52.1	2,401	0.33	801	28.9	23.2	5.9	602	1.18	711.43	1,512.47	12.2	6.00	Y
Avg	45.9	2,813	0.56	1,543	27.9	22.3	6.5	532	1.18	626.06	2,169.25	14.5	5.16	NA
Min	36.2	1,860	0.02	77	19.7	10.1	5.4	396	1.10	466.81	550.53	12.2	4.00	NA
Max	67.3	3,453	0.84	2,108	29.0	24.8	7.3	676	1.21	794.23	2,738.34	17.7	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 Cl<sub>2</sub>)

WSSN:	0072	0390				0400			0470							0485				0517	0518		2180	
	Akron	Bangor Twp.				Bangor Monitor Dist.			Bay City							Bay County				Beaver Rd	Beaver Twp		Essexville	
Date	1	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18	19	20	22	24	26	29	30	32
10/1/2020	0.04			0.14	1.10	0.79	1.01									0.66	0.71	0.76	0.50	0.13				
10/2/2020																								
10/3/2020																								
10/4/2020																								
10/5/2020																								
10/6/2020									0.67	0.24	0.48	0.63	0.15	1.08	0.54							0.05		1.03
10/7/2020																								
10/8/2020		0.71	0.25	0.12	1.11			0.98	0.72	0.19	0.39	0.67	0.16	0.98	0.53									
10/9/2020																								
10/10/2020																								
10/11/2020																								
10/12/2020																					1.00		0.05	1.11
10/13/2020																								
10/14/2020									0.67	0.17	0.37	0.65	0.16	0.94	0.46									
10/15/2020		0.19	0.29	0.15	1.10											0.90	0.92	1.02	0.77	0.98				
10/16/2020																								
10/17/2020																								
10/18/2020																								
10/19/2020																								1.11
10/20/2020									0.72	0.23	0.39	0.70	0.05	0.97	0.67									
10/21/2020																								
10/22/2020																								
10/23/2020																								
10/24/2020																								
10/25/2020																								
10/26/2020									0.92	0.22	0.33	0.54	0.32	0.94	0.38									1.21
10/27/2020																								
10/28/2020									0.67	0.25	0.59	0.57	0.18	0.86	0.41									
10/29/2020																								
10/30/2020																								
10/31/2020																								
Average	0.04			0.52			0.93					0.52						0.74			1.00		0.05	1.12
Min	0.04			0.12			0.79					0.05						0.13			1.00		0.05	1.03
Max	0.04			1.11			1.01					1.08						1.02			1.00		0.05	1.21



**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 Cl<sub>2</sub>)

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
10/1/2020												0.01	0.93	0.39	0.58					0.01				0.11
10/2/2020																								
10/3/2020																								
10/4/2020																								
10/5/2020			0.22	0.43	0.35																			
10/6/2020	0.39	0.49				0.90	0.29		0.50							0.21		0.41	0.49			0.32	0.28	0.09
10/7/2020													0.98	0.67	0.64									
10/8/2020																								
10/9/2020																								
10/10/2020																								
10/11/2020																								
10/12/2020																								
10/13/2020								0.96	0.89							0.49					0.27	0.38	0.08	
10/14/2020																								
10/15/2020										0.29														
10/16/2020			0.71	0.39	0.45																			
10/17/2020																								
10/18/2020																								
10/19/2020																								
10/20/2020			0.86	0.69	0.50																			
10/21/2020																								
10/22/2020																								
10/23/2020																								
10/24/2020																								
10/25/2020																								
10/26/2020			0.54																					
10/27/2020																								
10/28/2020																								
10/29/2020																								
10/30/2020																								
10/31/2020																								
Average	0.44		0.51			0.72			0.70		0.15		0.70			0.35		0.45		0.01		0.24		0.11
Min	0.39		0.22			0.29			0.50		0.01		0.39			0.21		0.41		0.01		0.08		0.11
Max	0.49		0.86			0.96			0.89		0.29		0.98			0.49		0.49		0.01		0.38		0.11



**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 Commisison, 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 St
- 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				Name of Water Supply			
MICHIGAN DEPARTMENT OF PUBLIC HEALTH				Bay Area Water Treatment Plant			
Bureau of Environmental Health				October, 2020			
Water Supplier Bacteriological Analysis Report				DISTRIBUTION SYSTEM SAMPLES			
COUNTY	COMMUNITY	WSSN NUMBER	avg free cl2 mg/L	NUMBER REQUIRED	NUMBER COLLECTED	NUMBER POSITIVE	NUMBER REPEAT SAMPLES
Tuscola	Akron	0072	0.04	1	1	0	0
BAY	Bangor Township	0390	0.52	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	0.93	3	3	0	0
BAY	Bay City	0470	0.52	40	42	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.74	10	10	0	0
BAY	Beaver Road Area	0517	1.00	1	1	0	0
BAY	Beaver Township	0518	0.05	2	2	0	0
BAY	Essexville	2180	1.12	4	4	0	0
BAY	Fraser Township	2465	0.44	2	2	0	0
BAY	Hampton Township	2960	0.51	10	10	0	0
BAY	Kawkawlin Township	3565	0.72	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.70	2	2	0	0
BAY	Merritt Township	4280	0.15	2	2	0	0
BAY	Monitor Township	4440	0.70	6	6	0	0
BAY	City of Pinconning	5330	0.35	2	2	0	0
BAY	Pinconning Township	5335	0.45	2	2	0	0
BAY	Portsmouth Township	5540	0.01	1	1	0	0
BAY	Williams Township	7125	0.24	6	6	0	0
Tuscola	Wisner	7134	0.11	1	1	0	0
Average Free Cl2 Residual of All Distribution Sites			0.49	mg/L			
1. Total distribution samples			110				
2. Total distribution samples with detectable free cl2 residual			107				
3. Total distribution samples with no detectable free cl2 residual			3				
4. Total distribution samples with no detectable free cl2 residual and HPC was <500			3				
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%				

