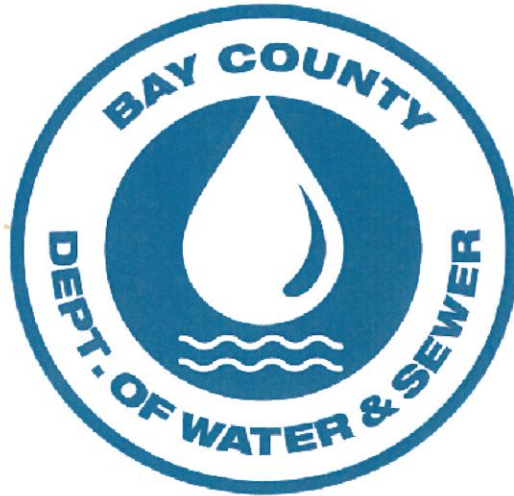


# Bay Area WTP

## Monthly Operations Report



July, 2024

Water Systems Serial Number: 0465

Carl J. Overly  
Carl J. Overly

Water Plant Superintendent  
Title

F-1, S-3, D-4  
Classification

Mike Wagar  
Mike Wagar

Operations Supervisor  
Title

F-1, S-4  
Classification

# Bay Area Water Treatment Plant

## Monthly Operations Report

Supply Name: Bay Area Water System  
 WSSN: 0465

Carl J. Overly  
 Operator-in-charge

July, 2024  
 Month, Year

F-1, S-3, D-4  
 Certification of Operator-in-charge

F-1  
 Water Plant Classification

20001  
 Operator Identification Number for Operator-in-charge

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>10.0</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>16.18</u>	PSI
Maximum Approved Flux Rate	<u>36.25</u>	gpd/sq.ft.
Maximum Operating Flux Rate	<u>29.56</u>	gpd/sq.ft.

### Chemical Data

Sodium Hypochlorite on hand:	<u>3,115</u>	Gallons	Estimated Supply:	<u>29.3</u>	days
Caustic Soda on hand:	<u>4,054</u>	Gallons	Estimated Supply:	<u>277.7</u>	days
Corrosion Inhibitor on hand:	<u>797</u>	Gallons	Estimated Supply:	<u>28.3</u>	days
Hydrofluosilicic Acid on hand:	<u>1,251</u>	Gallons	Estimated Supply:	<u>56.7</u>	days
Aluminum Chlorohydrate on hand:	<u>579</u>	Gallons	Estimated Supply:	<u>57.5</u>	days
Sulfuric Acid on hand:	<u>318</u>	Gallons	Estimated Supply:	<u>158.8</u>	days
Sodium Bisulfite on hand:	<u>371</u>	Gallons	Estimated Supply:	<u>127.8</u>	days
Citric Acid on hand:	<u>2,614</u>	Gallons	Estimated Supply:	<u>209.2</u>	days
Cost of All Chemicals per Million Gallons:	<u>125.34</u>	Dollars			

### Utility Data

Estimated Electrical Kilo Watts per Million Gallons:	<u>1,143.62</u>	KW
Estimated Natural Gas Million Cubic Feet per Million Gallons:	<u>3.12</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

Raw water NTU spike on 7/25/24 was a result of a Maintenance work error.

Finished water CL2 on the CT page shows a drop on 7/28/24, this occurred between 3:02pm to 3:09pm. This was due to operator error while changing reagents in Hach CL17. Outputs on the analyzer were not held during this maintenance activity. Chlorine feed nor residual were actually effected in any way.

## 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
7/1/2024	3.54	6.50	10.04	0.21	0.25	9.28	4.77	3.91	8.67
7/2/2024	3.53	6.48	10.01	0.30	0.20	9.98	4.91	3.99	8.90
7/3/2024	3.42	5.19	8.61	0.35	0.13	9.32	4.75	3.83	8.58
7/4/2024	4.28	5.57	9.85	0.27	0.17	9.74	4.89	3.99	8.88
7/5/2024	4.79	4.97	9.75	0.25	0.19	8.83	4.45	3.74	8.19
7/6/2024	4.12	4.08	8.19	0.31	0.12	7.97	3.91	3.38	7.30
7/7/2024	3.42	4.19	7.60	0.20	0.25	8.44	4.07	3.62	7.69
7/8/2024	3.65	5.37	9.02	0.23	0.21	8.49	4.15	3.58	7.73
7/9/2024	3.77	5.13	8.91	0.36	0.08	8.20	4.02	3.53	7.54
7/10/2024	3.72	3.15	6.87	0.33	0.08	7.59	3.65	3.19	6.85
7/11/2024	3.62	4.20	7.83	0.32	0.08	8.14	4.16	3.38	7.54
7/12/2024	3.82	5.53	9.35	0.39	0.08	8.57	4.33	3.52	7.85
7/13/2024	4.53	5.02	9.55	0.30	0.16	9.00	4.45	3.62	8.08
7/14/2024	4.37	3.72	8.08	0.32	0.12	8.45	4.37	3.55	7.92
7/15/2024	3.87	4.63	8.50	0.38	0.08	9.04	4.56	3.71	8.27
7/16/2024	3.69	5.47	9.15	0.40	0.08	8.82	4.34	3.71	8.06
7/17/2024	3.73	5.38	9.12	0.36	0.08	8.84	4.49	3.64	8.13
7/18/2024	3.75	5.32	9.07	0.38	0.09	9.62	4.84	3.92	8.76
7/19/2024	3.91	6.34	10.25	0.41	0.08	9.63	4.92	4.00	8.92
7/20/2024	4.55	6.34	10.89	0.41	0.10	9.63	4.92	4.00	8.92
7/21/2024	4.48	4.14	8.63	0.34	0.08	9.34	4.76	3.90	8.66
7/22/2024	4.33	5.24	9.57	0.37	0.10	9.64	4.80	3.92	8.72
7/23/2024	4.68	4.56	9.24	0.34	0.08	8.09	4.10	3.39	7.49
7/24/2024	4.66	3.57	8.24	0.34	0.08	8.65	4.33	3.53	7.86
7/25/2024	4.68	3.80	8.48	0.26	0.19	8.65	4.31	3.59	7.90
7/26/2024	4.90	4.32	9.22	0.33	0.14	9.30	4.77	3.87	8.64
7/27/2024	5.63	4.54	10.18	0.35	0.08	9.24	4.63	3.76	8.39
7/28/2024	5.44	3.87	9.31	0.35	0.08	9.34	4.75	3.89	8.64
7/29/2024	5.01	4.12	9.13	0.37	0.08	9.90	5.03	4.11	9.13
7/30/2024	4.80	4.48	9.28	0.34	0.08	8.58	4.43	3.57	8.00
7/31/2024	4.75	4.23	8.99	0.34	0.08	9.01	4.43	3.64	8.07
Total	131.45	149.46	280.90	10.20	3.74	277.32	139.28	114.99	254.27
Avg	4.24	4.82	9.06	0.33	0.12	8.95	4.49	3.71	8.20
Min	3.42	3.15	6.87	0.20	0.08	7.59	3.65	3.19	6.85
Max	5.63	6.50	10.89	0.41	0.25	9.98	5.03	4.11	9.13

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	
7/1/2024	18.7	8.12	0.62	1.00	0.10	0.37	Negative	Negative
7/2/2024	18.8	8.03	0.59	0.72	0.10	0.39	Negative	Negative
7/3/2024	18.8	8.04	0.62	0.68	0.10	0.38	Negative	Negative
7/4/2024	18.6	8.08	0.68	0.84	0.09	0.27	Negative	Negative
7/5/2024	18.6	8.05	0.55	0.66	0.08	0.29	Negative	Negative
7/6/2024	18.6	8.03	0.67	2.79	0.08	0.34	Negative	Negative
7/7/2024	18.7	8.02	0.71	9.24	0.08	0.33	Negative	Negative
7/8/2024	18.5	7.92	0.53	0.63	0.08	0.39	Negative	Negative
7/9/2024	18.2	7.89	0.48	0.53	0.08	0.40	Negative	Negative
7/10/2024	17.8	7.86	0.37	2.25	0.08	0.42	Negative	Negative
7/11/2024	17.5	7.93	0.34	0.53	0.09	0.38	Negative	Negative
7/12/2024	18.3	8.14	0.73	1.06	0.09	0.18	Negative	Negative
7/13/2024	19.0	8.08	1.01	1.31	0.09	0.25	Negative	Negative
7/14/2024	19.2	7.91	0.59	0.77	0.09	0.40	Negative	Negative
7/15/2024	19.1	7.77	0.49	0.59	0.09	0.45	Negative	Negative
7/16/2024	18.6	7.90	0.59	0.65	0.09	0.31	Negative	Negative
7/17/2024	17.6	7.92	0.49	0.56	0.09	0.41	Negative	Negative
7/18/2024	17.0	8.02	0.47	0.54	0.10	0.44	Negative	Negative
7/19/2024	17.2	8.09	0.61	0.77	0.09	0.40	Negative	Negative
7/20/2024	18.2	7.93	0.81	0.98	0.09	0.47	Negative	Negative
7/21/2024	17.8	7.79	0.60	0.77	0.09	0.50	Negative	Negative
7/22/2024	17.9	7.95	0.69	0.93	0.09	0.39	Negative	Negative
7/23/2024	19.3	8.10	0.88	0.97	0.10	0.14	Negative	Negative
7/24/2024	19.7	7.88	0.56	0.75	0.10	0.16	Negative	Negative
7/25/2024	19.3	7.79	0.51	10.01	0.09	0.26	Negative	Negative
7/26/2024	19.5	7.88	0.53	0.65	0.09	0.34	Negative	Negative
7/27/2024	20.1	7.95	0.80	1.02	0.09	0.29	Negative	Negative
7/28/2024	20.4	7.79	0.58	0.70	0.09	0.35	Negative	Negative
7/29/2024	22.3	7.67	0.47	0.59	0.09	0.42	Negative	Negative
7/30/2024	23.1	7.83	0.47	6.18	0.08	0.42	Negative	Negative
7/31/2024	22.1	7.84	0.52	0.67	0.07	0.40	Negative	Negative
Avg	19.0	7.94	0.60	1.62	0.09	0.35	NA	NA
Min	17.0	7.67	0.34	0.53	0.07	0.14	NA	NA
Max	23.1	8.14	1.01	10.01	0.10	0.50	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				Calculated	
	AIT-4040-1	AIT-4050-2	AIT-4040-5	Lab		AIT-4050-1	Lab		Lab	Lab	Lab	Lab	Lab	Lab				
7/1/2024	18.3	7.66	3.34	0.70	0.68	1.24	0	79	12	11	76	9.3	223	-0.56	1.09	0.44	Negative	Negative
7/2/2024	18.3	7.62	3.38	0.71		1.30	0	78	13	11	78	8.8	217	-0.59	1.18	0.47	Negative	Negative
7/3/2024	18.4	7.60	3.36	0.72		1.27	0	76	11	12	72	8.9	237	-0.66	0.92	0.45	Negative	Negative
7/4/2024	18.5	7.59	3.38	0.68		1.30	0	79	12	10	76	9.0	238	-0.62	1.20	0.43	Negative	Negative
7/5/2024	18.5	7.58	3.39	0.68		1.29	0	78	12	11	76	8.9	238	-0.64	1.09	0.45	Negative	Negative
7/6/2024	18.5	7.60	3.38	0.68		1.30	0	79	14	11	78	9.0	236	-0.61	1.27	0.49	Negative	Negative
7/7/2024	18.6	7.55	3.37	0.68		1.32	0	79	12	10	74	8.9	235	-0.67	1.20	0.43	Negative	Negative
7/8/2024	18.7	7.50	3.37	0.68	0.67	1.32	0	77	12	10	74	8.9	233	-0.74	1.20	0.44	Negative	Negative
7/9/2024	18.6	7.65	3.37	0.67		1.32	0	76	12	10	72	8.8	232	-0.61	1.20	0.44	Negative	Negative
7/10/2024	18.4	7.68	3.37	0.67		1.32	0	75	12	12	78	9.2	228	-0.55	1.00	0.48	Negative	Negative
7/11/2024	18.0	7.71	3.37	0.71		1.33	0	79	11	11	74	8.9	225	-0.53	1.00	0.42	Negative	Negative
7/12/2024	18.0	7.69	3.39	0.70		1.32	0	81	12	12	74	9.1	229	-0.53	1.00	0.45	Negative	Negative
7/13/2024	18.8	7.65	3.38	0.70		1.28	0	76	13	11	76	8.9	238	-0.58	1.18	0.48	Negative	Negative
7/14/2024	19.5	7.57	3.37	0.70		1.31	0	80	12	11	76	8.7	236	-0.62	1.09	0.44	Negative	Negative
7/15/2024	19.5	7.54	3.37	0.71	0.71	1.32	0	81	13	11	72	8.9	229	-0.66	1.18	0.45	Negative	Negative
7/16/2024	19.3	7.65	3.36	0.70		1.32	0	80	12	11	70	9.3	228	-0.57	1.09	0.44	Negative	Negative
7/17/2024	18.5	7.75	3.37	0.70		1.33	0	76	11	12	68	8.5	225	-0.53	0.92	0.45	Negative	Negative
7/18/2024	17.6	7.72	3.37	0.72		1.33	0	72	11	12	70	9.3	222	-0.59	0.92	0.48	Negative	Negative
7/19/2024	17.3	7.72	3.37	0.68		1.32	0	76	11	11	72	9.6	222	-0.56	1.00	0.44	Negative	Negative
7/20/2024	17.8	7.62	3.38	0.68		1.29	0	79	12	11	74	9.5	229	-0.62	1.09	0.44	Negative	Negative
7/21/2024	18.1	7.52	3.38	0.69		1.32	0	77	11	11	74	9.4	225	-0.72	1.00	0.43	Negative	Negative
7/22/2024	17.7	7.51	3.37	0.69	0.67	1.30	0	77	12	10	74	8.5	221	-0.74	1.20	0.44	Negative	Negative
7/23/2024	18.2	7.59	3.37	0.72		1.29	0	78	12	13	76	9.2	231	-0.64	0.92	0.48	Negative	Negative
7/24/2024	19.2	7.65	3.38	0.70		1.29	0	80	13	13	82	9.1	237	-0.51	1.00	0.49	Negative	Negative
7/25/2024	19.7	7.68	3.37	0.69		1.31	0	80	11	12	72	8.7	232	-0.52	0.92	0.43	Negative	Negative
7/26/2024	19.8	7.63	3.37	0.68		1.32	0	82	12	12	68	8.9	229	-0.59	1.00	0.44	Negative	Negative
7/27/2024	20.3	7.52	3.37	0.68		1.31	0	81	11	11	70	8.4	233	-0.68	1.00	0.41	Negative	Negative
7/28/2024	20.8	7.44	3.37	0.68		1.31	0	80	12	12	68	8.7	234	-0.76	1.00	0.45	Negative	Negative
7/29/2024	21.1	7.46	3.37	0.68	0.68	1.34	0	81	12	12	70	9.4	229	-0.72	1.00	0.45	Negative	Negative
7/30/2024	20.9	7.58	3.38	0.68		1.33	0	82	12	11	68	8.5	227	-0.61	1.09	0.43	Negative	Negative
7/31/2024	20.4	7.60	3.37	0.68		1.32	0	80	11	12	66	8.8	224	-0.63	0.92	0.43	Negative	Negative
Avg	18.9	7.61	3.37	0.69	0.68	1.31	0	79	12	11	73	9.0	230	-0.62	1.06	0.45	NA	NA
Min	17.3	7.44	3.34	0.67	0.67	1.24	0	72	11	10	66	8.4	217	-0.76	0.92	0.41	NA	NA
Max	21.1	7.75	3.39	0.72	0.71	1.34	0	82	14	13	82	9.6	238	-0.51	1.27	0.49	NA	NA

Turbidity										
Date	Raw Water		Clarified Water	Membrane Feed Water	Combined Membrane Filtrate					Finished Water
	Avg	Max	Avg	Avg	Avg	Max	# Samples	# > 0.3	% Exceeded	Avg
	NTU									
	AIT-1000-1		AIT-5030-1	AIT-1035-3	AIT-4000-1					Calculated
7/1/2024	0.62	1.00	10.71	0.66	0.033	0.033	96	0	0.0	0.028
7/2/2024	0.59	0.72	10.64	0.53	0.033	0.033	96	0	0.0	0.027
7/3/2024	0.62	0.68	24.31	0.55	0.033	0.033	96	0	0.0	0.027
7/4/2024	0.68	0.84	27.27	0.55	0.033	0.033	96	0	0.0	0.028
7/5/2024	0.55	0.66	29.03	0.55	0.033	0.034	96	0	0.0	0.028
7/6/2024	0.67	2.79	30.94	0.64	0.033	0.033	96	0	0.0	0.028
7/7/2024	0.71	9.24	9.31	0.58	0.033	0.034	96	0	0.0	0.027
7/8/2024	0.53	0.63	17.59	0.54	0.033	0.034	96	0	0.0	0.027
7/9/2024	0.48	0.53	2.30	0.48	0.032	0.034	96	0	0.0	0.027
7/10/2024	0.37	2.25	2.88	0.42	0.032	0.034	96	0	0.0	0.027
7/11/2024	0.34	0.53	3.24	0.36	0.031	0.032	96	0	0.0	0.026
7/12/2024	0.73	1.06	6.13	0.49	0.032	0.033	96	0	0.0	0.027
7/13/2024	1.01	1.31	7.20	0.77	0.033	0.035	96	0	0.0	0.027
7/14/2024	0.59	0.77	5.07	0.77	0.034	0.035	96	0	0.0	0.028
7/15/2024	0.49	0.59	4.85	0.61	0.034	0.035	96	0	0.0	0.027
7/16/2024	0.59	0.65	4.34	0.58	0.033	0.035	96	0	0.0	0.027
7/17/2024	0.49	0.56	3.33	0.53	0.032	0.033	96	0	0.0	0.027
7/18/2024	0.47	0.54	2.99	0.46	0.031	0.032	96	0	0.0	0.026
7/19/2024	0.61	0.77	4.39	0.49	0.031	0.032	96	0	0.0	0.026
7/20/2024	0.81	0.98	5.09	0.62	0.031	0.033	96	0	0.0	0.027
7/21/2024	0.60	0.77	9.29	0.64	0.031	0.031	96	0	0.0	0.027
7/22/2024	0.69	0.93	14.31	0.58	0.031	0.031	96	0	0.0	0.026
7/23/2024	0.88	0.97	20.73	0.74	0.033	0.034	96	0	0.0	0.027
7/24/2024	0.56	0.75	23.63	0.68	0.034	0.034	96	0	0.0	0.028
7/25/2024	0.51	10.01	16.60	0.58	0.034	0.034	96	0	0.0	0.027
7/26/2024	0.53	0.65	14.77	0.54	0.033	0.034	96	0	0.0	0.027
7/27/2024	0.80	1.02	29.80	0.66	0.034	0.035	96	0	0.0	0.027
7/28/2024	0.58	0.70	36.25	0.73	0.034	0.035	96	0	0.0	0.027
7/29/2024	0.47	0.59	46.16	0.62	0.034	0.035	96	0	0.0	0.027
7/30/2024	0.47	6.18	21.71	0.54	0.034	0.034	96	0	0.0	0.027
7/31/2024	0.52	0.67	42.10	0.52	0.033	0.034	96	0	0.0	0.027
Avg	0.60	1.62	15.71	0.58	0.033	0.034	96	0	0.0	0.027
Min	0.34	0.53	2.30	0.36	0.031	0.031	96	0	0.0	0.026
Max	1.01	10.01	46.16	0.77	0.034	0.035	96	0	0.0	0.028

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	Integrity	Max	Minimum	Integrity	Max	Minimum	Integrity	Max	Minimum	Integrity	Max	Minimum	Integrity	Max	Minimum	Integrity	Max	Minimum	Integrity	Max	Minimum	Integrity	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
7/1/2024	4.04	PASS	0.027	5.32	PASS	0.029	5.51	PASS	0.027	4.26	PASS	0.028	5.46	PASS	0.026	4.19	PASS	0.027	4.21	PASS	0.027	5.50	PASS	0.029		
7/2/2024	4.06	PASS	0.033	5.32	PASS	0.029	5.53	PASS	0.027	4.27	PASS	0.027	5.45	PASS	0.026	4.19	PASS	0.027	4.17	PASS	0.027	5.50	PASS	0.027		
7/3/2024	3.99	PASS	0.026	5.29	PASS	0.029	5.51	PASS	0.027	4.23	PASS	0.028	5.43	PASS	0.026	4.13	PASS	0.027	4.12	PASS	0.027	5.47	PASS	0.028		
7/4/2024	3.98	PASS	0.027	5.31	PASS	0.029	5.49	PASS	0.027	4.16	PASS	0.028	5.38	PASS	0.026	4.09	PASS	0.027	4.10	PASS	0.027	5.46	PASS	0.028		
7/5/2024	3.97	PASS	0.027	5.30	PASS	0.029	5.49	PASS	0.028	4.13	PASS	0.029	5.40	PASS	0.027	4.08	PASS	0.028	4.07	PASS	0.027	5.44	PASS	0.029		
7/6/2024	3.91	PASS	0.027	5.24	PASS	0.029	5.43	PASS	0.027	4.12	PASS	0.028	5.35	PASS	0.026	4.07	PASS	0.028	4.01	PASS	0.027	5.38	PASS	0.027		
7/7/2024	3.98	PASS	0.026	5.34	PASS	0.028	5.50	PASS	0.027	4.20	PASS	0.028	5.44	PASS	0.026	4.13	PASS	0.027	4.07	PASS	0.027	5.43	PASS	0.028		
7/8/2024	4.03	PASS	0.027	5.33	PASS	0.028	5.56	PASS	0.027	4.27	PASS	0.028	5.42	PASS	0.026	4.17	PASS	0.027	4.12	PASS	0.026	5.48	PASS	0.030		
7/9/2024	4.04	PASS	0.027	5.33	PASS	0.028	5.54	PASS	0.027	4.22	PASS	0.028	5.45	PASS	0.026	4.22	PASS	0.027	4.16	PASS	0.026	5.47	PASS	0.027		
7/10/2024	4.07	PASS	0.036	5.32	PASS	0.028	5.54	PASS	0.026	4.21	PASS	0.027	5.47	PASS	0.025	4.23	PASS	0.027	4.15	PASS	0.027	5.40	PASS	0.028		
7/11/2024	4.11	PASS	0.034	5.38	PASS	0.028	5.57	PASS	0.026	4.33	PASS	0.027	5.48	PASS	0.025	4.26	PASS	0.027	4.19	PASS	0.026	5.54	PASS	0.028		
7/12/2024	4.06	PASS	0.026	5.34	PASS	0.029	5.61	PASS	0.027	4.27	PASS	0.027	5.46	PASS	0.026	4.24	PASS	0.027	4.19	PASS	0.026	5.47	PASS	0.028		
7/13/2024	4.00	PASS	0.027	5.34	PASS	0.031	5.51	PASS	0.028	4.26	PASS	0.029	5.43	PASS	0.027	4.21	PASS	0.028	4.13	PASS	0.028	5.54	PASS	0.028		
7/14/2024	4.01	PASS	0.028	5.34	PASS	0.031	5.55	PASS	0.028	4.31	PASS	0.028	5.43	PASS	0.027	4.21	PASS	0.028	4.13	PASS	0.027	5.51	PASS	0.028		
7/15/2024	4.03	PASS	0.027	5.34	PASS	0.029	5.54	PASS	0.027	4.42	PASS	0.027	5.46	PASS	0.026	4.21	PASS	0.028	4.12	PASS	0.027	5.52	PASS	0.029		
7/16/2024	4.07	PASS	0.026	5.33	PASS	0.029	5.53	PASS	0.027	4.42	PASS	0.028	5.47	PASS	0.026	4.38	PASS	0.027	4.15	PASS	0.026	5.53	PASS	0.028		
7/17/2024	4.04	PASS	0.027	5.31	PASS	0.029	5.52	PASS	0.026	4.42	PASS	0.027	5.48	PASS	0.026	4.37	PASS	0.026	4.16	PASS	0.026	5.50	PASS	0.028		
7/18/2024	4.01	PASS	0.026	5.33	PASS	0.028	5.53	PASS	0.026	4.41	PASS	0.026	5.50	PASS	0.025	4.33	PASS	0.026	4.15	PASS	0.026	5.51	PASS	0.027		
7/19/2024	4.01	PASS	0.026	5.32	PASS	0.028	5.55	PASS	0.026	4.35	PASS	0.026	5.47	PASS	0.025	4.26	PASS	0.026	4.09	PASS	0.026	5.53	PASS	0.027		
7/20/2024	3.99	PASS	0.026	5.32	PASS	0.029	5.53	PASS	0.026	4.34	PASS	0.027	5.46	PASS	0.026	4.24	PASS	0.026	4.09	PASS	0.026	5.49	PASS	0.028		
7/21/2024	4.02	PASS	0.026	5.33	PASS	0.028	5.53	PASS	0.027	4.31	PASS	0.027	5.46	PASS	0.026	4.25	PASS	0.027	4.10	PASS	0.026	5.49	PASS	0.027		
7/22/2024	4.04	PASS	0.026	5.32	PASS	0.028	5.55	PASS	0.026	4.30	PASS	0.027	5.42	PASS	0.025	4.26	PASS	0.026	4.09	PASS	0.026	5.50	PASS	0.027		
7/23/2024	3.93	PASS	0.027	5.31	PASS	0.030	5.50	PASS	0.027	4.21	PASS	0.028	5.41	PASS	0.027	4.14	PASS	0.027	4.06	PASS	0.027	5.42	PASS	0.028		
7/24/2024	3.92	PASS	0.029	5.29	PASS	0.030	5.54	PASS	0.027	4.20	PASS	0.029	5.42	PASS	0.027	4.13	PASS	0.028	4.06	PASS	0.027	5.41	PASS	0.028		
7/25/2024	3.96	PASS	0.027	5.29	PASS	0.029	5.53	PASS	0.027	4.28	PASS	0.028	5.39	PASS	0.026	4.19	PASS	0.028	4.04	PASS	0.027	5.46	PASS	0.028		
7/26/2024	3.96	PASS	0.031	5.30	PASS	0.029	5.54	PASS	0.026	4.31	PASS	0.027	5.42	PASS	0.026	4.29	PASS	0.027	4.05	PASS	0.026	5.43	PASS	0.028		
7/27/2024	3.93	PASS	0.027	5.32	PASS	0.029	5.43	PASS	0.027	4.27	PASS	0.028	5.34	PASS	0.026	4.23	PASS	0.028	4.05	PASS	0.027	5.43	PASS	0.028		
7/28/2024	3.99	PASS	0.027	5.31	PASS	0.029	5.42	PASS	0.027	4.27	PASS	0.028	5.39	PASS	0.026	4.22	PASS	0.029	4.03	PASS	0.027	5.42	PASS	0.029		
7/29/2024	3.99	PASS	0.028	5.27	PASS	0.029	5.44	PASS	0.027	4.26	PASS	0.028	5.38	PASS	0.026	4.24	PASS	0.027	4.04	PASS	0.027	5.45	PASS	0.029		
7/30/2024	4.02	PASS	0.027	5.30	PASS	0.029	5.48	PASS	0.026	4.30	PASS	0.027	5.39	PASS	0.026	4.28	PASS	0.028	4.29	PASS	0.026	5.49	PASS	0.028		
7/31/2024	4.06	PASS	0.027	5.32	PASS	0.029	5.48	PASS	0.026	4.35	PASS	0.027	5.43	PASS	0.025	4.29	PASS	0.027	4.28	PASS	0.026	5.47	PASS	0.027		
Avg	4.01		0.028	5.32		0.029	5.52		0.027	4.28		0.028	5.43		0.026	4.22		0.027	4.12		0.027	5.47		0.028		
Min	3.91		0.026	5.24		0.028	5.42		0.026	4.12		0.026	5.34		0.025	4.07		0.026	4.01		0.026	5.38		0.027		
Max	4.11		0.036	5.38		0.031	5.61		0.028	4.42		0.029	5.50		0.027	4.38		0.029	4.29		0.028	5.54		0.030		

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
7/1/2024	9.3	0.37	0.16	1.32	1.40	1.24	3.29	3.34	0.10	0.57	0.70
7/2/2024	10.0	0.39	0.21	1.24	1.40	1.30	3.30	3.38	0.10	0.57	0.71
7/3/2024	9.3	0.38	0.20	1.32	1.41	1.27	3.31	3.36	0.10	0.57	0.72
7/4/2024	9.7	0.27	0.17	1.36	1.42	1.30	3.32	3.38	0.09	0.57	0.68
7/5/2024	8.8	0.29	0.13	1.42	1.45	1.29	3.32	3.39	0.08	0.57	0.68
7/6/2024	8.0	0.34	0.15	1.44	1.45	1.30	3.32	3.38	0.08	0.57	0.68
7/7/2024	8.4	0.33	0.15	1.44	1.46	1.32	3.32	3.37	0.08	0.57	0.68
7/8/2024	8.5	0.39	0.18	1.38	1.46	1.32	3.32	3.37	0.08	0.57	0.68
7/9/2024	8.2	0.40	0.20	1.38	1.46	1.32	3.32	3.37	0.08	0.57	0.67
7/10/2024	7.6	0.42	0.21	1.36	1.45	1.32	3.32	3.37	0.08	0.57	0.67
7/11/2024	8.1	0.38	0.22	1.36	1.45	1.33	3.32	3.37	0.09	0.57	0.71
7/12/2024	8.6	0.18	0.17	1.45	1.42	1.32	3.32	3.39	0.09	0.57	0.70
7/13/2024	9.0	0.25	0.10	1.52	1.44	1.28	3.32	3.38	0.09	0.57	0.70
7/14/2024	8.4	0.40	0.14	1.48	1.47	1.31	3.32	3.37	0.09	0.57	0.70
7/15/2024	9.0	0.45	0.20	1.40	1.46	1.32	3.32	3.37	0.09	0.57	0.71
7/16/2024	8.8	0.31	0.19	1.48	1.46	1.32	3.32	3.36	0.09	0.57	0.70
7/17/2024	8.8	0.41	0.21	1.42	1.46	1.33	3.32	3.37	0.09	0.57	0.70
7/18/2024	9.6	0.44	0.26	1.34	1.44	1.33	3.32	3.37	0.10	0.57	0.72
7/19/2024	9.6	0.40	0.28	1.34	1.43	1.32	3.32	3.37	0.09	0.55	0.68
7/20/2024	9.6	0.47	0.26	1.38	1.41	1.29	3.32	3.38	0.09	0.55	0.68
7/21/2024	9.3	0.50	0.29	1.34	1.44	1.32	3.32	3.38	0.09	0.55	0.69
7/22/2024	9.6	0.39	0.28	1.37	1.42	1.30	3.32	3.37	0.09	0.55	0.69
7/23/2024	8.1	0.14	0.14	1.70	1.45	1.29	3.32	3.37	0.10	0.55	0.72
7/24/2024	8.6	0.16	0.06	1.74	1.46	1.29	3.32	3.38	0.10	0.55	0.70
7/25/2024	8.7	0.26	0.07	1.68	1.47	1.31	3.32	3.37	0.09	0.55	0.69
7/26/2024	9.3	0.34	0.14	1.60	1.46	1.32	3.32	3.37	0.09	0.55	0.68
7/27/2024	9.2	0.29	0.15	1.62	1.46	1.31	3.32	3.37	0.09	0.55	0.68
7/28/2024	9.3	0.35	0.15	1.63	1.45	1.31	3.32	3.37	0.09	0.55	0.68
7/29/2024	9.9	0.42	0.18	1.58	1.47	1.34	3.32	3.37	0.09	0.55	0.68
7/30/2024	8.6	0.42	0.22	1.55	1.46	1.33	3.32	3.38	0.08	0.56	0.68
7/31/2024	9.0	0.40	0.23	1.30	1.42	1.32	3.32	3.37	0.07	0.57	0.68
Avg	8.9	0.35	0.18	1.45	1.44	1.31	3.32	3.37	0.09	0.56	0.69
Min	7.6	0.14	0.06	1.24	1.40	1.24	3.29	3.34	0.07	0.55	0.67
Max	10.0	0.50	0.29	1.74	1.47	1.34	3.32	3.39	0.10	0.57	0.72



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
7/1/2024	63.2	1,978	0.37	736	28.8	20.1	8.7	386	1.19	230	965	18.7	4.00	Y
7/2/2024	62.7	1,996	0.39	789	28.7	20.3	8.9	378	1.23	232	1020	18.8	4.00	Y
7/3/2024	63.4	1,972	0.38	748	28.8	24.8	8.6	428	1.25	267	1014	18.8	4.00	Y
7/4/2024	57.2	2,189	0.27	593	28.8	24.8	8.9	414	1.21	249	843	18.6	4.00	Y
7/5/2024	56.4	2,220	0.29	648	28.8	25.1	8.2	451	1.23	277	924	18.6	4.00	Y
7/6/2024	66.6	1,877	0.34	641	28.8	24.7	7.3	503	1.23	310	952	18.6	4.00	Y
7/7/2024	67.4	1,855	0.33	614	28.8	24.9	7.7	479	1.24	297	911	18.7	4.00	Y
7/8/2024	62.9	1,988	0.39	770	28.8	24.2	7.7	470	1.25	295	1064	18.5	4.00	Y
7/9/2024	56.2	2,226	0.40	879	28.8	23.5	7.5	475	1.16	275	1154	18.2	4.00	Y
7/10/2024	57.3	2,184	0.42	914	28.7	24.4	6.8	532	1.23	326	1240	17.8	4.00	Y
7/11/2024	57.9	2,162	0.38	824	28.8	24.3	7.5	483	1.21	291	1115	17.5	4.00	Y
7/12/2024	50.4	2,484	0.18	440	28.7	21.0	7.9	433	1.20	260	700	18.3	4.00	Y
7/13/2024	68.4	1,828	0.25	451	28.9	23.3	8.1	442	1.16	256	707	19.0	4.00	Y
7/14/2024	69.3	1,805	0.40	718	28.8	23.6	7.9	453	1.24	281	999	19.2	4.00	Y
7/15/2024	64.3	1,946	0.45	875	28.4	24.0	8.3	435	1.20	261	1136	19.1	4.00	Y
7/16/2024	53.5	2,338	0.31	716	28.3	21.9	8.1	427	1.23	262	978	18.6	4.00	Y
7/17/2024	52.6	2,377	0.41	977	28.9	24.7	8.1	451	1.20	271	1247	17.6	4.00	Y
7/18/2024	53.2	2,350	0.44	1030	28.7	22.9	8.8	404	1.28	259	1288	17.0	4.00	Y
7/19/2024	56.3	2,223	0.40	894	28.8	24.1	8.9	406	1.24	252	1146	17.2	4.00	Y
7/20/2024	68.2	1,835	0.47	855	28.8	23.8	8.9	404	1.16	234	1089	18.2	4.00	Y
7/21/2024	69.3	1,805	0.50	903	28.9	23.1	8.7	412	1.10	226	1129	17.8	4.00	Y
7/22/2024	70.2	1,782	0.39	695	29.0	23.7	8.7	414	1.23	254	949	17.9	4.00	Y
7/23/2024	62.8	1,990	0.14	272	28.8	23.6	7.5	480	1.09	261	533	19.3	4.00	Y
7/24/2024	51.3	2,438	0.16	382	28.8	23.8	7.9	459	1.21	277	659	19.7	4.00	Y
7/25/2024	51.3	2,438	0.26	630	28.8	23.3	7.9	452	1.05	238	868	19.3	4.00	Y
7/26/2024	56.5	2,213	0.34	757	28.8	23.1	8.6	411	1.25	258	1015	19.5	4.00	Y
7/27/2024	68.3	1,832	0.29	531	28.9	23.4	8.4	427	1.28	272	804	20.1	2.00	Y
7/28/2024	69.1	1,811	0.35	639	29.0	24.9	8.6	427	0.78	167	805	20.4	2.00	Y
7/29/2024	64.8	1,932	0.42	807	28.9	23.6	9.1	394	1.31	258	1065	22.3	2.00	Y
7/30/2024	57.4	2,179	0.42	913	28.7	21.9	8.0	434	1.30	283	1196	23.1	2.00	Y
7/31/2024	54.7	2,287	0.40	906	28.8	21.6	8.1	428	1.28	273	1179	22.1	2.00	Y
Avg	60.7	2,082	0.35	727	28.8	23.4	8.2	438	1.20	263	990	19.0	3.68	NA
Min	50.4	1,782	0.14	272	28.3	20.1	6.8	378	0.78	167	533	17.0	2.00	NA
Max	70.2	2,484	0.50	1030	29.0	25.1	9.1	532	1.31	326	1288	23.1	4.00	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
7/1/2024																								
7/2/2024		0.72	0.25	0.79	1.12				0.82	0.51	0.61	0.73	0.44	1.01	0.55	0.89	0.79	0.83	0.64	0.33		0.12		0.98
7/3/2024																								
7/4/2024																								
7/5/2024																								
7/6/2024																								
7/7/2024																								
7/8/2024																								0.91
7/9/2024						0.96	0.93		0.80	0.55	0.71	0.86	0.33	0.72	0.73									
7/10/2024																								
7/11/2024		0.87	0.22	0.79	1.06				0.72	0.46	0.73	0.88	0.42	0.69	0.71	0.71	0.82	0.41	0.82	0.37		0.32		
7/12/2024																								
7/13/2024																								
7/14/2024																								
7/15/2024								1.02																1.08
7/16/2024																					0.92			
7/17/2024									0.81	0.51	0.63	0.87	0.36	1.01	0.68									
7/18/2024		0.99	0.29																					
7/19/2024																								
7/20/2024																								
7/21/2024																								
7/22/2024																								
7/23/2024																								0.98
7/24/2024									0.84		0.59	0.77		0.99	0.71									
7/25/2024	0.12																							
7/26/2024																								
7/27/2024																								
7/28/2024																								
7/29/2024																								
7/30/2024									0.81	0.52	0.64	0.82	0.34	0.74	0.73									
7/31/2024																								
Average	0.12			0.71				0.97				0.68						0.66			0.92		0.22	0.99
Min	0.12			0.22				0.93				0.33						0.33			0.92		0.12	0.91
Max	0.12			1.12				1.02				1.01						0.89			0.92		0.32	1.08

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. Top Gun Liquor, 2981 Midland Rd           | 17. Skipper Buds Marina, 1809 S Water St          | 30. Sample Station, 340 W. Beaver Rd            |
| 10. Little Caesars, 3475 E North Union Rd    | 18. Bay Valley Animal Hospital 6015 WS Saginaw Rd | 32. Essexville City Hall, 1107 Woodside Ave     |

Distribution System Monitoring																												
Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl2)																												
WSSN:	2465		2960				3565			3570		3910		4280		4440			5330		5335		5540	7125			7134	
	Fraser Twp.		Hampton Twp.				Kawkawlin Twp.			Kawkawlin Met.		Linwood, LMWD		Merritt Twp.		Monitor Twp.			City Pinconning		Pinconning Twp.		Portsmouth	Williams Twp.			Wisner	
Date	34	35	36	37	38	39	40	41	42	43	45	73	74	46	48	49	52	55	58	59	61	63	65	68	69	70	72	
7/1/2024																												
7/2/2024														0.31										0.51	0.79	0.54	0.48	0.20
7/3/2024																												
7/4/2024																												
7/5/2024																												
7/6/2024																												
7/7/2024																												
7/8/2024																												
7/9/2024		0.82	0.60	0.38	0.79	0.35	1.04	0.63		0.72			0.15			0.90	0.56	0.58	0.39		0.20							
7/10/2024																												
7/11/2024														0.43										0.53	0.58	0.26		
7/12/2024																												
7/13/2024																												
7/14/2024																												
7/15/2024																												
7/16/2024	0.24		0.62	0.53	0.78				0.97							1.06	0.67	0.66	0.52		0.66							
7/17/2024																												
7/18/2024																												
7/19/2024																												
7/20/2024																												
7/21/2024																												
7/22/2024																												
7/23/2024			0.36	0.47	0.38					0.82						0.99	0.42											
7/24/2024																												
7/25/2024																												
7/26/2024																												
7/27/2024																												
7/28/2024																												
7/29/2024																												
7/30/2024																												
7/31/2024																												
Average	0.53		0.53				0.88			0.77			0.15			0.73			0.46		0.43		0.51		0.53		0.20	
Min	0.24		0.35				0.63			0.72			0.15			0.42			0.39		0.20		0.51		0.26		0.20	
Max	0.82		0.79				1.04			0.82			0.15			1.06			0.52		0.66		0.51		0.79		0.20	

MONITORING STATION ADDRESSES

34. Fraser Elevated Tank, 2949 1/2 N. Huron Rd	43. Speedway, 106 S. Huron Rd.	59. Marathon Gas Station, 511 S Mabel St	73. Larry Chambers, 407 W. Clara Street
35. Lloyd's Cabinet, 1947 N Huron Rd	45. Kawkawlin Restaurant, 103 S Huron Rd	61. Pinconning Meter Pit, 3005 N Huron Rd	74. Linwood Party and Sporting Goods, 211 W. Center St.
36. Shirts Mugs & More, 2728 Center Ave	46. John's Bar, 1476 S Tuscola Rd	63. Master Meter Pit, 2865 Pinconning Rd	
37. Hampton DPW, 950 Wagner Rd.	48. Tool Shed Bar, 12 W Munger Rd	65. Ike's Welding, 50 N Finn Rd	
38. Bay County Golf Course, 584 W Hampton Rd.	49. Wilder Rd Party Store, 2951 E Wilder Rd	68. Williams Township Hall, 1080 W Midland Rd	
39. Sewer Lift Station, 902 Nebobish Rd.	52. Monitor Twp. Elevated Tank, 1611 E. Midland Rd	69. Pump Station, 490 W. Salzburg & 9 Mile Rd	
40. Bay Co. Road Commisison, 2600 E Beaver Rd	55. Auburn Fertilizer, 4640 S 7 Mile Rd	70. 11 Mile Elevated Tank, 5003 S. 11 Mile Rd	
41. Parish Rd. Elevated Tank, 1770 E. Parish Rd	58. Pinconning City Hall, 208 S Manitou St	72. Lindy's Sales, 9051 M-25	
42. Linwood Tile, 205 S Huron Rd			

Distribution System Bacteriological							
Water Supplier Bacteriological Analysis Report							
MICHIGAN DEPARTMENT OF PUBLIC HEALTH Bureau of Environmental Health Water Supplier Bacteriological Analysis Report				Name of Water Supply Bay Area Water Treatment Plant			
				July, 2024			
COUNTY	COMMUNITY	WSSN NUMBER	DISTRIBUTION SYSTEM SAMPLES				
			avg free cl2 mg/L	NUMBER REQUIRED	NUMBER COLLECTED	NUMBER POSITIVE	NUMBER REPEAT SAMPLES
Tuscola	Akron	0072	0.12	1	1	0	0
BAY	Bangor Township	0390	0.71	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	0.97	3	3	0	0
BAY	Bay City	0470	0.68	30	40	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.66	9	10	0	0
BAY	Beaver Road Area	0517	0.92	1	1	0	0
BAY	Beaver Township	0518	0.22	2	2	0	0
BAY	Essexville	2180	0.99	4	4	0	0
BAY	Fraser Township	2465	0.53	2	2	0	0
BAY	Hampton Township	2960	0.53	10	10	0	0
BAY	Kawkawlin Township	3565	0.88	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.77	2	2	0	0
BAY	Linwood Metro Water District	3910	0.15	1	1	0	0
BAY	Merritt Township	4280	0.37	2	2	0	0
BAY	Monitor Township	4440	0.73	6	8	0	0
BAY	City of Pinconning	5330	0.46	2	2	0	0
BAY	Pinconning Township	5335	0.43	2	2	0	0
BAY	Portsmouth Township	5540	0.51	1	1	0	0
BAY	Williams Township	7125	0.53	6	6	0	0
Tuscola	Wisner	7134	0.20	1	1	0	0
Average Free Cl2 Residual of All Distribution Sites			0.57	mg/L			
1. Total distribution samples			111				
2. Total distribution samples with detectable free cl2 residual			111				
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%				