


# Bay Area WTP

## Monthly Operations Report



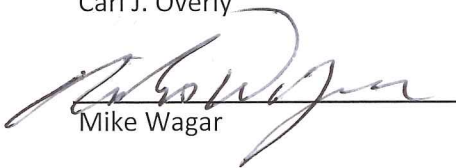
December, 2023

Water Systems Serial Number: 0465

  
\_\_\_\_\_  
Carl J. Overly

Water Plant Superintendent  
\_\_\_\_\_  
Title

F-1  
\_\_\_\_\_  
Classification

  
\_\_\_\_\_  
Mike Wagar

Operations Supervisor  
\_\_\_\_\_  
Title

F-1  
\_\_\_\_\_  
Classification

# Bay Area Water Treatment Plant

## Monthly Operations Report

Supply Name: Bay Area Water System  
 WSSN: 0465

December, 2023  
 Month, Year

F-1  
 Water Plant Classification

Bay  
 County

Carl J. Overly  
 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>6.9</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>17.04</u>	PSI
Maximum Approved Flux Rate	<u>36.25</u>	gpd/sq.ft.
Maximum Operating Flux Rate	<u>22.68</u>	gpd/sq.ft.

### Chemical Data

Sodium Hypochlorite on hand:	<u>4,958</u>	Gallons	Estimated Supply:	<u>91.3</u>	days
Caustic Soda on hand:	<u>2,861</u>	Gallons	Estimated Supply:	<u>195.9</u>	days
Corrosion Inhibitor on hand:	<u>1,394</u>	Gallons	Estimated Supply:	<u>72.8</u>	days
Hydrofluosilicic Acid on hand:	<u>1,506</u>	Gallons	Estimated Supply:	<u>91.7</u>	days
Aluminum Chlorohydrate on hand:	<u>204</u>	Gallons	Estimated Supply:	<u>34.0</u>	days
Sulfuric Acid on hand:	<u>773</u>	Gallons	Estimated Supply:	<u>386.6</u>	days
Sodium Bisulfite on hand:	<u>969</u>	Gallons	Estimated Supply:	<u>334.0</u>	days
Citric Acid on hand:	<u>2,010</u>	Gallons	Estimated Supply:	<u>160.8</u>	days
Cost of All Chemicals per Million Gallons:	<u>98.00</u>	Dollars			
Estimated Electrical Kilo Watt per Million Gallons:	<u>36,497.23</u>	KW			
Estimated Natural Gas Million Cubic Feet per Million Gallons:	<u>376.57</u>	Mcf			

### 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

Filter 2 out for Membrane Replacement on 11-27-23 @ 9:40am and returned to service on 12-14-23 @ 1:42pm

Due variability in utility billing we are planning to transition away from costs per million gallon and instead report the KW and Mcf per million gallon. We can more accurate record and report these number

# Bay Area WTP Monthly Operating Report

Date	Flows								
	Raw Water (MG)			Clarified (MG)	Sludge (MG)	Treated (MG)	Finished Water Pumped (MG)		
	N. Euclid	Lauria Road	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
12/1/2023	0.00	6.65	6.65	0.25	0.08	6.11	2.83	2.54	5.37
12/2/2023	0.00	5.77	5.77	0.23	0.08	5.97	2.93	2.61	5.54
12/3/2023	0.00	5.95	5.95	0.25	0.08	6.03	2.87	2.56	5.43
12/4/2023	0.00	5.99	5.99	0.29	0.08	6.68	3.17	2.78	5.94
12/5/2023	0.00	6.10	6.10	0.22	0.08	5.49	2.65	2.36	5.01
12/6/2023	0.00	6.17	6.17	0.25	0.08	6.33	2.97	2.65	5.63
12/7/2023	0.00	6.26	6.26	0.28	0.08	6.39	3.01	2.69	5.71
12/8/2023	0.00	6.30	6.30	0.28	0.08	6.08	2.99	2.57	5.56
12/9/2023	0.00	6.30	6.30	0.29	0.08	5.96	2.87	2.44	5.31
12/10/2023	0.00	5.87	5.87	0.29	0.08	6.14	2.96	2.55	5.51
12/11/2023	0.00	6.21	6.21	0.28	0.08	6.26	3.03	2.60	5.63
12/12/2023	0.00	6.55	6.55	0.26	0.08	6.16	3.01	2.55	5.56
12/13/2023	0.00	5.63	5.63	0.23	0.08	5.80	2.81	2.49	5.30
12/14/2023	0.00	5.53	5.53	0.26	0.08	6.14	2.93	2.59	5.52
12/15/2023	0.00	6.42	6.42	0.29	0.08	5.88	2.78	2.52	5.30
12/16/2023	0.00	6.49	6.49	0.25	0.08	6.04	2.97	2.68	5.65
12/17/2023	0.00	6.35	6.35	0.26	0.08	6.41	2.94	2.63	5.57
12/18/2023	0.00	6.01	6.01	0.25	0.08	5.92	2.83	2.54	5.37
12/19/2023	0.00	5.47	5.47	0.29	0.08	6.87	3.33	2.96	6.29
12/20/2023	0.00	5.92	5.92	0.27	0.08	6.24	2.86	2.55	5.41
12/21/2023	0.00	6.49	6.49	0.25	0.08	6.03	2.90	2.63	5.53
12/22/2023	0.00	6.75	6.75	0.26	0.08	6.04	2.82	2.56	5.38
12/23/2023	0.00	6.65	6.65	0.27	0.08	6.26	2.94	2.67	5.61
12/24/2023	0.00	6.24	6.24	0.19	0.19	6.29	2.92	2.67	5.59
12/25/2023	0.00	5.63	5.63	0.27	0.08	5.67	2.68	2.42	5.10
12/26/2023	0.00	5.66	5.66	0.30	0.08	5.69	2.79	2.45	5.23
12/27/2023	0.00	6.46	6.46	0.29	0.08	6.42	3.01	2.69	5.70
12/28/2023	0.00	6.74	6.74	0.25	0.08	6.01	2.90	2.49	5.39
12/29/2023	0.00	5.62	5.62	0.20	0.08	5.73	2.84	2.44	5.27
12/30/2023	0.00	5.70	5.70	0.25	0.08	6.21	2.94	2.52	5.47
12/31/2023	0.00	6.08	6.08	0.25	0.08	5.92	2.88	2.51	5.39
Total	0.00	189.97	189.97	8.02	2.55	189.14	90.36	79.92	170.28
Avg	0.00	6.13	6.13	0.26	0.08	6.10	2.91	2.58	5.49
Min	0.00	5.47	5.47	0.19	0.08	5.49	2.65	2.36	5.01
Max	0.00	6.75	6.75	0.30	0.19	6.87	3.33	2.96	6.29



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	
12/1/2023	9.1	7.97	0.48	0.66	0.08	0.33	Negative	Negative
12/2/2023	9.0	7.99	0.40	0.79	0.08	0.32	Negative	Negative
12/3/2023	9.1	7.97	2.63	4.16	0.08	0.22	Negative	Negative
12/4/2023	8.8	7.97	2.51	10.90	0.08	0.23	Negative	Negative
12/5/2023	8.6	7.99	1.98	3.66	0.08	0.20	Negative	Negative
12/6/2023	8.6	8.00	0.90	1.44	0.08	0.27	Negative	Negative
12/7/2023	8.5	8.01	0.71	1.24	0.08	0.31	Negative	Negative
12/8/2023	8.5	7.99	0.76	0.97	0.08	0.21	Negative	Negative
12/9/2023	8.5	7.97	0.76	1.11	0.08	0.18	Negative	Negative
12/10/2023	8.3	7.99	0.74	1.42	0.08	0.36	Negative	Negative
12/11/2023	8.2	8.02	0.52	0.81	0.08	0.35	Negative	Negative
12/12/2023	8.2	8.02	0.37	0.54	0.09	0.40	Negative	Negative
12/13/2023	8.1	8.03	0.35	0.49	0.08	0.40	Negative	Negative
12/14/2023	8.1	8.03	0.49	0.65	0.08	0.37	Negative	Negative
12/15/2023	8.0	8.02	0.33	0.54	0.08	0.38	Negative	Negative
12/16/2023	8.0	8.00	0.45	1.06	0.08	0.40	Negative	Negative
12/17/2023	8.1	7.99	0.45	0.74	0.08	0.43	Negative	Negative
12/18/2023	7.9	8.01	0.35	0.73	0.08	0.43	Negative	Negative
12/19/2023	7.7	8.05	0.29	1.68	0.08	0.34	Negative	Negative
12/20/2023	7.8	8.05	0.42	3.45	0.08	0.29	Negative	Negative
12/21/2023	8.1	8.01	0.46	0.69	0.08	0.35	Negative	Negative
12/22/2023	8.1	8.00	0.39	1.06	0.09	0.35	Negative	Negative
12/23/2023	8.1	7.98	1.27	2.46	0.08	0.33	Negative	Negative
12/24/2023	8.1	7.98	0.64	1.63	0.08	0.36	Negative	Negative
12/25/2023	7.6	7.98	0.45	1.12	0.08	0.40	Negative	Negative
12/26/2023	7.3	7.98	0.40	0.78	0.08	0.39	Negative	Negative
12/27/2023	7.3	7.99	0.35	0.62	0.08	0.37	Negative	Negative
12/28/2023	7.3	8.00	0.34	2.55	0.09	0.35	Negative	Negative
12/29/2023	7.3	8.00	0.35	0.50	0.09	0.34	Negative	Negative
12/30/2023	7.4	7.99	1.18	2.18	0.09	0.34	Negative	Negative
12/31/2023	7.4	7.98	0.70	1.37	0.09	0.39	Negative	Negative
Avg	8.1	8.00	0.72	1.68	0.08	0.33	NA	NA
Min	7.3	7.97	0.29	0.49	0.08	0.18	NA	NA
Max	9.1	8.05	2.63	10.90	0.09	0.43	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				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	
12/1/2023	8.5	7.61	3.40	0.76		1.10	0	77	12	11	72	11.2	250	-0.89	1.09	0.45	Negative	Negative
12/2/2023	8.4	7.64	3.40	0.79		1.09	0	80	12	10	70	10.5	251	-0.85	1.20	0.42	Negative	Negative
12/3/2023	8.4	7.62	3.39	0.80		1.09	0	79	12	10	70	10.9	251	-0.88	1.20	0.43	Negative	Negative
12/4/2023	8.2	7.62	3.42	0.78	0.78	1.09	0	78	12	11	70	10.2	250	-0.89	1.09	0.45	Negative	Negative
12/5/2023	8.1	7.64	3.49	0.80		1.09	0	76	12	9	66	10.3	237	-0.91	1.33	0.43	Negative	Negative
12/6/2023	8.0	7.64	3.50	0.78		1.04	0	78	9	14	72	11.8	236	-0.86	0.64	0.43	Negative	Negative
12/7/2023	8.0	7.64	3.47	0.77		1.00	0	73	10	10	76	12.1	239	-0.87	1.00	0.41	Negative	Negative
12/8/2023	8.0	7.62	3.42	0.77		1.01	0	73	9	9	78	12.2	241	-0.88	1.00	0.37	Negative	Negative
12/9/2023	8.0	7.59	3.41	0.75		1.00	0	74	10	10	80	11.7	243	-0.89	1.00	0.41	Negative	Negative
12/10/2023	7.7	7.64	3.41	0.78		1.01	0	73	10	10	76	12.2	241	-0.88	1.00	0.41	Negative	Negative
12/11/2023	7.4	7.69	3.41	0.77	0.75	1.01	0	75	10	9	80	11.8	243	-0.80	1.11	0.38	Negative	Negative
12/12/2023	7.3	7.71	3.40	0.78		1.03	0	74	10	10	76	12.4	246	-0.81	1.00	0.41	Negative	Negative
12/13/2023	7.3	7.71	3.40	0.75		1.03	0	75	11	11	72	12.2	243	-0.83	1.00	0.44	Negative	Negative
12/14/2023	7.2	7.72	3.40	0.78		1.03	0	74	11	10	74	11.6	241	-0.81	1.10	0.43	Negative	Negative
12/15/2023	7.1	7.76	3.40	0.78		1.03	0	76	10	10	66	11.7	243	-0.82	1.00	0.40	Negative	Negative
12/16/2023	7.3	7.72	3.40	0.78		1.05	0	78	11	10	68	11.3	240	-0.82	1.10	0.41	Negative	Negative
12/17/2023	7.4	7.71	3.41	0.77		1.04	0	72	11	10	70	12.3	241	-0.85	1.10	0.44	Negative	Negative
12/18/2023	7.3	7.73	3.39	0.78	0.78	1.04	0	77	11	10	66	11.4	241	-0.83	1.10	0.41	Negative	Negative
12/19/2023	7.1	7.76	3.39	0.78		1.03	0	77	11	10	66	11.4	240	-0.81	1.10	0.41	Negative	Negative
12/20/2023	7.0	7.77	3.39	0.78		1.02	0	80	9	10	70	12.6	240	-0.76	0.87	0.35	Negative	Negative
12/21/2023	7.1	7.74	3.39	0.77		1.00	0	75	10	8	80	11.7	239	-0.75	1.25	0.37	Negative	Negative
12/22/2023	7.1	7.74	3.43	0.75		1.00	0	72	9	10	84	12.6	241	-0.76	0.90	0.39	Negative	Negative
12/23/2023	7.0	7.72	3.41	0.76		1.00	0	72	9	9	74	12.5	241	-0.83	1.00	0.38	Negative	Negative
12/24/2023	7.0	7.72	3.41	0.76		1.00	0	72	9	9	76	12.5	241	-0.82	1.00	0.38	Negative	Negative
12/25/2023	6.9	7.71	3.41	0.76	0.71	1.02	0	72	9	10	74	12.5	240	-0.84	0.90	0.39	Negative	Negative
12/26/2023	6.9	7.71	3.41	0.76		1.02	0	74	9	9	72	12.3	241	-0.84	1.00	0.37	Negative	Negative
12/27/2023	6.9	7.71	3.40	0.75		1.02	0	72	12	9	72	12.4	232	-0.85	1.33	0.45	Negative	Negative
12/28/2023	6.9	7.72	3.41	0.77		1.03	0	75	9	9	70	12.6	237	-0.84	1.00	0.36	Negative	Negative
12/29/2023	6.8	7.73	3.40	0.77		1.02	0	74	11	7	72	11.6	242	-0.82	1.57	0.38	Negative	Negative
12/30/2023	6.8	7.72	3.40	0.78		1.03	0	76	11	10	68	11.8	244	-0.85	1.10	0.42	Negative	Negative
12/31/2023	6.7	7.72	3.40	0.78		1.02	0	76	11	9	68	12.4	244	-0.85	1.22	0.40	Negative	Negative
Avg	7.4	7.69	3.41	0.77	0.75	1.03	0	75	10	10	73	11.8	242	-0.84	1.07	0.41	NA	NA
Min	6.7	7.59	3.39	0.75	0.71	1.00	0	72	9	7	66	10.2	232	-0.91	0.64	0.35	NA	NA
Max	8.5	7.77	3.50	0.80	0.78	1.10	0	80	12	14	84	12.6	251	-0.75	1.57	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
12/1/2023	0.48	0.66	2.92	0.38	0.023	0.024	96	0	0.0	0.014
12/2/2023	0.40	0.79	3.24	0.37	0.023	0.024	96	0	0.0	0.014
12/3/2023	2.63	4.16	1.46	0.96	0.023	0.024	96	0	0.0	0.014
12/4/2023	2.51	10.90	2.08	1.68	0.023	0.024	96	0	0.0	0.014
12/5/2023	1.98	3.66	1.03	1.58	0.023	0.024	96	0	0.0	0.014
12/6/2023	0.90	1.44	1.60	1.29	0.023	0.024	96	0	0.0	0.014
12/7/2023	0.71	1.24	2.30	0.88	0.023	0.024	96	0	0.0	0.014
12/8/2023	0.76	0.97	2.43	0.76	0.023	0.024	96	0	0.0	0.014
12/9/2023	0.76	1.11	2.51	0.71	0.023	0.024	96	0	0.0	0.014
12/10/2023	0.74	1.42	3.20	0.71	0.023	0.023	96	0	0.0	0.014
12/11/2023	0.52	0.81	2.80	0.65	0.023	0.024	96	0	0.0	0.014
12/12/2023	0.37	0.54	2.30	0.49	0.023	0.024	96	0	0.0	0.014
12/13/2023	0.35	0.49	2.69	0.40	0.023	0.023	96	0	0.0	0.014
12/14/2023	0.49	0.65	3.25	0.42	0.023	0.024	96	0	0.0	0.014
12/15/2023	0.33	0.54	1.15	0.37	0.023	0.023	96	0	0.0	0.014
12/16/2023	0.45	1.06	1.31	0.35	0.023	0.024	96	0	0.0	0.014
12/17/2023	0.45	0.74	1.71	0.41	0.023	0.023	96	0	0.0	0.014
12/18/2023	0.35	0.73	1.60	0.46	0.023	0.024	96	0	0.0	0.014
12/19/2023	0.29	1.68	1.87	0.40	0.022	0.024	96	0	0.0	0.014
12/20/2023	0.42	3.45	2.00	0.40	0.022	0.022	96	0	0.0	0.014
12/21/2023	0.46	0.69	2.04	0.50	0.022	0.022	96	0	0.0	0.014
12/22/2023	0.39	1.06	1.69	0.47	0.022	0.022	96	0	0.0	0.014
12/23/2023	1.27	2.46	2.68	0.94	0.022	0.022	96	0	0.0	0.014
12/24/2023	0.64	1.63	3.21	0.85	0.022	0.022	96	0	0.0	0.014
12/25/2023	0.45	1.12	3.23	0.67	0.022	0.022	96	0	0.0	0.014
12/26/2023	0.40	0.78	3.12	0.56	0.022	0.022	96	0	0.0	0.014
12/27/2023	0.35	0.62	3.20	0.47	0.022	0.022	96	0	0.0	0.014
12/28/2023	0.34	2.55	2.31	0.41	0.022	0.022	96	0	0.0	0.014
12/29/2023	0.35	0.50	2.07	0.39	0.022	0.022	96	0	0.0	0.014
12/30/2023	1.18	2.18	2.37	0.67	0.022	0.022	96	0	0.0	0.014
12/31/2023	0.70	1.37	2.92	0.85	0.022	0.022	96	0	0.0	0.014
Avg	0.72	1.68	2.33	0.66	0.023	0.023	96	0	0.0	0.014
Min	0.29	0.49	1.03	0.35	0.022	0.022	96	0	0.0	0.014
Max	2.63	10.90	3.25	1.68	0.023	0.024	96	0	0.0	0.014



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

Membrane LRV/Integrity/Max Turbidity																											
Date	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			
	Minimum	Max	Max	Minimum	Max	Max	Minimum	Max	Max	Minimum	Max	Max	Minimum	Max	Max	Minimum	Max	Max	Minimum	Max	Max	Minimum	Max	Max			
	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU
12/1/2023	4.13	PASS	0.019	Skid 2 out for Membrane Replacement			4.76	PASS	0.019	4.40	PASS	0.014	5.63	PASS	0.020	4.24	PASS	0.022	4.15	PASS	0.027	4.70	PASS	0.020			
12/2/2023	4.13	PASS	0.019				4.76	PASS	0.019	4.41	PASS	0.015	5.54	PASS	0.020	4.25	PASS	0.024	4.15	PASS	0.027	4.71	PASS	0.027	4.71	PASS	0.020
12/3/2023	4.24	PASS	0.019				4.81	PASS	0.019	4.36	PASS	0.015	5.56	PASS	0.020	4.26	PASS	0.022	4.18	PASS	0.027	4.73	PASS	0.027	4.73	PASS	0.020
12/4/2023	4.23	PASS	0.019				4.82	PASS	0.020	4.32	PASS	0.015	5.57	PASS	0.023	4.24	PASS	0.022	4.16	PASS	0.027	4.73	PASS	0.027	4.73	PASS	0.021
12/5/2023	4.22	PASS	0.019				4.81	PASS	0.019	4.34	PASS	0.015	5.57	PASS	0.020	4.20	PASS	0.025	4.17	PASS	0.027	4.71	PASS	0.027	4.71	PASS	0.021
12/6/2023	4.21	PASS	0.019				4.80	PASS	0.019	4.34	PASS	0.015	5.60	PASS	0.020	4.27	PASS	0.023	4.16	PASS	0.027	4.71	PASS	0.027	4.71	PASS	0.020
12/7/2023	4.20	PASS	0.018				4.80	PASS	0.019	4.38	PASS	0.014	5.53	PASS	0.019	4.23	PASS	0.021	4.19	PASS	0.027	4.76	PASS	0.027	4.76	PASS	0.020
12/8/2023	4.29	PASS	0.020				4.82	PASS	0.019	4.38	PASS	0.013	5.55	PASS	0.025	4.27	PASS	0.022	4.17	PASS	0.027	4.76	PASS	0.027	4.76	PASS	0.020
12/9/2023	4.29	PASS	0.018				4.82	PASS	0.019	4.43	PASS	0.012	5.62	PASS	0.019	4.25	PASS	0.022	4.16	PASS	0.027	4.74	PASS	0.027	4.74	PASS	0.019
12/10/2023	4.32	PASS	0.019				4.81	PASS	0.019	4.42	PASS	0.012	5.61	PASS	0.019	4.26	PASS	0.022	4.37	PASS	0.028	4.74	PASS	0.028	4.74	PASS	0.019
12/11/2023	4.31	PASS	0.018				4.81	PASS	0.019	4.34	PASS	0.013	5.63	PASS	0.021	4.24	PASS	0.022	4.36	PASS	0.027	4.74	PASS	0.027	4.74	PASS	0.020
12/12/2023	4.21	PASS	0.018				4.81	PASS	0.019	4.29	PASS	0.012	5.58	PASS	0.022	4.23	PASS	0.022	4.35	PASS	0.027	4.71	PASS	0.027	4.71	PASS	0.019
12/13/2023	4.21	PASS	0.018				4.81	PASS	0.019	4.34	PASS	0.013	5.57	PASS	0.020	4.20	PASS	0.023	4.33	PASS	0.027	4.72	PASS	0.027	4.72	PASS	0.019
12/14/2023	4.25	PASS	0.017				5.53	PASS	0.024	4.79	PASS	0.019	4.40	PASS	0.012	5.60	PASS	0.019	4.21	PASS	0.023	4.30	PASS	0.027	4.73	PASS	0.019
12/15/2023	4.30	PASS	0.018				5.49	PASS	0.024	4.82	PASS	0.019	4.41	PASS	0.015	5.66	PASS	0.019	4.23	PASS	0.023	4.31	PASS	0.026	4.76	PASS	0.019
12/16/2023	4.29	PASS	0.018				5.48	PASS	0.023	4.80	PASS	0.019	4.31	PASS	0.012	5.64	PASS	0.020	4.24	PASS	0.022	4.40	PASS	0.026	4.75	PASS	0.020
12/17/2023	4.29	PASS	0.018	5.48	PASS	0.027	4.80	PASS	0.019	4.37	PASS	0.015	5.62	PASS	0.019	4.22	PASS	0.022	4.35	PASS	0.026	4.76	PASS	0.019			
12/18/2023	4.28	PASS	0.021	5.48	PASS	0.025	4.83	PASS	0.023	4.35	PASS	0.017	5.64	PASS	0.023	4.25	PASS	0.025	4.34	PASS	0.026	4.76	PASS	0.022			
12/19/2023	4.26	PASS	0.022	5.49	PASS	0.024	4.82	PASS	0.022	4.34	PASS	0.019	5.59	PASS	0.021	4.23	PASS	0.025	4.33	PASS	0.025	4.76	PASS	0.022			
12/20/2023	4.22	PASS	0.021	5.42	PASS	0.024	4.83	PASS	0.020	4.31	PASS	0.019	5.57	PASS	0.023	4.22	PASS	0.025	4.24	PASS	0.028	4.76	PASS	0.022			
12/21/2023	4.21	PASS	0.020	5.41	PASS	0.023	4.82	PASS	0.020	4.34	PASS	0.017	5.58	PASS	0.021	4.22	PASS	0.024	4.23	PASS	0.029	4.75	PASS	0.022			
12/22/2023	4.31	PASS	0.021	5.42	PASS	0.024	4.82	PASS	0.021	4.45	PASS	0.020	5.68	PASS	0.023	4.27	PASS	0.024	4.25	PASS	0.027	4.75	PASS	0.023			
12/23/2023	4.28	PASS	0.021	5.42	PASS	0.024	4.82	PASS	0.021	4.41	PASS	0.020	5.66	PASS	0.021	4.27	PASS	0.024	4.28	PASS	0.028	4.73	PASS	0.022			
12/24/2023	4.26	PASS	0.020	5.45	PASS	0.024	4.82	PASS	0.021	4.38	PASS	0.020	5.65	PASS	0.021	4.28	PASS	0.024	4.34	PASS	0.028	4.74	PASS	0.022			
12/25/2023	4.22	PASS	0.021	5.43	PASS	0.023	4.81	PASS	0.021	4.38	PASS	0.019	5.63	PASS	0.022	4.25	PASS	0.024	4.34	PASS	0.026	4.77	PASS	0.022			
12/26/2023	4.22	PASS	0.020	5.44	PASS	0.023	4.82	PASS	0.021	4.35	PASS	0.021	5.63	PASS	0.024	4.28	PASS	0.026	4.25	PASS	0.027	4.73	PASS	0.022			
12/27/2023	4.28	PASS	0.020	5.40	PASS	0.024	4.81	PASS	0.020	4.33	PASS	0.020	5.63	PASS	0.021	4.27	PASS	0.024	4.24	PASS	0.027	4.73	PASS	0.022			
12/28/2023	4.25	PASS	0.019	5.40	PASS	0.023	4.81	PASS	0.020	4.37	PASS	0.020	5.62	PASS	0.021	4.24	PASS	0.024	4.24	PASS	0.027	4.75	PASS	0.023			
12/29/2023	4.17	PASS	0.021	5.45	PASS	0.023	4.83	PASS	0.020	4.31	PASS	0.021	5.58	PASS	0.021	4.24	PASS	0.025	4.35	PASS	0.027	4.75	PASS	0.022			
12/30/2023	4.16	PASS	0.020	5.48	PASS	0.023	4.81	PASS	0.020	4.32	PASS	0.020	5.55	PASS	0.021	4.20	PASS	0.024	4.30	PASS	0.027	4.74	PASS	0.022			
12/31/2023	4.22	PASS	0.021	5.44	PASS	0.024	4.82	PASS	0.020	4.39	PASS	0.021	5.59	PASS	0.021	4.25	PASS	0.024	4.29	PASS	0.027	4.74	PASS	0.022			
Avg	4.24		0.019	5.45		0.024	4.81		0.020	4.36		0.016	5.60		0.021	4.24		0.023	4.27		0.027	4.74		0.021			
Min	4.13		0.017	5.40		0.023	4.76		0.019	4.29		0.012	5.53		0.019	4.20		0.025	4.15		0.025	4.70		0.019			
Max	4.32		0.022	5.53		0.027	4.83		0.023	4.45		0.021	5.68		0.025	4.28		0.026	4.40		0.029	4.77		0.023			

Note: As calculated by the manufacturer, the Upper Control Limit (UCL) for the installed membrane filtration system is 3.32 psi/min.  
 Per the manufacturer's UCL calculation: Q = 1,848 gpm, ALCR = 44.6, P atm = 14.4 psi, LRC = 3, V sys = 356.9 gallons, and VCF = 1.



In Service Dates For Modules				
	Train 1		Train 2	
Skid 1	8/2015	12/2023	Skid 2	
Skid 3	11/2023	8/2015	Skid 4	
Skid 5	2/2023	8/2015	Skid 6	
Skid 7	8/2015	1/2023	Skid 8	

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>					PO <sub>4</sub>		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
12/1/2023	6.1	0.33	0.33	0.93	1.16	1.10	3.31	3.40	0.08	0.62	0.76
12/2/2023	6.0	0.32	0.32	0.94	1.15	1.09	3.31	3.40	0.08	0.62	0.79
12/3/2023	6.0	0.22	0.30	0.98	1.15	1.09	3.31	3.39	0.08	0.62	0.80
12/4/2023	6.7	0.23	0.27	1.03	1.15	1.09	3.31	3.42	0.08	0.62	0.78
12/5/2023	5.5	0.20	0.26	1.00	1.14	1.09	3.31	3.49	0.08	0.62	0.80
12/6/2023	6.3	0.27	0.25	0.94	1.07	1.04	3.31	3.50	0.08	0.62	0.78
12/7/2023	6.4	0.31	0.25	0.94	1.06	1.00	3.25	3.47	0.08	0.62	0.77
12/8/2023	6.1	0.21	0.26	0.92	1.10	1.01	3.24	3.42	0.08	0.62	0.77
12/9/2023	6.0	0.18	0.27	0.94	1.10	1.00	3.24	3.41	0.08	0.62	0.75
12/10/2023	6.1	0.36	0.29	0.89	1.11	1.01	3.24	3.41	0.08	0.62	0.78
12/11/2023	6.3	0.35	0.30	0.92	1.10	1.01	3.24	3.41	0.08	0.62	0.77
12/12/2023	6.2	0.40	0.32	0.90	1.11	1.03	3.24	3.40	0.09	0.62	0.78
12/13/2023	5.8	0.40	0.32	0.90	1.11	1.03	3.24	3.40	0.08	0.62	0.75
12/14/2023	6.1	0.37	0.31	0.92	1.11	1.03	3.24	3.40	0.08	0.62	0.78
12/15/2023	5.9	0.38	0.32	0.92	1.12	1.03	3.24	3.40	0.08	0.62	0.78
12/16/2023	6.0	0.40	0.34	0.90	1.12	1.05	3.24	3.40	0.08	0.62	0.78
12/17/2023	6.4	0.43	0.35	0.88	1.11	1.04	3.24	3.41	0.08	0.62	0.77
12/18/2023	5.9	0.43	0.36	0.88	1.11	1.04	3.24	3.39	0.08	0.62	0.78
12/19/2023	6.9	0.34	0.34	0.92	1.09	1.03	3.24	3.39	0.08	0.62	0.78
12/20/2023	6.2	0.29	0.29	0.94	1.09	1.02	3.24	3.39	0.08	0.62	0.78
12/21/2023	6.0	0.35	0.28	0.96	1.07	1.00	3.25	3.39	0.08	0.62	0.77
12/22/2023	6.0	0.35	0.28	0.96	1.07	1.00	3.26	3.43	0.09	0.62	0.75
12/23/2023	6.3	0.33	0.26	0.98	1.07	1.00	3.26	3.41	0.08	0.62	0.76
12/24/2023	6.3	0.36	0.27	0.98	1.08	1.00	3.26	3.41	0.08	0.62	0.76
12/25/2023	5.7	0.40	0.29	0.84	1.11	1.02	3.26	3.41	0.08	0.62	0.76
12/26/2023	5.7	0.39	0.29	0.84	1.09	1.02	3.26	3.41	0.08	0.62	0.76
12/27/2023	6.4	0.37	0.29	0.82	1.09	1.02	3.26	3.40	0.08	0.62	0.75
12/28/2023	6.0	0.35	0.29	0.82	1.09	1.03	3.26	3.41	0.09	0.62	0.77
12/29/2023	5.7	0.34	0.27	0.84	1.09	1.02	3.26	3.40	0.09	0.62	0.77
12/30/2023	6.2	0.34	0.26	0.84	1.09	1.03	3.26	3.40	0.09	0.62	0.78
12/31/2023	5.9	0.39	0.27	0.84	1.09	1.02	3.26	3.40	0.09	0.62	0.78
Avg	6.1	0.33	0.29	0.91	1.10	1.03	3.26	3.41	0.08	0.62	0.77
Min	5.5	0.18	0.25	0.82	1.06	1.00	3.24	3.39	0.08	0.62	0.75
Max	6.9	0.43	0.36	1.03	1.16	1.10	3.31	3.50	0.09	0.62	0.80





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
12/1/2023	40.7	3,070	0.33	1003	28.6	23.6	5.4	666	1.03	689	1692	9.1	8.00	Y
12/2/2023	46.7	2,676	0.32	859	28.7	22.8	5.5	637	1.05	667	1526	9.0	8.00	Y
12/3/2023	46.5	2,691	0.22	580	28.6	22.2	5.4	641	1.03	658	1238	9.1	8.00	Y
12/4/2023	41.6	3,009	0.23	699	28.6	22.8	5.9	593	1.07	633	1332	8.8	8.00	Y
12/5/2023	38.9	3,215	0.20	633	28.6	23.2	5.0	707	1.06	750	1383	8.6	8.00	Y
12/6/2023	39.3	3,187	0.27	864	28.7	23.1	5.6	630	0.96	608	1472	8.6	8.00	Y
12/7/2023	39.8	3,145	0.31	986	28.7	24.5	5.7	639	0.94	602	1589	8.5	8.00	Y
12/8/2023	42.4	2,951	0.21	630	28.7	23.3	5.6	641	0.98	626	1256	8.5	8.00	Y
12/9/2023	53.1	2,355	0.18	417	28.6	25.0	5.3	692	0.97	672	1089	8.5	8.00	Y
12/10/2023	50.4	2,480	0.36	885	28.6	24.9	5.5	665	0.96	641	1526	8.3	8.00	Y
12/11/2023	43.3	2,888	0.35	998	28.7	25.7	5.6	663	0.97	644	1641	8.2	8.00	Y
12/12/2023	39.8	3,141	0.40	1256	28.6	25.7	5.6	670	0.98	660	1916	8.2	8.00	Y
12/13/2023	38.0	3,289	0.40	1315	28.6	25.0	5.3	694	0.96	669	1984	8.1	8.00	Y
12/14/2023	36.7	3,407	0.37	1267	28.6	24.8	5.5	663	0.98	648	1916	8.1	8.00	Y
12/15/2023	43.8	2,856	0.38	1090	28.6	24.7	5.3	690	0.98	679	1769	8.0	8.00	Y
12/16/2023	55.8	2,242	0.40	897	28.6	20.2	5.7	592	0.98	584	1481	8.0	8.00	Y
12/17/2023	53.2	2,354	0.43	1012	28.6	18.5	5.6	580	0.96	555	1567	8.1	8.00	Y
12/18/2023	42.9	2,916	0.43	1253	28.6	23.2	5.4	660	1.01	663	1916	7.9	8.00	Y
12/19/2023	38.8	3,228	0.34	1110	28.7	22.3	6.3	556	1.00	555	1665	7.7	8.00	Y
12/20/2023	40.3	3,106	0.29	913	28.6	22.2	5.4	644	0.97	625	1538	7.8	8.00	Y
12/21/2023	39.0	3,204	0.35	1131	28.6	24.5	5.5	658	0.98	643	1774	8.1	8.00	Y
12/22/2023	41.1	3,046	0.35	1057	28.7	24.4	5.4	676	0.95	642	1700	8.1	8.00	Y
12/23/2023	51.8	2,415	0.33	789	28.6	25.5	5.6	661	0.96	637	1426	8.1	8.00	Y
12/24/2023	53.2	2,351	0.36	854	28.6	25.9	5.6	668	0.96	644	1497	8.1	8.00	Y
12/25/2023	49.4	2,534	0.40	1017	28.6	26.6	5.1	741	0.96	709	1727	7.6	8.00	Y
12/26/2023	35.1	3,566	0.39	1373	28.6	23.8	5.2	687	0.98	676	2049	7.3	8.00	Y
12/27/2023	36.2	3,453	0.37	1270	28.6	22.6	5.7	617	0.98	607	1877	7.3	8.00	Y
12/28/2023	37.0	3,384	0.35	1170	28.6	25.1	5.4	683	0.96	659	1829	7.3	8.00	Y
12/29/2023	40.1	3,123	0.34	1076	28.5	22.5	5.3	663	0.96	640	1715	7.3	8.00	Y
12/30/2023	55.1	2,269	0.34	764	28.7	23.1	5.5	648	0.96	621	1384	7.4	8.00	Y
12/31/2023	52.6	2,377	0.39	918	28.7	24.0	5.4	669	0.99	664	1582	7.4	8.00	Y
Avg	44.0	2,901	0.33	971	28.6	23.7	5.5	655	0.98	644	1615	8.1	8.00	NA
Min	35.1	2,242	0.18	417	28.5	18.5	5.0	556	0.94	555	1089	7.3	8.00	NA
Max	55.8	3,566	0.43	1373	28.7	26.6	6.3	741	1.07	750	2049	9.1	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 Cl2)																								
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	23	24	26	29	30	32
12/1/2023																								
12/2/2023																								
12/3/2023																								
12/4/2023																								
12/5/2023	0.17	0.61	0.58	0.43	1.02				0.89	0.58	0.66	0.86	0.39	0.99	0.73	0.80	0.73	0.81	0.72	0.55		0.36		0.98
12/6/2023																								
12/7/2023						0.93	0.95		0.86	0.51	0.57	0.81	0.37	0.94	0.67									
12/8/2023																								
12/9/2023																								
12/10/2023																								
12/11/2023																								
12/12/2023				0.30	0.91											0.81	0.79	0.77	0.70	0.60		0.47		0.89
12/13/2023									0.87	0.51	0.64	0.84	0.33	0.96	0.73						0.83			
12/14/2023								0.99																
12/15/2023																								
12/16/2023																								
12/17/2023																								
12/18/2023									0.84	0.53	0.59	0.86	0.29	0.96	0.73									0.96
12/19/2023		0.46	0.58	0.38	0.97																			
12/20/2023									0.72	0.62	0.65	0.84	0.58	0.97	0.71									
12/21/2023																								
12/22/2023																								
12/23/2023																								
12/24/2023																								
12/25/2023																								
12/26/2023																								
12/27/2023									0.82		0.63	0.86		0.98										0.92
12/28/2023																								
12/29/2023																								
12/30/2023																								
12/31/2023																								
Average	0.17			0.62				0.96					0.72						0.73		0.83		0.42	0.94
Min	0.17			0.30				0.93					0.29						0.55		0.83		0.36	0.89
Max	0.17			1.02				0.99					0.99						0.81		0.83		0.47	0.98



MONITORING STATION ADDRESSES

- |  |   |   |
|--|---|---|
| 1. Sample station at corner of 5758 M-25 & R | 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. Jack's Fruit Market, 1000 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
	Fraser Twp.		Hampton Twp.			Kawkawlin Twp.			Kawkawlin Met.		Merritt Twp.		Monitor Twp.			City Pinconning		Pinconning Twp.		Portsmouth	Williams Twp.			Wisner
Date	34	35	37	38	39	40	41	42	43	45	46	48	49	52	55	58	59	61	63	65	68	69	70	72
12/1/2023																								
12/2/2023																								
12/3/2023																								
12/4/2023																								
12/5/2023													0.62							0.64	0.64	0.71	0.67	0.38
12/6/2023																								
12/7/2023		0.88	0.35	0.70	0.61	0.97	0.74		0.66				1.19	0.74	closed	0.63		0.63						
12/8/2023																								
12/9/2023																								
12/10/2023																								
12/11/2023																								
12/12/2023													0.53									0.58	0.62	0.54
12/13/2023																								
12/14/2023	0.56		0.34	0.38	0.48			0.81	0.68				0.93	0.65	closed	0.57		0.53						
12/15/2023																								
12/16/2023																								
12/17/2023																								
12/18/2023																								
12/19/2023																								
12/20/2023																								
12/21/2023			0.28	0.68	0.52								0.88	0.67										
12/22/2023																								
12/23/2023																								
12/24/2023																								
12/25/2023																								
12/26/2023																								
12/27/2023																								
12/28/2023			0.39																					
12/29/2023																								
12/30/2023																								
12/31/2023																								
Average	0.72		0.47			0.84			0.67		0.58		0.84			0.60		0.58		0.64		0.63		0.38
Min	0.56		0.28			0.74			0.66		0.53		0.65			0.57		0.53		0.64		0.54		0.38
Max	0.88		0.70			0.97			0.68		0.62		1.19			0.63		0.63		0.64		0.71		0.38



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. Speedway, 106 S. Huron Rd.
- 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, 2023			
COUNTY	COMMUNITY	WSSN NUMBER	DISTRIBUTION SYSTEM SAMPLES				
			avg free cl2 mg/L	NUMBER REQUIRED	NUMBER COLLECTED	NUMBER POSITIVE	NUMBER REPEAT SAMPLES
Tuscola	Akron	0072	0.17	1	1	0	0
BAY	Bangor Township	0390	0.62	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	0.96	3	3	0	0
BAY	Bay City	0470	0.72	30	39	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.73	9	10	0	0
BAY	Beaver Road Area	0517	0.83	1	1	0	0
BAY	Beaver Township	0518	0.42	2	2	0	0
BAY	Essexville	2180	0.94	4	4	0	0
BAY	Fraser Township	2465	0.72	2	2	0	0
BAY	Hampton Township	2960	0.47	10	10	0	0
BAY	Kawkawlin Township	3565	0.84	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.67	2	2	0	0
BAY	Merritt Township	4280	0.58	2	2	0	0
BAY	Monitor Township	4440	0.84	6	6	0	0
BAY	City of Pinconning	5330	0.60	2	2	0	0
BAY	Pinconning Township	5335	0.58	2	2	0	0
BAY	Portsmouth Township	5540	0.64	1	1	0	0
BAY	Williams Township	7125	0.63	6	6	0	0
Tuscola	Wisner	7134	0.38	1	1	0	0
Average Free Cl2 Residual of All Distribution Sites			0.65	mg/L			
1. Total distribution samples			107				
2. Total distribution samples with detectable free cl2 residual			107				
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%				

