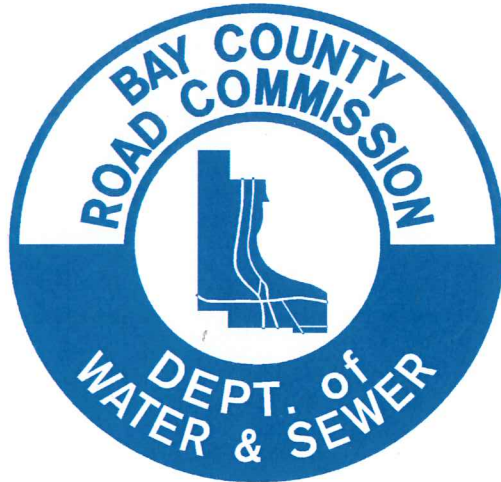


# Bay Area WTP

## Monthly Operations Report



November, 2023

Water Systems Serial Number: 0465

Carl J. Overly  
Carl J. Overly

Water Plant Superintendent  
Title

F-1  
Classification

Mike Wagar  
Mike Wagar

Operations Supervisor  
Title

F-1  
Classification

# Bay Area Water Treatment Plant

## Monthly Operations Report

Supply Name: Bay Area Water System  
 WSSN: 0465

Carl J. Overly  
 Operator-in-charge

November, 2023  
 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>6.7</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>16.68</u>	PSI
Maximum Approved Flux Rate	<u>36.25</u>	gpd/sq.ft.
Maximum Operating Flux Rate	<u>28.82</u>	gpd/sq.ft.

**Chemical Data**

Sodium Hypochlorite on hand:	<u>5,329</u>	Gallons	Estimated Supply:	<u>87.6</u>	days
Caustic Soda on hand:	<u>3,165</u>	Gallons	Estimated Supply:	<u>216.8</u>	days
Corrosion Inhibitor on hand:	<u>313</u>	Gallons	Estimated Supply:	<u>15.4</u>	days
Hydrofluosilicic Acid on hand:	<u>518</u>	Gallons	Estimated Supply:	<u>31.0</u>	days
Aluminum Chlorohydrate on hand:	<u>432</u>	Gallons	Estimated Supply:	<u>47.2</u>	days
Sulfuric Acid on hand:	<u>126</u>	Gallons	Estimated Supply:	<u>62.8</u>	days
Sodium Bisulfite on hand:	<u>408</u>	Gallons	Estimated Supply:	<u>140.5</u>	days
Citric Acid on hand:	<u>2,244</u>	Gallons	Estimated Supply:	<u>179.5</u>	days
Cost of All Chemicals per Million Gallons:	<u>115.55</u>	Dollars			
Estimated Electrical Cost per Million Gallons:		Dollars			
Estimated Natural Gas Cost per Million Gallons:		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**

- #3 out for Module replacement @ 8:10am on 11-6-23 and back in @ 4:43p on 11-15-23
- #2 out for Maint 4:25p on 11-18-23, back in at 9:33a on 11-20-23
- #2 out for Module replacement @ 7:54a on 11-27-23, due for completion on 12-12-23
- \* The following changes were made to page 7 Mem-LRV-Int-NTU: LRV unit is now Min Value, LRV values are now daily Min, UCL note was updated and a Module Age Matrix was added

# Bay Area WTP Monthly Operating Report

Flows									
Date	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
11/1/2023	0.00	5.79	5.79	0.27	0.08	6.65	3.09	2.74	5.83
11/2/2023	0.00	6.75	6.75	0.29	0.08	6.01	2.94	2.60	5.54
11/3/2023	0.00	6.60	6.60	0.27	0.10	6.24	3.05	2.67	5.72
11/4/2023	0.00	5.63	5.63	0.28	0.08	6.03	2.86	2.54	5.40
11/5/2023	0.00	5.49	5.49	0.26	0.08	6.46	3.09	2.69	5.78
11/6/2023	0.00	6.35	6.35	0.17	0.19	6.19	2.99	2.68	5.67
11/7/2023	0.00	6.93	6.93	0.09	0.25	5.66	2.70	2.42	5.12
11/8/2023	0.00	6.43	6.43	0.23	0.12	6.47	3.08	2.69	5.77
11/9/2023	0.00	6.10	6.10	0.30	0.08	6.35	3.13	2.72	5.86
11/10/2023	0.00	6.06	6.06	0.30	0.08	6.25	3.05	2.63	5.68
11/11/2023	0.00	6.24	6.24	0.26	0.12	6.54	3.06	2.74	5.80
11/12/2023	0.00	6.51	6.51	0.13	0.25	6.20	3.00	2.69	5.68
11/13/2023	0.00	6.93	6.93	0.13	0.25	6.17	3.03	2.68	5.71
11/14/2023	0.00	6.50	6.50	0.15	0.25	6.20	2.91	2.60	5.51
11/15/2023	0.00	6.30	6.30	0.23	0.16	6.43	3.10	2.67	5.77
11/16/2023	0.00	6.27	6.27	0.24	0.08	5.87	2.85	2.46	5.30
11/17/2023	0.00	5.36	5.36	0.24	0.08	5.63	2.75	2.37	5.13
11/18/2023	0.00	6.02	6.02	0.25	0.08	6.26	3.08	2.59	5.68
11/19/2023	0.00	6.25	6.25	0.21	0.14	5.97	2.93	2.51	5.44
11/20/2023	0.00	6.10	6.10	0.21	0.14	6.33	3.07	2.59	5.66
11/21/2023	0.00	6.23	6.23	0.25	0.08	5.91	2.47	2.92	5.39
11/22/2023	0.00	6.23	6.23	0.27	0.08	6.74	3.22	2.84	6.06
11/23/2023	0.00	6.38	6.38	0.20	0.17	6.52	3.09	2.80	5.89
11/24/2023	0.00	6.52	6.52	0.17	0.18	5.58	2.64	2.40	5.04
11/25/2023	0.00	6.06	6.06	0.27	0.08	5.71	2.72	2.46	5.18
11/26/2023	0.00	5.63	5.63	0.29	0.08	6.07	2.83	2.58	5.41
11/27/2023	0.00	6.35	6.35	0.28	0.09	6.37	3.07	2.75	5.82
11/28/2023	0.00	6.31	6.31	0.23	0.08	5.90	2.85	2.56	5.42
11/29/2023	0.00	6.04	6.04	0.30	0.08	6.51	3.08	2.78	5.86
11/30/2023	0.00	6.47	6.47	0.20	0.14	6.31	3.03	2.76	5.78
Total	0.00	186.83	186.83	6.97	3.73	185.54	88.75	79.12	167.86
Avg	0.00	6.23	6.23	0.23	0.12	6.18	2.96	2.64	5.60
Min	0.00	5.36	5.36	0.09	0.08	5.58	2.47	2.37	5.04
Max	0.00	6.93	6.93	0.30	0.25	6.74	3.22	2.92	6.06



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	
11/1/2023	14.0	8.00	0.58	0.88	0.08	0.39	Negative	Negative
11/2/2023	13.8	7.95	0.54	0.92	0.08	0.52	Negative	Negative
11/3/2023	13.6	7.98	0.71	1.30	0.08	0.46	Negative	Negative
11/4/2023	13.3	7.96	0.77	1.42	0.08	0.53	Negative	Negative
11/5/2023	13.0	7.98	0.97	1.84	0.08	0.54	Negative	Negative
11/6/2023	13.0	7.97	0.62	1.23	0.08	0.58	Negative	Negative
11/7/2023	13.0	7.96	0.60	0.81	0.08	0.45	Negative	Negative
11/8/2023	12.7	7.99	0.56	0.74	0.08	0.50	Negative	Negative
11/9/2023	12.6	8.01	0.46	0.64	0.08	0.49	Negative	Negative
11/10/2023	12.5	8.04	1.36	3.96	0.08	0.27	Negative	Negative
11/11/2023	12.2	8.04	1.19	2.39	0.09	0.22	Negative	Negative
11/12/2023	12.0	8.05	0.78	1.67	0.08	0.40	Negative	Negative
11/13/2023	11.6	8.06	0.65	1.43	0.08	0.50	Negative	Negative
11/14/2023	11.4	8.07	0.48	0.92	0.08	0.48	Negative	Negative
11/15/2023	11.4	8.07	0.45	0.68	0.08	0.45	Negative	Negative
11/16/2023	11.5	8.08	0.70	2.05	0.09	0.35	Negative	Negative
11/17/2023	11.2	8.09	0.78	8.37	0.09	0.33	Negative	Negative
11/18/2023	11.1	8.09	0.61	1.54	0.09	0.42	Negative	Negative
11/19/2023	11.1	8.09	0.68	1.89	0.09	0.40	Negative	Negative
11/20/2023	11.1	8.08	0.49	1.04	0.08	0.48	Negative	Negative
11/21/2023	11.0	8.08	0.47	0.73	0.08	0.38	Negative	Negative
11/22/2023	10.8	8.08	0.64	2.06	0.08	0.33	Negative	Negative
11/23/2023	10.5	8.13	2.17	3.00	0.10	0.18	Negative	Negative
11/24/2023	10.2	8.10	1.00	1.63	0.08	0.51	Negative	Negative
11/25/2023	10.0	8.13	0.83	1.38	0.09	0.42	Negative	Negative
11/26/2023	9.9	8.12	0.96	2.19	0.08	0.38	Negative	Negative
11/27/2023	9.6	8.13	0.67	1.52	0.09	0.46	Negative	Negative
11/28/2023	9.4	8.15	0.46	3.45	0.08	0.45	Negative	Negative
11/29/2023	9.2	8.06	0.34	0.54	0.08	0.35	Negative	Negative
11/30/2023	9.2	7.97	0.31	0.40	0.08	0.33	Negative	Negative
Avg	11.5	8.05	0.73	1.75	0.08	0.42	NA	NA
Min	9.2	7.95	0.31	0.40	0.08	0.18	NA	NA
Max	14.0	8.15	2.17	8.37	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				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	
11/1/2023	12.5	7.65	3.40	0.79		1.27	0	78	11	11	76	10.6	245	-0.72	1.00	0.43	Negative	Negative
11/2/2023	12.4	7.65	3.39	0.79		1.28	0	79	13	9	68	10.1	245	-0.76	1.44	0.43	Negative	Negative
11/3/2023	12.4	7.65	3.43	0.77		1.29	0	80	12	10	70	10.3	244	-0.75	1.20	0.42	Negative	Negative
11/4/2023	12.2	7.68	3.43	0.79		1.29	0	81	12	10	70	10.7	248	-0.72	1.20	0.42	Negative	Negative
11/5/2023	11.9	7.70	3.43	0.79		1.31	0	78	12	10	70	10.7	248	-0.72	1.20	0.43	Negative	Negative
11/6/2023	11.7	7.69	3.42	0.79	0.80	1.33	0	81	12	11	72	10.1	245	-0.70	1.09	0.43	Negative	Negative
11/7/2023	11.7	7.69	3.42	0.77		1.33	0	77	13	10	72	10.3	245	-0.72	1.30	0.46	Negative	Negative
11/8/2023	11.5	7.74	3.41	0.78		1.30	0	78	11	10	76	10.4	245	-0.65	1.10	0.41	Negative	Negative
11/9/2023	11.3	7.75	3.40	0.77		1.32	0	75	10	9	78	10.4	245	-0.65	1.11	0.38	Negative	Negative
11/10/2023	11.2	7.76	3.40	0.77		1.30	0	77	10	9	78	10.9	247	-0.64	1.11	0.37	Negative	Negative
11/11/2023	11.0	7.78	3.41	0.77		1.30	0	76	11	9	78	11.2	258	-0.63	1.22	0.40	Negative	Negative
11/12/2023	10.7	7.81	3.40	0.78		1.31	0	75	11	9	76	11.3	253	-0.62	1.22	0.41	Negative	Negative
11/13/2023	10.5	7.83	3.40	0.78	0.76	1.32	0	74	11	10	78	11.0	250	-0.60	1.10	0.43	Negative	Negative
11/14/2023	10.4	7.83	3.40	0.78		1.29	0	75	10	9	76	11.4	247	-0.60	1.11	0.38	Negative	Negative
11/15/2023	10.4	7.81	3.40	0.78		1.31	0	78	11	10	76	11.0	247	-0.61	1.10	0.41	Negative	Negative
11/16/2023	10.3	7.74	3.41	0.77		1.30	0	77	11	11	68	10.2	248	-0.74	1.00	0.43	Negative	Negative
11/17/2023	10.3	7.63	3.40	0.77		1.28	0	79	12	12	68	11.2	240	-0.84	1.00	0.46	Negative	Negative
11/18/2023	10.1	7.66	3.40	0.78		1.32	0	80	12	10	68	10.7	252	-0.81	1.20	0.42	Negative	Negative
11/19/2023	10.2	7.63	3.38	0.79		1.33	0	78	12	10	68	11.0	250	-0.85	1.20	0.43	Negative	Negative
11/20/2023	10.1	7.62	3.39	0.79	0.77	1.30	0	78	12	11	70	11.6	239	-0.84	1.09	0.45	Negative	Negative
11/21/2023	10.0	7.67	3.37	0.78		1.22	0	79	12	10	70	10.6	240	-0.78	1.20	0.43	Negative	Negative
11/22/2023	10.0	7.63	3.38	0.79		1.23	0	75	10	10	72	11.1	248	-0.84	1.00	0.40	Negative	Negative
11/23/2023	9.8	7.68	3.38	0.78		1.19	0	79	12	12	78	11.5	266	-0.74	1.00	0.46	Negative	Negative
11/24/2023	9.3	7.76	3.38	0.79		1.20	0	80	12	12	76	11.6	266	-0.68	1.00	0.45	Negative	Negative
11/25/2023	9.0	7.76	3.39	0.79		1.22	0	77	12	10	78	11.3	259	-0.69	1.20	0.44	Negative	Negative
11/26/2023	9.0	7.74	3.39	0.79		1.22	0	77	12	9	78	11.3	253	-0.71	1.33	0.42	Negative	Negative
11/27/2023	8.7	7.75	3.39	0.79	0.75	1.22	0	77	13	11	74	11.1	254	-0.74	1.18	0.48	Negative	Negative
11/28/2023	8.4	7.79	3.38	0.78		1.16	0	76	11	11	76	11.9	252	-0.69	1.00	0.44	Negative	Negative
11/29/2023	8.3	7.71	3.39	0.80		1.12	0	78	11	11	78	11.2	245	-0.75	1.00	0.43	Negative	Negative
11/30/2023	8.5	7.62	3.40	0.80		1.10	0	77	12	10	76	11.5	252	-0.86	1.20	0.44	Negative	Negative
Avg	10.5	7.71	3.40	0.78	0.77	1.27	0	78	12	10	74	10.9	249	-0.72	1.14	0.43	NA	NA
Min	8.3	7.62	3.37	0.77	0.75	1.10	0	74	10	9	68	10.1	239	-0.86	1.00	0.37	NA	NA
Max	12.5	7.83	3.43	0.80	0.80	1.33	0	81	13	12	78	11.9	266	-0.60	1.44	0.48	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
11/1/2023	0.58	0.88	2.62	0.58	0.023	0.023	96	0	0.0	0.014
11/2/2023	0.54	0.92	4.68	0.52	0.023	0.023	96	0	0.0	0.014
11/3/2023	0.71	1.30	6.24	0.56	0.023	0.023	96	0	0.0	0.014
11/4/2023	0.77	1.42	4.63	0.61	0.023	0.023	96	0	0.0	0.014
11/5/2023	0.97	1.84	8.27	0.77	0.023	0.023	96	0	0.0	0.014
11/6/2023	0.62	1.23	5.75	0.68	0.023	0.023	96	0	0.0	0.014
11/7/2023	0.60	0.81	3.11	0.60	0.023	0.023	96	0	0.0	0.014
11/8/2023	0.56	0.74	8.75	0.56	0.023	0.023	96	0	0.0	0.014
11/9/2023	0.46	0.64	3.74	0.49	0.023	0.023	96	0	0.0	0.014
11/10/2023	1.36	3.96	4.34	0.68	0.023	0.023	96	0	0.0	0.014
11/11/2023	1.19	2.39	8.11	1.04	0.023	0.023	96	0	0.0	0.014
11/12/2023	0.78	1.67	5.25	0.83	0.023	0.023	96	0	0.0	0.014
11/13/2023	0.65	1.43	5.49	0.70	0.023	0.023	96	0	0.0	0.014
11/14/2023	0.48	0.92	5.71	0.56	0.023	0.023	96	0	0.0	0.016
11/15/2023	0.45	0.68	3.15	0.45	0.023	0.023	96	0	0.0	0.014
11/16/2023	0.70	2.05	3.42	0.46	0.023	0.023	96	0	0.0	0.014
11/17/2023	0.78	8.37	5.16	0.55	0.023	0.023	96	0	0.0	0.014
11/18/2023	0.61	1.54	6.92	0.53	0.023	0.023	96	0	0.0	0.014
11/19/2023	0.68	1.89	6.98	0.55	0.023	0.023	96	0	0.0	0.014
11/20/2023	0.49	1.04	4.61	0.48	0.023	0.023	96	0	0.0	0.014
11/21/2023	0.47	0.73	4.07	0.45	0.023	0.023	96	0	0.0	0.015
11/22/2023	0.64	2.06	1.80	0.41	0.023	0.023	96	0	0.0	0.014
11/23/2023	2.17	3.00	6.35	0.97	0.023	0.023	96	0	0.0	0.014
11/24/2023	1.00	1.63	6.68	1.00	0.023	0.023	96	0	0.0	0.014
11/25/2023	0.83	1.38	6.72	0.81	0.023	0.023	96	0	0.0	0.014
11/26/2023	0.96	2.19	5.36	0.75	0.023	0.024	96	0	0.0	0.014
11/27/2023	0.67	1.52	5.46	0.67	0.023	0.023	96	0	0.0	0.014
11/28/2023	0.46	3.45	2.37	0.57	0.023	0.024	96	0	0.0	0.012
11/29/2023	0.34	0.54	2.20	0.46	0.023	0.024	96	0	0.0	0.014
11/30/2023	0.31	0.40	1.82	0.36	0.023	0.024	96	0	0.0	0.014
Avg	0.73	1.75	4.99	0.62	0.023	0.023	96	0	0.0	0.014
Min	0.31	0.40	1.80	0.36	0.023	0.023	96	0	0.0	0.012
Max	2.17	8.37	8.75	1.04	0.023	0.024	96	0	0.0	0.016

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		
	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
11/1/2023	4.19	PASS	0.021	4.17	PASS	0.024	4.17	PASS	0.023	4.43	PASS	0.017	5.54	PASS	0.022	4.24	PASS	0.025	4.28	PASS	0.028	4.71	PASS	0.021		
11/2/2023	4.23	PASS	0.021	4.18	PASS	0.024	4.21	PASS	0.021	4.43	PASS	0.015	5.60	PASS	0.025	4.23	PASS	0.024	4.23	PASS	0.029	4.70	PASS	0.021		
11/3/2023	4.23	PASS	0.021	4.19	PASS	0.024	4.21	PASS	0.021	4.40	PASS	0.013	5.62	PASS	0.020	4.24	PASS	0.024	4.22	PASS	0.029	4.71	PASS	0.020		
11/4/2023	4.23	PASS	0.021	4.17	PASS	0.024	4.18	PASS	0.020	4.43	PASS	0.016	5.67	PASS	0.020	4.26	PASS	0.024	4.24	PASS	0.028	4.68	PASS	0.021		
11/5/2023	4.26	PASS	0.021	4.13	PASS	0.024	4.16	PASS	0.020	4.37	PASS	0.015	5.55	PASS	0.020	4.21	PASS	0.025	4.21	PASS	0.028	4.68	PASS	0.021		
11/6/2023	4.20	PASS	0.021	4.14	PASS	0.024	4.16	PASS	0.020	4.37	PASS	0.015	5.55	PASS	0.024	4.20	PASS	0.023	4.33	PASS	0.028	4.69	PASS	0.020		
11/7/2023	4.18	PASS	0.021	4.11	PASS	0.023				4.36	PASS	0.015	5.54	PASS	0.020	4.21	PASS	0.023	4.31	PASS	0.029	4.71	PASS	0.020		
11/8/2023	4.22	PASS	0.021	4.11	PASS	0.024				4.37	PASS	0.016	5.53	PASS	0.020	4.22	PASS	0.023	4.24	PASS	0.028	4.75	PASS	0.020		
11/9/2023	4.25	PASS	0.021	4.12	PASS	0.023				4.31	PASS	0.015	5.57	PASS	0.020	4.20	PASS	0.024	4.23	PASS	0.027	4.72	PASS	0.020		
11/10/2023	4.27	PASS	0.021	4.11	PASS	0.023				4.30	PASS	0.016	5.57	PASS	0.024	4.22	PASS	0.022	4.24	PASS	0.027	4.72	PASS	0.020		
11/11/2023	4.21	PASS	0.021	4.07	PASS	0.024				4.31	PASS	0.016	5.53	PASS	0.022	4.16	PASS	0.022	4.18	PASS	0.028	4.68	PASS	0.020		
11/12/2023	4.18	PASS	0.021	4.11	PASS	0.024				4.30	PASS	0.015	5.53	PASS	0.020	4.16	PASS	0.024	4.18	PASS	0.028	4.71	PASS	0.020		
11/13/2023	4.18	PASS	0.022	4.10	PASS	0.023				4.30	PASS	0.015	5.54	PASS	0.020	4.20	PASS	0.021	4.17	PASS	0.027	4.69	PASS	0.020		
11/14/2023	4.18	PASS	0.022	4.11	PASS	0.024				4.29	PASS	0.015	5.54	PASS	0.026	4.19	PASS	0.022	4.16	PASS	0.028	4.69	PASS	0.019		
11/15/2023	4.20	PASS	0.020	4.11	PASS	0.024	4.79	0	0.021	4.30	PASS	0.015	5.59	PASS	0.020	4.18	PASS	0.021	4.16	PASS	0.028	4.72	PASS	0.019		
11/16/2023	4.17	PASS	0.020	4.11	PASS	0.023	4.74	PASS	0.021	4.31	PASS	0.015	5.56	PASS	0.020	4.20	PASS	0.023	4.19	PASS	0.028	4.71	PASS	0.019		
11/17/2023	4.18	PASS	0.021	4.10	PASS	0.023	4.69	PASS	0.020	4.35	PASS	0.015	5.58	PASS	0.020	4.19	PASS	0.023	4.28	PASS	0.028	4.69	PASS	0.019		
11/18/2023	4.18	PASS	0.021	4.07	PASS	0.023	4.68	PASS	0.021	4.32	PASS	0.015	5.55	PASS	0.021	4.23	PASS	0.022	4.16	PASS	0.028	4.68	PASS	0.020		
11/19/2023	4.14	PASS	0.020		Maint		4.68	PASS	0.021	4.25	PASS	0.013	5.58	PASS	0.020	4.17	PASS	0.023	4.15	PASS	0.028	4.71	PASS	0.020		
11/20/2023	4.14	PASS	0.020	4.14	PASS	0.023	4.68	PASS	0.020	4.25	PASS	0.015	5.56	PASS	0.020	4.16	PASS	0.024	4.15	PASS	0.028	4.69	PASS	0.019		
11/21/2023	4.18	PASS	0.020	4.13	PASS	0.023	4.72	PASS	0.020	4.34	PASS	0.014	5.54	PASS	0.022	4.19	PASS	0.023	4.30	PASS	0.027	4.69	PASS	0.019		
11/22/2023	4.17	PASS	0.020	4.12	PASS	0.023	4.72	PASS	0.020	4.38	PASS	0.015	5.53	PASS	0.020	4.16	PASS	0.023	4.19	PASS	0.027	4.69	PASS	0.019		
11/23/2023	4.12	PASS	0.020	4.04	PASS	0.024	4.66	PASS	0.021	4.35	PASS	0.014	5.59	PASS	0.024	4.18	PASS	0.026	4.14	PASS	0.028	4.66	PASS	0.020		
11/24/2023	4.13	PASS	0.020	4.04	PASS	0.023	4.68	PASS	0.021	4.36	PASS	0.013	5.57	PASS	0.020	4.31	PASS	0.023	4.20	PASS	0.028	4.69	PASS	0.024		
11/25/2023	4.21	PASS	0.020	4.07	PASS	0.023	4.67	PASS	0.021	4.37	PASS	0.013	5.62	PASS	0.020	4.28	PASS	0.023	4.19	PASS	0.028	4.71	PASS	0.020		
11/26/2023	4.18	PASS	0.020	4.09	PASS	0.023	4.71	PASS	0.020	4.31	PASS	0.013	5.68	PASS	0.021	4.28	PASS	0.022	4.28	PASS	0.028	4.69	PASS	0.020		
11/27/2023	4.13	PASS	0.019	4.08	0	0.023	4.71	PASS	0.020	4.42	PASS	0.013	5.66	PASS	0.020	4.23	PASS	0.023	4.15	PASS	0.028	4.68	PASS	0.019		
11/28/2023	4.17	PASS	0.020		Module Replacement		4.72	PASS	0.031	4.42	PASS	0.019	5.55	PASS	0.023	4.27	PASS	0.023	4.14	PASS	0.028	4.71	PASS	0.024		
11/29/2023	4.21	PASS	0.020				4.73	PASS	0.020	4.33	PASS	0.015	5.55	PASS	0.020	4.25	PASS	0.023	4.18	PASS	0.026	4.70	PASS	0.020		
11/30/2023	4.21	PASS	0.020				4.75	PASS	0.020	4.38	PASS	0.015	5.58	PASS	0.033	4.26	PASS	0.023	4.16	PASS	0.027	4.71	PASS	0.020		
Avg	4.19		0.020	4.11		0.023	4.57		0.021	4.35		0.015	5.57		0.022	4.22		0.023	4.21		0.028	4.70		0.020		
Min	4.12		0.019	4.04		0.023	4.16		0.020	4.25		0.013	5.53		0.020	4.16		0.021	4.14		0.026	4.66		0.019		
Max	4.27		0.022	4.19		0.024	4.79		0.031	4.43		0.019	5.68		0.033	4.31		0.026	4.33		0.029	4.75		0.024		



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	8/2015	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		Hydroflourosilicic 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
11/1/2023	6.6	0.39	0.39	1.08	1.40	1.27	3.31	3.40	0.08	0.64	0.79
11/2/2023	6.0	0.52	0.36	1.04	1.42	1.28	3.31	3.39	0.08	0.64	0.79
11/3/2023	6.2	0.46	0.35	1.06	1.42	1.29	3.31	3.43	0.08	0.64	0.77
11/4/2023	6.0	0.53	0.34	1.10	1.42	1.29	3.31	3.43	0.08	0.64	0.79
11/5/2023	6.5	0.54	0.35	1.08	1.43	1.31	3.31	3.43	0.08	0.64	0.79
11/6/2023	6.2	0.58	0.38	1.06	1.44	1.33	3.31	3.42	0.08	0.63	0.79
11/7/2023	5.7	0.45	0.40	1.04	1.42	1.33	3.31	3.42	0.08	0.62	0.77
11/8/2023	6.5	0.50	0.37	1.08	1.40	1.30	3.31	3.41	0.08	0.62	0.78
11/9/2023	6.3	0.49	0.37	1.06	1.40	1.32	3.31	3.40	0.08	0.62	0.77
11/10/2023	6.2	0.27	0.31	1.18	1.38	1.30	3.31	3.40	0.08	0.62	0.77
11/11/2023	6.5	0.22	0.24	1.20	1.43	1.30	3.31	3.41	0.09	0.62	0.77
11/12/2023	6.2	0.40	0.29	1.20	1.43	1.31	3.31	3.40	0.08	0.62	0.78
11/13/2023	6.2	0.50	0.33	1.10	1.39	1.32	3.31	3.40	0.08	0.62	0.78
11/14/2023	6.2	0.48	0.34	1.12	1.39	1.29	3.31	3.40	0.08	0.62	0.78
11/15/2023	6.4	0.45	0.34	1.12	1.40	1.31	3.31	3.40	0.08	0.62	0.78
11/16/2023	5.9	0.35	0.33	1.12	1.38	1.30	3.31	3.41	0.09	0.62	0.77
11/17/2023	5.6	0.33	0.28	1.23	1.39	1.28	3.31	3.40	0.09	0.62	0.77
11/18/2023	6.3	0.42	0.28	1.23	1.43	1.32	3.31	3.40	0.09	0.62	0.78
11/19/2023	6.0	0.40	0.30	1.18	1.41	1.33	3.31	3.38	0.09	0.62	0.79
11/20/2023	6.3	0.48	0.34	1.02	1.35	1.30	3.31	3.39	0.08	0.62	0.79
11/21/2023	5.9	0.38	0.35	1.05	1.30	1.22	3.31	3.37	0.08	0.62	0.78
11/22/2023	6.7	0.33	0.34	1.02	1.30	1.23	3.31	3.38	0.08	0.62	0.79
11/23/2023	6.5	0.18	0.22	1.21	1.28	1.19	3.31	3.38	0.10	0.62	0.78
11/24/2023	5.6	0.51	0.28	1.10	1.33	1.20	3.31	3.38	0.08	0.62	0.79
11/25/2023	5.7	0.42	0.31	1.08	1.31	1.22	3.31	3.39	0.09	0.62	0.79
11/26/2023	6.1	0.38	0.33	1.06	1.31	1.22	3.31	3.39	0.08	0.62	0.79
11/27/2023	6.4	0.46	0.37	0.95	1.29	1.22	3.31	3.39	0.09	0.62	0.79
11/28/2023	5.9	0.45	0.39	0.93	1.16	1.16	3.31	3.38	0.08	0.62	0.78
11/29/2023	6.5	0.35	0.37	0.86	1.16	1.12	3.31	3.39	0.08	0.62	0.80
11/30/2023	6.3	0.33	0.34	0.84	1.18	1.10	3.31	3.40	0.08	0.62	0.80
Avg	6.2	0.42	0.33	1.08	1.36	1.27	3.31	3.40	0.08	0.62	0.78
Min	5.6	0.18	0.22	0.84	1.16	1.10	3.31	3.37	0.08	0.62	0.77
Max	6.7	0.58	0.40	1.23	1.44	1.33	3.31	3.43	0.10	0.64	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	TIT-1000	Calculated	Calculated	
11/1/2023	30.5	4,107	0.39	1608	28.6	22.2	5.8	598	1.24	742	2350	14.0	6.00	Y
11/2/2023	38.1	3,287	0.52	1701	28.6	23.9	5.5	650	1.23	798	2499	13.8	6.00	Y
11/3/2023	40.6	3,080	0.46	1430	28.6	23.9	5.7	629	1.23	776	2205	13.6	6.00	Y
11/4/2023	50.9	2,457	0.53	1302	28.6	23.8	5.4	665	1.21	801	2104	13.3	6.00	Y
11/5/2023	52.1	2,403	0.54	1309	28.6	24.0	5.8	623	1.28	799	2108	13.0	6.00	Y
11/6/2023	47.6	2,627	0.58	1529	28.6	23.9	5.7	635	1.26	801	2329	13.0	6.00	Y
11/7/2023	40.8	3,068	0.45	1388	28.6	24.6	5.1	712	1.30	927	2315	13.0	6.00	Y
11/8/2023	40.1	3,120	0.50	1573	28.7	23.4	5.8	618	1.27	788	2361	12.7	6.00	Y
11/9/2023	39.8	3,142	0.49	1555	28.6	24.9	5.9	626	1.25	785	2340	12.6	6.00	Y
11/10/2023	41.6	3,007	0.27	824	28.7	24.2	5.7	638	1.26	804	1629	12.5	6.00	Y
11/11/2023	50.8	2,464	0.22	550	28.6	24.0	5.8	623	1.23	768	1318	12.2	6.00	Y
11/12/2023	50.5	2,479	0.40	1001	28.6	25.3	5.7	651	1.25	816	1817	12.0	6.00	Y
11/13/2023	44.5	2,814	0.50	1394	28.6	22.7	5.7	616	1.27	781	2175	11.6	6.00	Y
11/14/2023	39.3	3,179	0.48	1538	28.6	23.4	5.5	647	1.23	798	2336	11.4	6.00	Y
11/15/2023	34.7	3,603	0.45	1619	28.7	25.3	5.8	641	1.25	804	2422	11.4	6.00	Y
11/16/2023	25.2	4,960	0.35	1715	28.6	25.4	5.3	698	1.27	890	2605	11.5	6.00	Y
11/17/2023	31.8	3,931	0.33	1302	28.6	24.7	5.1	713	1.18	844	2146	11.2	6.00	Y
11/18/2023	48.1	2,600	0.42	1094	28.6	24.6	5.7	642	1.25	805	1899	11.1	6.00	Y
11/19/2023	47.3	2,644	0.40	1066	28.6	23.4	5.4	656	1.23	809	1875	11.1	6.00	Y
11/20/2023	38.7	3,230	0.48	1553	28.6	23.4	5.7	630	1.22	769	2322	11.1	6.00	Y
11/21/2023	34.9	3,581	0.38	1373	28.2	22.2	5.4	641	1.17	751	2124	11.0	6.00	Y
11/22/2023	34.9	3,581	0.33	1196	28.7	24.4	6.1	600	1.16	695	1891	10.8	6.00	Y
11/23/2023	38.0	3,293	0.18	582	28.6	25.8	5.9	634	1.16	734	1316	10.5	6.00	Y
11/24/2023	41.4	3,024	0.51	1532	28.6	25.8	5.0	739	1.16	860	2393	10.2	6.00	Y
11/25/2023	46.2	2,707	0.42	1129	28.6	24.9	5.2	708	1.21	853	1983	10.0	6.00	Y
11/26/2023	45.1	2,771	0.38	1053	28.7	23.5	5.4	661	1.14	756	1809	9.9	8.00	Y
11/27/2023	42.1	2,973	0.46	1356	28.6	24.6	5.8	626	1.14	716	2072	9.6	8.00	Y
11/28/2023	37.2	3,362	0.45	1520	28.2	22.2	5.4	638	1.10	698	2218	9.4	8.00	Y
11/29/2023	36.7	3,408	0.35	1182	28.7	24.3	5.9	620	1.08	670	1852	9.2	8.00	Y
11/30/2023	38.0	3,292	0.33	1099	28.6	23.1	5.8	613	1.03	633	1732	9.2	8.00	Y
Avg	40.9	3,140	0.42	1303	28.6	24.1	5.6	646	1.21	782	2085	11.5	6.33	NA
Min	25.2	2,403	0.18	550	28.2	22.2	5.0	598	1.03	633	1316	9.2	6.00	NA
Max	52.1	4,960	0.58	1715	28.7	25.8	6.1	739	1.30	927	2605	14.0	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
11/1/2023																								
11/2/2023		0.70	0.53					1.27	0.79	0.51	0.59	0.78	0.37	1.05	0.67									
11/3/2023																								
11/4/2023																								
11/5/2023																								
11/6/2023																								1.12
11/7/2023	0.05									0.56	0.65	0.87	0.32	1.10	0.71	1.01	0.99	0.94	0.79	0.64		0.22		
11/8/2023																								
11/9/2023		0.33	0.21	0.38	1.01	0.89	0.99		0.88	0.58	0.69	0.84	0.35	1.02	0.71									
11/10/2023																								
11/11/2023																								
11/12/2023																								
11/13/2023																								1.16
11/14/2023									0.88	0.61	0.73	0.89	0.37	0.99	0.68	0.89	0.95	0.98	0.83	0.56	1.01			
11/15/2023																								
11/16/2023		0.32	0.37	0.31	0.92																		0.37	
11/17/2023																								
11/18/2023																								
11/19/2023																								
11/20/2023																								
11/21/2023									0.99		0.64	0.98		1.10	0.71									1.16
11/22/2023																								
11/23/2023																								
11/24/2023																								
11/25/2023																								
11/26/2023																								
11/27/2023																								0.97
11/28/2023																								
11/29/2023									0.91	0.61	0.78	0.87	0.39	1.04	0.64									
11/30/2023																								
Average	0.05		0.51					1.05				0.74						0.86			1.01		0.30	1.10
Min	0.05		0.21					0.89				0.32						0.56			1.01		0.22	0.97
Max	0.05		1.01					1.27				1.10						1.01			1.01		0.37	1.16



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	
	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
11/1/2023																									
11/2/2023		0.68				0.93	0.77		0.67					1.03	0.63		0.37		0.57						
11/3/2023																									
11/4/2023																									
11/5/2023																									
11/6/2023																									
11/7/2023											0.71									0.69		0.67	0.72	0.69	0.20
11/8/2023																									
11/9/2023				0.40	0.87	0.50								0.96	0.64										
11/10/2023																									
11/11/2023																									
11/12/2023																									
11/13/2023																									
11/14/2023	0.50		0.40	0.82	0.51			0.52	0.83	0.47						0.49		0.49							
11/15/2023																									
11/16/2023																						0.27	0.73	0.62	
11/17/2023																									
11/18/2023																									
11/19/2023																									
11/20/2023																									
11/21/2023				0.20										1.01	0.68										
11/22/2023				0.31	0.81	0.57																			
11/23/2023																									
11/24/2023																									
11/25/2023																									
11/26/2023																									
11/27/2023																									
11/28/2023																									
11/29/2023																									
11/30/2023																									
Average		0.59		0.54		0.74			0.75		0.59			0.83		0.43		0.53		0.69		0.62		0.20	
Min		0.50		0.20		0.52			0.67		0.47			0.63		0.37		0.49		0.69		0.27		0.20	
Max		0.68		0.87		0.93			0.83		0.71			1.03		0.49		0.57		0.69		0.73		0.20	



MONITORING STATION ADDRESSES

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

- 43. 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

Name of Water Supply

**Bay Area Water Treatment Plant**

MICHIGAN DEPARTMENT OF PUBLIC HEALTH  
Bureau of Environmental Health  
Water Supplier Bacteriological Analysis Report

November, 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	0.05	1	1	0	0
BAY	Bangor Township	0390	0.51	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	1.05	3	3	0	0
BAY	Bay City	0470	0.74	30	39	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.86	9	10	0	0
BAY	Beaver Road Area	0517	1.01	1	1	0	0
BAY	Beaver Township	0518	0.30	2	2	0	0
BAY	Essexville	2180	1.10	4	4	0	0
BAY	Fraser Township	2465	0.59	2	2	0	0
BAY	Hampton Township	2960	0.54	10	10	0	0
BAY	Kawkawlin Township	3565	0.74	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.75	2	2	0	0
BAY	Merritt Township	4280	0.59	2	2	0	0
BAY	Monitor Township	4440	0.83	6	6	0	0
BAY	City of Pinconning	5330	0.43	2	2	0	0
BAY	Pinconning Township	5335	0.53	2	2	0	0
BAY	Portsmouth Township	5540	0.69	1	1	0	0
BAY	Williams Township	7125	0.62	6	6	0	0
Tuscola	Wisner	7134	0.20	1	1	0	0

Average Free Cl2 Residual of All Distribution Sites 0.64 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%

