

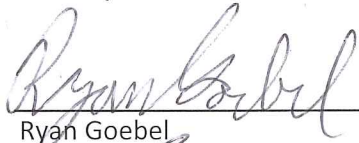
# Bay Area WTP

## Monthly Operations Report



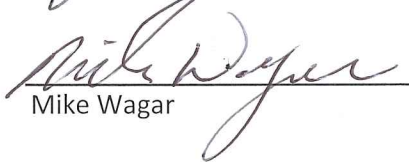
December, 2021

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

December, 2021  
 Month, Year

F-1  
 Water Plant Classification

Bay  
 County

Ryan Goebel  
 Operator-in-charge

F-1  
 Certification of Operator-in-charge

### Treatment Rate and Membrane Data

Treatment Rate, Approved Rated Plant Capacity	<u>17.4</u>	Millions of Gallons per Day
Treatment Rate, Maximum	<u>7.3</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>17.46</u>	PSI
Maximum Approved Flux Rate	<u>36.25</u>	gpd/sq.ft.
Maximum Operating Flux Rate	<u>29.01</u>	gpd/sq.ft.

### Chemical Data

Sodium Hypochlorite on hand:	<u>9,771</u>	Gallons	Estimated Supply: <u>225.5</u> days
Caustic Soda on hand:	<u>4,142</u>	Gallons	Estimated Supply: <u>222.0</u> days
Corrosion Inhibitor on hand:	<u>592</u>	Gallons	Estimated Supply: <u>27.5</u> days
Hydrofluosilicic Acid on hand:	<u>2,424</u>	Gallons	Estimated Supply: <u>131.2</u> days
Aluminum Chlorohydrate on hand:	<u>1,082</u>	Gallons	Estimated Supply: <u>110.4</u> days
Sulfuric Acid on hand:	<u>662</u>	Gallons	Estimated Supply: <u>260.9</u> days
Sodium Bisulfite on hand:	<u>762</u>	Gallons	Estimated Supply: <u>122.1</u> days
Citric Acid on hand:	<u>2,740</u>	Gallons	Estimated Supply: <u>289.6</u> days
Cost of All Chemicals per Million Gallons:	<u>72.34</u>	Dollars	
Estimated Electrical Cost per Million Gallons:	<u>65.17</u>	Dollars	
Estimated Natural Gas Cost per Million Gallons:	<u>19.51</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

# 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
12/1/2021	0.00	7.28	7.28	0.24	0.08	7.15	3.53	3.25	6.79
12/2/2021	0.00	6.14	6.14	0.25	0.08	6.62	3.30	3.12	6.43
12/3/2021	0.00	6.19	6.19	0.24	0.08	6.81	3.32	3.08	6.41
12/4/2021	0.00	7.08	7.08	0.24	0.08	6.97	3.46	3.20	6.66
12/5/2021	0.00	7.19	7.19	0.25	0.08	6.99	3.45	3.28	6.72
12/6/2021	0.00	7.32	7.32	0.24	0.08	6.80	3.31	3.18	6.49
12/7/2021	0.00	7.02	7.02	0.23	0.08	6.76	3.31	3.21	6.52
12/8/2021	0.00	6.66	6.66	0.25	0.08	7.06	3.41	3.27	6.68
12/9/2021	0.00	7.15	7.15	0.25	0.08	7.07	3.41	3.27	6.68
12/10/2021	0.00	7.32	7.32	0.25	0.08	7.23	3.57	3.36	6.93
12/11/2021	0.00	6.81	6.81	0.26	0.08	7.32	3.54	3.37	6.91
12/12/2021	0.00	7.20	7.20	0.24	0.08	6.85	3.35	3.25	6.60
12/13/2021	0.00	6.86	6.86	0.25	0.08	6.79	3.31	3.19	6.49
12/14/2021	0.00	7.22	7.22	0.27	0.08	7.17	3.47	3.33	6.80
12/15/2021	0.00	7.32	7.32	0.26	0.08	7.00	3.32	3.29	6.61
12/16/2021	0.00	6.51	6.51	0.24	0.08	6.68	3.27	3.18	6.45
12/17/2021	0.00	6.47	6.47	0.23	0.08	6.67	3.22	3.16	6.38
12/18/2021	0.00	6.75	6.75	0.25	0.08	7.02	3.29	3.30	6.59
12/19/2021	0.00	6.87	6.87	0.24	0.08	6.78	3.25	3.27	6.53
12/20/2021	0.00	7.16	7.16	0.26	0.08	7.16	3.46	3.27	6.73
12/21/2021	0.00	7.33	7.33	0.27	0.08	6.98	3.49	3.25	6.74
12/22/2021	0.00	7.04	7.04	0.27	0.07	6.91	3.51	3.21	6.71
12/23/2021	0.00	6.86	6.86	0.27	0.08	7.27	3.60	3.30	6.91
12/24/2021	0.00	7.11	7.11	0.26	0.08	6.88	3.39	3.20	6.58
12/25/2021	0.00	6.51	6.51	0.24	0.08	6.48	3.10	3.00	6.11
12/26/2021	0.00	6.69	6.69	0.28	0.08	6.87	3.34	3.25	6.60
12/27/2021	0.00	6.96	6.96	0.25	0.08	6.65	3.23	3.09	6.32
12/28/2021	0.00	6.70	6.70	0.26	0.08	6.78	3.21	3.19	6.40
12/29/2021	0.00	6.44	6.44	0.26	0.08	6.94	3.36	3.25	6.61
12/30/2021	0.00	6.81	6.81	0.26	0.08	6.77	3.25	3.18	6.43
12/31/2021	0.00	6.96	6.96	0.26	0.08	6.86	3.27	3.19	6.47
Total	0.00	213.93	213.93	7.80	2.37	214.29	104.32	99.96	204.28
Avg	0.00	6.90	6.90	0.25	0.08	6.91	3.37	3.22	6.59
Min	0.00	6.14	6.14	0.23	0.07	6.48	3.10	3.00	6.11
Max	0.00	7.33	7.33	0.28	0.08	7.32	3.60	3.37	6.93



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	
12/1/2021	8.7	7.80	0.72	2.64	0.09	0.49	Negative	Negative
12/2/2021	8.5	7.80	0.61	1.65	0.08	0.50	Negative	Negative
12/3/2021	8.4	7.80	0.62	1.22	0.09	0.51	Negative	Negative
12/4/2021	8.4	7.77	0.71	1.34	0.08	0.56	Negative	Negative
12/5/2021	8.5	7.76	0.73	1.30	0.08	0.56	Negative	Negative
12/6/2021	8.5	7.76	0.50	0.79	0.08	0.57	Negative	Negative
12/7/2021	8.4	7.77	0.91	7.27	0.08	0.48	Negative	Negative
12/8/2021	8.3	7.77	0.93	1.56	0.08	0.47	Negative	Negative
12/9/2021	8.3	7.75	0.58	0.81	0.09	0.54	Negative	Negative
12/10/2021	8.3	7.76	0.53	0.66	0.08	0.52	Negative	Negative
12/11/2021	8.0	7.77	0.64	1.09	0.08	0.51	Negative	Negative
12/12/2021	8.0	7.76	1.41	3.71	0.09	0.51	Negative	Negative
12/13/2021	8.1	7.75	1.81	4.63	0.10	0.48	Negative	Negative
12/14/2021	8.1	7.76	0.89	6.60	0.08	0.50	Negative	Negative
12/15/2021	8.0	7.76	0.60	3.30	0.09	0.55	Negative	Negative
12/16/2021	7.9	7.76	0.51	1.65	0.08	0.54	Negative	Negative
12/17/2021	7.8	7.76	0.60	0.84	0.08	0.52	Negative	Negative
12/18/2021	7.9	7.75	1.13	2.26	0.08	0.53	Negative	Negative
12/19/2021	8.0	7.75	0.99	1.91	0.09	0.56	Negative	Negative
12/20/2021	7.7	7.75	1.80	7.86	0.09	0.52	Negative	Negative
12/21/2021	7.4	7.76	1.06	3.10	0.08	0.49	Negative	Negative
12/22/2021	7.6	7.77	1.43	3.13	0.08	0.44	Negative	Negative
12/23/2021	7.9	7.76	0.61	1.37	0.10	0.50	Negative	Negative
12/24/2021	7.8	7.76	0.46	1.49	0.07	0.54	Negative	Negative
12/25/2021	7.9	7.75	0.41	0.86	0.08	0.57	Negative	Negative
12/26/2021	7.9	7.75	0.50	1.27	0.09	0.57	Negative	Negative
12/27/2021	7.3	7.75	0.57	1.20	0.09	0.58	Negative	Negative
12/28/2021	6.7	7.78	0.36	1.00	0.08	0.48	Negative	Negative
12/29/2021	6.6	7.78	1.07	1.86	0.09	0.42	Negative	Negative
12/30/2021	6.6	7.78	0.80	1.20	0.09	0.44	Negative	Negative
12/31/2021	6.4	7.78	0.60	0.89	0.08	0.46	Negative	Negative
Avg	7.9	7.77	0.81	2.27	0.08	0.51	NA	NA
Min	6.4	7.75	0.36	0.66	0.07	0.42	NA	NA
Max	8.7	7.80	1.81	7.86	0.10	0.58	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			Lab	
12/1/2021	8.2	7.70	3.37	0.76		1.08	0	78	12	11	72	11.2	229	-0.79	1.09	0.45	Negative	Negative
12/2/2021	8.1	7.72	3.37	0.78		1.00	0	79	10	9	74	11.3	226	-0.76	1.11	0.37	Negative	Negative
12/3/2021	8.0	7.71	3.36	0.79		1.01	0	78	10	8	74	11.7	229	-0.78	1.25	0.35	Negative	Negative
12/4/2021	7.9	7.71	3.36	0.78		1.01	0	78	10	9	72	11.1	229	-0.79	1.11	0.37	Negative	Negative
12/5/2021	8.0	7.70	3.37	0.79		1.01	0	78	10	9	74	11.7	225	-0.78	1.11	0.37	Negative	Negative
12/6/2021	8.0	7.71	3.37	0.78	0.75	1.05	0	77	9	8	74	11.2	226	-0.78	1.13	0.34	Negative	Negative
12/7/2021	7.9	7.71	3.44	0.78		1.03	0	78	10	8	74	11.5	221	-0.78	1.25	0.35	Negative	Negative
12/8/2021	7.9	7.70	3.44	0.78		1.01	0	71	10	8	72	11.0	225	-0.84	1.25	0.39	Negative	Negative
12/9/2021	7.9	7.69	3.41	0.81		1.00	0	76	9	9	68	13.5	231	-0.85	1.00	0.36	Negative	Negative
12/10/2021	7.9	7.69	3.41	0.79		1.01	0	78	10	9	68	12.8	227	-0.84	1.11	0.37	Negative	Negative
12/11/2021	7.8	7.69	3.41	0.80		1.02	0	78	9	10	74	11.0	230	-0.80	0.90	0.36	Negative	Negative
12/12/2021	7.7	7.71	3.41	0.79		1.01	0	76	9	9	70	11.5	229	-0.82	1.00	0.36	Negative	Negative
12/13/2021	7.6	7.71	3.40	0.79	0.80	1.01	0	78	9	10	70	11.9	227	-0.81	0.90	0.36	Negative	Negative
12/14/2021	7.5	7.70	3.40	0.79		1.01	0	76	9	10	66	11.7	230	-0.87	0.90	0.37	Negative	Negative
12/15/2021	7.4	7.69	3.40	0.77		1.01	0	78	12	10	78	11.8	229	-0.78	1.20	0.43	Negative	Negative
12/16/2021	7.5	7.58	3.40	0.76		1.03	0	77	10	9	72	10.8	230	-0.94	1.11	0.37	Negative	Negative
12/17/2021	7.4	7.54	3.40	0.77		1.02	0	76	9	9	74	12.2	228	-0.97	1.00	0.36	Negative	Negative
12/18/2021	7.3	7.54	3.40	0.76		1.02	0	76	10	9	72	12.1	228	-0.99	1.11	0.38	Negative	Negative
12/19/2021	7.1	7.54	3.40	0.77		1.02	0	76	9	8	72	12.2	232	-1.00	1.13	0.34	Negative	Negative
12/20/2021	7.1	7.55	3.39	0.76	0.74	1.01	0	77	10	9	72	12.1	231	-0.98	1.11	0.37	Negative	Negative
12/21/2021	6.8	7.55	3.39	0.75		1.01	0	77	10	9	74	11.8	236	-0.98	1.11	0.37	Negative	Negative
12/22/2021	6.8	7.56	3.39	0.75		1.00	0	80	10	8	80	11.4	227	-0.91	1.25	0.34	Negative	Negative
12/23/2021	6.8	7.55	3.39	0.79		1.01	0	78	10	11	72	10.9	238	-0.98	0.91	0.40	Negative	Negative
12/24/2021	6.7	7.54	3.39	0.75		1.01	0	78	9	11	70	11.7	237	-1.00	0.82	0.38	Negative	Negative
12/25/2021	6.9	7.54	3.38	0.78		0.98	0	78	9	10	72	12.1	233	-0.99	0.90	0.36	Negative	Negative
12/26/2021	7.0	7.53	3.38	0.77		1.03	0	76	9	8	72	11.6	232	-1.00	1.13	0.34	Negative	Negative
12/27/2021	6.3	7.54	3.39	0.77	0.73	1.01	0	77	9	9	72	11.4	231	-1.01	1.00	0.35	Negative	Negative
12/28/2021	5.6	7.54	3.37	0.74		1.01	0	78	9	9	68	11.9	229	-1.04	1.00	0.35	Negative	Negative
12/29/2021	5.6	7.54	3.38	0.73		1.01	0	79	10	10	70	12.1	232	-1.03	1.00	0.38	Negative	Negative
12/30/2021	5.5	7.54	3.38	0.76		1.01	0	75	10	8	70	11.7	227	-1.05	1.25	0.37	Negative	Negative
12/31/2021	5.4	7.54	3.38	0.75		1.02	0	75	10	7	72	11.4	229	-1.04	1.43	0.35	Negative	Negative
Avg	7.2	7.62	3.39	0.77	0.76	1.02	0	77	10	9	72	11.7	229	-0.90	1.08	0.37	NA	NA
Min	5.4	7.53	3.36	0.73	0.73	0.98	0	71	9	7	66	10.8	221	-1.05	0.82	0.34	NA	NA
Max	8.2	7.72	3.44	0.81	0.80	1.08	0	80	12	11	80	13.5	238	-0.76	1.43	0.45	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	
12/1/2021	0.72	2.64	1.92	0.72	0.022	0.022	96	0	0.0	0.017
12/2/2021	0.61	1.65	2.46	0.76	0.022	0.022	96	0	0.0	0.017
12/3/2021	0.62	1.22	2.73	0.71	0.022	0.022	96	0	0.0	0.017
12/4/2021	0.71	1.34	2.55	0.73	0.022	0.022	96	0	0.0	0.017
12/5/2021	0.73	1.30	2.23	0.72	0.022	0.022	96	0	0.0	0.017
12/6/2021	0.50	0.79	2.56	0.60	0.022	0.022	96	0	0.0	0.017
12/7/2021	0.91	7.27	1.10	0.65	0.022	0.022	96	0	0.0	0.017
12/8/2021	0.93	1.56	1.06	0.86	0.022	0.022	96	0	0.0	0.019
12/9/2021	0.58	0.81	1.14	0.85	0.021	0.021	96	0	0.0	0.020
12/10/2021	0.53	0.66	1.15	0.72	0.022	0.037	96	0	0.0	0.020
12/11/2021	0.64	1.09	1.28	0.53	0.021	0.022	96	0	0.0	0.020
12/12/2021	1.41	3.71	1.27	0.79	0.021	0.021	96	0	0.0	0.020
12/13/2021	1.81	4.63	1.11	1.29	0.021	0.021	96	0	0.0	0.020
12/14/2021	0.89	6.60	1.10	1.02	0.021	0.021	96	0	0.0	0.020
12/15/2021	0.60	3.30	1.11	0.70	0.021	0.021	96	0	0.0	0.020
12/16/2021	0.51	1.65	1.17	0.50	0.021	0.022	96	0	0.0	0.020
12/17/2021	0.60	0.84	1.25	0.47	0.021	0.021	96	0	0.0	0.020
12/18/2021	1.13	2.26	1.30	0.60	0.021	0.021	96	0	0.0	0.020
12/19/2021	0.99	1.91	1.37	0.83	0.021	0.022	96	0	0.0	0.020
12/20/2021	1.80	7.86	2.15	1.23	0.021	0.022	96	0	0.0	0.020
12/21/2021	1.06	3.10	2.56	1.09	0.021	0.022	96	0	0.0	0.020
12/22/2021	1.43	3.13	2.63	1.46	0.022	0.022	96	0	0.0	0.020
12/23/2021	0.61	1.37	1.64	1.03	0.022	0.022	96	0	0.0	0.020
12/24/2021	0.46	1.49	1.36	0.76	0.022	0.022	96	0	0.0	0.020
12/25/2021	0.41	0.86	1.35	0.56	0.021	0.022	96	0	0.0	0.020
12/26/2021	0.50	1.27	0.92	0.54	0.021	0.022	96	0	0.0	0.020
12/27/2021	0.57	1.20	1.15	0.47	0.021	0.022	96	0	0.0	0.020
12/28/2021	0.36	1.00	1.29	0.40	0.021	0.022	96	0	0.0	0.020
12/29/2021	1.07	1.86	1.61	0.64	0.021	0.022	96	0	0.0	0.020
12/30/2021	0.80	1.20	1.82	0.74	0.021	0.022	96	0	0.0	0.020
12/31/2021	0.60	0.89	1.83	0.71	0.021	0.022	96	0	0.0	0.020
Avg	0.81	2.27	1.62	0.76	0.022	0.022	96	0	0.0	0.019
Min	0.36	0.66	0.92	0.40	0.021	0.021	96	0	0.0	0.017
Max	1.81	7.86	2.73	1.46	0.022	0.037	96	0	0.0	0.020



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	Pass/Fail	Max	Average	Pass/Fail	Max	Average	Pass/Fail	Max	Average	Pass/Fail	Max	Average	Pass/Fail	Max	Average	Pass/Fail	Max	Average	Pass/Fail	Max	Average	Pass/Fail	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	
12/1/2021	4.19	PASS	0.018	4.08	PASS	0.026	4.18	PASS	0.017	4.41	PASS	0.015	4.12	PASS	0.018	4.32	PASS	0.018	4.23	PASS	0.025	4.31	PASS	0.012
12/2/2021	4.14	PASS	0.017	4.06	PASS	0.027	4.15	PASS	0.017	4.36	PASS	0.015	4.39	PASS	0.018	4.30	PASS	0.018	4.19	PASS	0.025	4.24	PASS	0.011
12/3/2021	4.06	PASS	0.017	4.07	PASS	0.028	4.50	PASS	0.017	4.38	PASS	0.015	4.33	PASS	0.018	4.29	PASS	0.018	4.17	PASS	0.025	4.22	PASS	0.012
12/4/2021	4.30	PASS	0.018	4.07	PASS	0.029	4.39	PASS	0.017	4.38	PASS	0.015	4.28	PASS	0.018	4.32	PASS	0.018	4.17	PASS	0.025	4.21	PASS	0.012
12/5/2021	4.20	PASS	0.017	4.08	PASS	0.027	4.40	PASS	0.017	4.36	PASS	0.015	4.21	PASS	0.018	4.35	PASS	0.018	4.22	PASS	0.025	4.23	PASS	0.012
12/6/2021	4.17	PASS	0.017	4.09	PASS	0.026	4.35	PASS	0.017	4.43	PASS	0.015	4.20	PASS	0.018	4.33	PASS	0.018	4.22	PASS	0.025	4.22	PASS	0.012
12/7/2021	4.14	PASS	0.017	4.07	PASS	0.025	4.34	PASS	0.017	4.42	PASS	0.015	4.23	PASS	0.018	4.31	PASS	0.018	4.22	PASS	0.025	4.21	PASS	0.012
12/8/2021	4.11	PASS	0.017	4.05	PASS	0.027	4.45	PASS	0.018	4.44	PASS	0.015	4.20	PASS	0.018	4.28	PASS	0.018	4.21	PASS	0.025	4.18	PASS	0.012
12/9/2021	4.07	PASS	0.017	4.05	PASS	0.027	4.33	PASS	0.017	4.36	PASS	0.015	4.17	PASS	0.018	4.28	PASS	0.018	4.20	PASS	0.025	4.19	PASS	0.012
12/10/2021	4.07	PASS	0.017	4.05	PASS	0.024	4.32	PASS	0.017	4.34	PASS	0.014	4.16	PASS	0.018	4.30	PASS	0.019	4.20	PASS	0.025	4.20	PASS	0.011
12/11/2021	4.08	PASS	0.017	4.04	PASS	0.027	4.30	PASS	0.017	4.33	PASS	0.015	4.19	PASS	0.018	4.27	PASS	0.019	4.24	PASS	0.025	4.18	PASS	0.011
12/12/2021	4.08	PASS	0.017	4.08	PASS	0.024	4.31	PASS	0.017	4.35	PASS	0.015	4.24	PASS	0.018	4.27	PASS	0.019	4.23	PASS	0.025	4.18	PASS	0.012
12/13/2021	4.10	PASS	0.017	4.06	PASS	0.029	4.32	PASS	0.017	4.30	PASS	0.015	4.23	PASS	0.019	4.27	PASS	0.018	4.22	PASS	0.025	4.17	PASS	0.012
12/14/2021	4.09	PASS	0.017	4.04	PASS	0.027	4.32	PASS	0.017	4.33	PASS	0.014	4.21	PASS	0.018	4.27	PASS	0.018	4.22	PASS	0.024	4.21	PASS	0.012
12/15/2021	4.15	PASS	0.017	4.02	PASS	0.025	4.31	PASS	0.017	4.36	PASS	0.015	4.20	PASS	0.018	4.29	PASS	0.018	4.21	PASS	0.024	4.20	PASS	0.012
12/16/2021	4.12	PASS	0.016	4.05	PASS	0.034	4.29	PASS	0.017	4.34	PASS	0.014	4.19	PASS	0.018	4.29	PASS	0.019	4.25	PASS	0.024	4.20	PASS	0.012
12/17/2021	4.10	PASS	0.016	4.04	PASS	0.026	4.29	PASS	0.017	4.36	PASS	0.014	4.20	PASS	0.018	4.23	PASS	0.019	4.24	PASS	0.025	4.20	PASS	0.011
12/18/2021	4.10	PASS	0.018	4.02	PASS	0.025	4.29	PASS	0.017	4.34	PASS	0.014	4.24	PASS	0.018	4.24	PASS	0.018	4.26	PASS	0.025	4.19	PASS	0.010
12/19/2021	4.11	PASS	0.016	4.01	PASS	0.026	4.27	PASS	0.018	4.32	PASS	0.014	4.24	PASS	0.018	4.27	PASS	0.018	4.26	PASS	0.025	4.19	PASS	0.012
12/20/2021	4.08	PASS	0.038	4.21	PASS	0.030	4.24	PASS	0.023	4.28	PASS	0.018	4.16	PASS	0.023	4.26	PASS	0.023	4.25	PASS	0.032	4.17	PASS	0.029
12/21/2021	4.09	PASS	0.025	4.24	PASS	0.029	4.22	PASS	0.023	4.32	PASS	0.018	4.18	PASS	0.023	4.28	PASS	0.023	4.24	PASS	0.030	4.18	PASS	0.023
12/22/2021	4.04	PASS	0.024	4.17	PASS	0.030	4.21	PASS	0.024	4.36	PASS	0.021	4.14	PASS	0.023	4.29	PASS	0.027	4.22	PASS	0.031	4.22	PASS	0.022
12/23/2021	4.02	PASS	0.023	4.16	PASS	0.029	4.22	PASS	0.023	4.33	PASS	0.021	4.16	PASS	0.023	4.28	PASS	0.024	4.18	PASS	0.033	4.18	PASS	0.023
12/24/2021	4.04	PASS	0.022	4.13	PASS	0.029	4.23	PASS	0.023	4.29	PASS	0.018	4.13	PASS	0.023	4.24	PASS	0.023	4.22	PASS	0.032	4.17	PASS	0.033
12/25/2021	4.04	PASS	0.018	4.11	PASS	0.030	4.23	PASS	0.024	4.31	PASS	0.017	4.13	PASS	0.026	4.26	PASS	0.024	4.19	PASS	0.033	4.18	PASS	0.026
12/26/2021	4.03	PASS	0.019	4.13	PASS	0.033	4.24	PASS	0.024	4.33	PASS	0.018	4.15	PASS	0.023	4.28	PASS	0.023	4.21	PASS	0.032	4.18	PASS	0.024
12/27/2021	4.12	PASS	0.020	4.10	PASS	0.028	4.22	PASS	0.023	4.30	PASS	0.018	4.14	PASS	0.025	4.28	PASS	0.023	4.39	PASS	0.032	4.18	PASS	0.023
12/28/2021	4.12	PASS	0.021	4.12	PASS	0.028	4.26	PASS	0.023	4.29	PASS	0.017	4.15	PASS	0.026	4.28	PASS	0.023	4.60	PASS	0.032	4.17	PASS	0.028
12/29/2021	4.07	PASS	0.021	4.09	PASS	0.029	4.26	PASS	0.022	4.32	PASS	0.017	4.14	PASS	0.023	4.26	PASS	0.023	4.27	PASS	0.032	4.19	PASS	0.028
12/30/2021	4.07	PASS	0.021	4.10	PASS	0.028	4.29	PASS	0.022	4.30	PASS	0.017	4.16	PASS	0.024	4.26	PASS	0.023	4.29	PASS	0.032	4.22	PASS	0.024
12/31/2021	4.07	PASS	0.021	4.11	PASS	0.028	4.27	PASS	0.022	4.29	PASS	0.019	4.18	PASS	0.025	4.26	PASS	0.023	4.31	PASS	0.032	4.21	PASS	0.025
Avg	4.10		0.019	4.09		0.028	4.29		0.020	4.34		0.016	4.19		0.020	4.28		0.020	4.24		0.027	4.20		0.017
Min	4.02		0.016	4.01		0.024	4.15		0.017	4.28		0.014	4.12		0.018	4.23		0.018	4.17		0.024	4.17		0.010
Max	4.30		0.038	4.24		0.034	4.50		0.024	4.44		0.021	4.39		0.026	4.35		0.027	4.60		0.033	4.31		0.033

\*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
12/1/2021	7.2	0.49	0.41	0.98	1.10	1.08	3.29	3.37	0.09	0.63	0.76
12/2/2021	6.6	0.50	0.39	1.06	1.09	1.00	3.29	3.37	0.08	0.63	0.78
12/3/2021	6.8	0.51	0.40	1.04	1.09	1.01	3.29	3.36	0.09	0.63	0.79
12/4/2021	7.0	0.56	0.43	1.04	1.09	1.01	3.29	3.36	0.08	0.63	0.78
12/5/2021	7.0	0.56	0.44	1.02	1.10	1.01	3.29	3.37	0.08	0.63	0.79
12/6/2021	6.8	0.57	0.44	0.66	1.13	1.05	3.29	3.37	0.08	0.63	0.78
12/7/2021	6.8	0.48	0.44	0.66	1.08	1.03	3.24	3.44	0.08	0.63	0.77
12/8/2021	7.1	0.47	0.41	0.64	1.06	1.01	3.22	3.44	0.08	0.63	0.78
12/9/2021	7.1	0.54	0.43	0.64	1.07	1.00	3.21	3.41	0.09	0.63	0.81
12/10/2021	7.2	0.52	0.45	0.62	1.07	1.01	3.21	3.41	0.08	0.63	0.79
12/11/2021	7.3	0.51	0.44	0.62	1.07	1.02	3.21	3.41	0.08	0.63	0.80
12/12/2021	6.8	0.51	0.45	0.64	1.07	1.01	3.21	3.41	0.09	0.63	0.79
12/13/2021	6.8	0.48	0.42	0.67	1.07	1.01	3.21	3.40	0.10	0.62	0.79
12/14/2021	7.2	0.50	0.42	0.66	1.07	1.01	3.21	3.40	0.08	0.62	0.79
12/15/2021	7.0	0.55	0.45	0.62	1.08	1.01	3.21	3.40	0.09	0.62	0.77
12/16/2021	6.7	0.54	0.47	0.64	1.09	1.03	3.21	3.40	0.08	0.62	0.76
12/17/2021	6.7	0.52	0.47	0.62	1.07	1.02	3.21	3.40	0.08	0.62	0.77
12/18/2021	7.0	0.53	0.47	0.62	1.08	1.02	3.21	3.40	0.08	0.62	0.76
12/19/2021	6.8	0.56	0.47	0.62	1.08	1.02	3.21	3.40	0.09	0.62	0.77
12/20/2021	7.2	0.52	0.47	0.62	1.07	1.01	3.21	3.39	0.09	0.62	0.76
12/21/2021	7.0	0.49	0.45	0.64	1.07	1.01	3.21	3.39	0.08	0.62	0.75
12/22/2021	6.9	0.44	0.40	0.69	1.06	1.00	3.21	3.39	0.08	0.62	0.75
12/23/2021	7.3	0.50	0.42	0.68	1.08	1.01	3.21	3.39	0.10	0.62	0.79
12/24/2021	6.9	0.54	0.44	0.65	1.07	1.01	3.21	3.39	0.07	0.62	0.75
12/25/2021	6.5	0.57	0.47	0.72	1.05	0.98	3.21	3.38	0.08	0.62	0.78
12/26/2021	6.9	0.57	0.49	0.66	1.10	1.03	3.21	3.38	0.09	0.62	0.77
12/27/2021	6.7	0.58	0.50	0.64	1.07	1.01	3.21	3.39	0.09	0.62	0.77
12/28/2021	6.8	0.48	0.48	0.70	1.08	1.01	3.21	3.37	0.08	0.62	0.74
12/29/2021	6.9	0.42	0.41	0.72	1.06	1.01	3.21	3.38	0.09	0.63	0.73
12/30/2021	6.8	0.44	0.38	0.76	1.08	1.01	3.21	3.38	0.09	0.63	0.76
12/31/2021	6.9	0.46	0.37	0.76	1.08	1.02	3.21	3.38	0.08	0.63	0.75
Avg	6.9	0.51	0.44	0.72	1.08	1.02	3.23	3.39	0.08	0.62	0.77
Min	6.5	0.42	0.37	0.62	1.05	0.98	3.21	3.36	0.07	0.62	0.73
Max	7.3	0.58	0.50	1.06	1.13	1.08	3.29	3.44	0.10	0.63	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	TIT-1000	Calculated	Calculated
12/1/2021	40.3	3,107	0.49	1517	28.7	23.9	6.8	532	1.01	537	2054	8.7	8.00	Y
12/2/2021	39.7	3,150	0.50	1574	28.7	22.9	6.4	550	0.99	544	2118	8.5	8.00	Y
12/3/2021	40.3	3,100	0.51	1592	28.7	23.1	6.4	554	0.99	548	2139	8.4	8.00	Y
12/4/2021	54.6	2,293	0.56	1286	28.7	24.8	6.7	551	0.98	541	1827	8.4	8.00	Y
12/5/2021	51.1	2,450	0.56	1383	28.7	24.8	6.7	545	1.00	543	1926	8.5	8.00	Y
12/6/2021	43.4	2,885	0.57	1654	28.7	24.2	6.5	558	1.01	563	2218	8.5	8.00	Y
12/7/2021	37.6	3,327	0.48	1606	28.7	23.1	6.5	545	1.00	545	2151	8.4	8.00	Y
12/8/2021	38.2	3,276	0.47	1536	28.7	23.1	6.7	532	0.99	528	2064	8.3	8.00	Y
12/9/2021	41.3	3,025	0.54	1630	28.7	23.3	6.7	534	0.98	522	2152	8.3	8.00	Y
12/10/2021	45.2	2,770	0.52	1450	28.7	23.0	6.9	511	0.99	507	1957	8.3	8.00	Y
12/11/2021	53.1	2,356	0.51	1203	28.7	22.9	6.9	513	0.98	502	1705	8.0	8.00	Y
12/12/2021	51.3	2,437	0.51	1255	28.7	23.8	6.6	545	1.00	545	1800	8.0	8.00	Y
12/13/2021	40.5	3,088	0.48	1480	28.7	22.6	6.5	541	0.99	537	2017	8.1	8.00	Y
12/14/2021	39.1	3,199	0.50	1595	28.7	23.2	6.8	523	0.99	519	2114	8.1	8.00	Y
12/15/2021	37.2	3,366	0.55	1854	28.7	24.2	6.6	548	0.98	536	2390	8.0	8.00	Y
12/16/2021	34.3	3,651	0.54	1962	28.7	23.8	6.4	558	1.01	562	2523	7.9	8.00	Y
12/17/2021	38.8	3,225	0.52	1687	28.7	23.0	6.4	555	0.99	551	2238	7.8	8.00	Y
12/18/2021	54.6	2,291	0.53	1223	28.7	23.4	6.6	542	1.00	541	1764	7.9	8.00	Y
12/19/2021	53.6	2,332	0.56	1313	28.7	23.8	6.5	551	0.99	543	1856	8.0	8.00	Y
12/20/2021	44.5	2,809	0.52	1455	28.7	24.1	6.7	538	0.99	530	1985	7.7	8.00	Y
12/21/2021	39.4	3,171	0.49	1543	28.6	23.8	6.7	533	0.99	525	2068	7.4	8.00	Y
12/22/2021	39.2	3,195	0.44	1391	28.7	23.5	6.7	533	0.99	529	1921	7.6	8.00	Y
12/23/2021	40.5	3,088	0.50	1552	28.7	23.2	6.9	515	0.98	504	2056	7.9	8.00	Y
12/24/2021	41.8	2,990	0.54	1621	28.7	24.7	6.6	556	1.01	559	2180	7.8	8.00	Y
12/25/2021	50.3	2,488	0.57	1410	28.2	22.0	6.1	564	0.94	528	1938	7.9	8.00	Y
12/26/2021	44.6	2,803	0.57	1589	28.7	23.0	6.6	537	1.00	536	2125	7.9	8.00	Y
12/27/2021	40.4	3,093	0.58	1782	28.7	24.5	6.3	578	0.99	573	2356	7.3	8.00	Y
12/28/2021	38.0	3,293	0.48	1568	28.8	23.7	6.4	562	0.98	550	2117	6.7	8.00	Y
12/29/2021	38.2	3,278	0.42	1392	28.7	22.1	6.6	527	0.99	519	1912	6.6	8.00	Y
12/30/2021	36.5	3,423	0.44	1517	28.7	25.4	6.4	575	0.99	567	2084	6.6	8.00	Y
12/31/2021	39.6	3,163	0.46	1440	28.7	24.1	6.5	560	1.00	559	1999	6.4	8.00	Y
Avg	42.8	2,972	0.51	1518	28.7	23.6	6.6	544	0.99	538	2057	7.9	8.00	NA
Min	34.3	2,291	0.42	1203	28.2	22.0	6.1	511	0.94	502	1705	6.4	8.00	NA
Max	54.6	3,651	0.58	1962	28.8	25.4	6.9	578	1.01	573	2523	8.7	8.00	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
Date	Akron	Bangor Twp.				Bangor Monitor Dist.			Bay City							Bay County					Beaver Rd	Beaver Twp		Essexville
	1	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18	19	20	23	24	26	29	30	32
12/1/2021																								
12/2/2021									0.79	0.70	0.75	0.82	0.39	0.99	0.82									
12/3/2021																								
12/4/2021																								
12/5/2021																								
12/6/2021																								0.98
12/7/2021	0.21	0.68	0.38	0.49	1.01											0.87	0.81	0.88	0.79	0.56				
12/8/2021									0.79	0.56	0.65	0.77	0.35	0.91	0.69									
12/9/2021						0.97	0.91																	
12/10/2021																								
12/11/2021																								
12/12/2021																								
12/13/2021																								0.87
12/14/2021									0.81	0.51	0.52	0.76	0.45	0.91	0.83									
12/15/2021																								
12/16/2021		0.48	0.37						0.82	0.53	0.59	0.74	0.41	0.91	0.68	0.85	0.82	0.79	0.77	0.68			0.29	
12/17/2021																								
12/18/2021																								
12/19/2021																								
12/20/2021																								0.86
12/21/2021		0.73	0.48	0.53	0.97			1.00													0.91	0.41		
12/22/2021									0.68	0.49	0.63	0.74	0.40	0.94	0.68									
12/23/2021																								
12/24/2021																								
12/25/2021																								
12/26/2021																								
12/27/2021																								
12/28/2021																								0.96
12/29/2021									0.84	0.55	0.49	0.66	0.47	0.82										
12/30/2021																								
12/31/2021																								
Average	0.21		0.61					0.96				0.68					0.78				0.91	0.35		0.92
Min	0.21		0.37					0.91				0.35					0.56				0.91	0.29		0.86
Max	0.21		1.01					1.00				0.99					0.88				0.91	0.41		0.98



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         | 23. Rail Trail Pump Station, 366 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:	2465		2960			3565			3570		4280		4440			5330		5335		5540	7125			7134
Date	Fraser Twp.		Hampton Twp.			Kawkawlin Twp.			Kawkawlin Met.		Merritt Twp.		Monitor Twp.			City Pinconning		Pinconning Twp.		Portsmouth	Williams Twp.			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
12/1/2021																								
12/2/2021			0.90	0.79	0.57																			
12/3/2021																								
12/4/2021																								
12/5/2021																								
12/6/2021																								
12/7/2021			0.63	0.38	0.42							0.59								0.61				0.55
12/8/2021																								
12/9/2021	0.75	0.86				0.94	0.81		0.67				0.86	0.79	0.71	0.61		0.76	0.60					
12/10/2021																								
12/11/2021																								
12/12/2021																								
12/13/2021			0.52	0.62	0.61																			
12/14/2021																								
12/15/2021																								
12/16/2021												0.52									0.70	0.56	0.59	
12/17/2021																								
12/18/2021																								
12/19/2021																								
12/20/2021			0.60																					
12/21/2021								0.90	0.78				0.86	0.72	0.74	0.67					0.59	0.60	0.57	
12/22/2021																								
12/23/2021																								
12/24/2021																								
12/25/2021																								
12/26/2021																								
12/27/2021																								
12/28/2021																								
12/29/2021																								
12/30/2021																								
12/31/2021																								
Average	0.81		0.60			0.88			0.73		0.56		0.78			0.64		0.68		0.61		0.60		0.55
Min	0.75		0.38			0.81			0.67		0.52		0.71			0.61		0.60		0.61		0.56		0.55
Max	0.86		0.90			0.94			0.78		0.59		0.86			0.67		0.76		0.61		0.70		0.55



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 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			
				December, 2021			
COUNTY	COMMUNITY	WSSN NUMBER	DISTRIBUTION SYSTEM SAMPLES				
			avg free cl2 mg/L	NUMBER REQUIRED	NUMBER COLLECTED	NUMBER POSITIVE	NUMBER REPEAT SAMPLES
Tuscola	Akron	0072	0.21	1	1	0	0
BAY	Bangor Township	0390	0.61	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	0.96	3	3	0	0
BAY	Bay City	0470	0.68	30	41	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.78	9	10	0	0
BAY	Beaver Road Area	0517	0.91	1	1	0	0
BAY	Beaver Township	0518	0.35	2	2	0	0
BAY	Essexville	2180	0.92	4	4	0	0
BAY	Fraser Township	2465	0.81	2	2	0	0
BAY	Hampton Township	2960	0.60	10	10	0	0
BAY	Kawkawlin Township	3565	0.88	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.73	2	2	0	0
BAY	Merritt Township	4280	0.56	2	2	0	0
BAY	Monitor Township	4440	0.78	6	6	0	0
BAY	City of Pinconning	5330	0.64	2	2	0	0
BAY	Pinconning Township	5335	0.68	2	2	0	0
BAY	Portsmouth Township	5540	0.61	1	1	0	0
BAY	Williams Township	7125	0.60	6	6	0	0
Tuscola	Wisner	7134	0.55	1	1	0	0
Average Free Cl2 Residual of All Distribution Sites			0.68	mg/L			
1. Total distribution samples					109		
2. Total distribution samples with detectable free cl2 residual					109		
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%		

