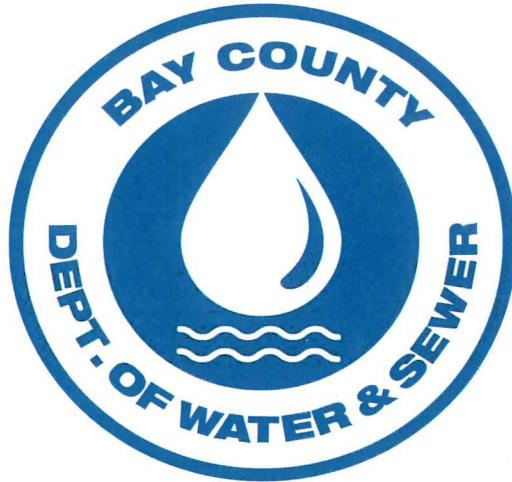


Bay Area WTP

Monthly Operations Report



March, 2024

Water Systems Serial Number: 0465


Carl J. Overly

Water Plant Superintendent
Title

F-1, S-3
Classification


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

March, 2024
 Month, Year

F-1
 Water Plant Classification

Bay
 County

Carl J. Overly
 Operator-in-charge

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

20001
 Operator Identification Number for Operator-in-charge

Treatment Rate and Membrane Data

Treatment Rate, Approved Rated Plant Capacity	<u>17.4</u>	Millions of Gallons per Day
Treatment Rate, Maximum	<u>7.0</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>17.15</u>	PSI
Maximum Approved Flux Rate	<u>36.25</u>	gpd/sq.ft.
Maximum Operating Flux Rate	<u>26.29</u>	gpd/sq.ft.

Chemical Data

Sodium Hypochlorite on hand:	<u>5,275</u>	Gallons	Estimated Supply:	<u>101.2</u>	days
Caustic Soda on hand:	<u>1,944</u>	Gallons	Estimated Supply:	<u>133.2</u>	days
Corrosion Inhibitor on hand:	<u>1,022</u>	Gallons	Estimated Supply:	<u>50.6</u>	days
Hydrofluosilicic Acid on hand:	<u>1,676</u>	Gallons	Estimated Supply:	<u>105.0</u>	days
Aluminum Chlorohydrate on hand:	<u>802</u>	Gallons	Estimated Supply:	<u>176.5</u>	days
Sulfuric Acid on hand:	<u>565</u>	Gallons	Estimated Supply:	<u>282.6</u>	days
Sodium Bisulfite on hand:	<u>727</u>	Gallons	Estimated Supply:	<u>250.8</u>	days
Citric Acid on hand:	<u>1,352</u>	Gallons	Estimated Supply:	<u>108.2</u>	days
Cost of All Chemicals per Million Gallons:	<u>102.59</u>	Dollars			

Utility Data

Estimated Electrical Kilo Watts per Million Gallons:	<u>1,173.01</u>	KW
Estimated Natural Gas Million Cubic Feet per Million Gallons:	<u>2.624</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

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
3/1/2024	0.00	6.42	6.42	0.28	0.08	6.30	2.93	2.66	5.58
3/2/2024	0.00	6.33	6.33	0.28	0.08	6.31	2.94	2.66	5.60
3/3/2024	0.00	6.09	6.09	0.27	0.08	6.34	2.99	2.72	5.71
3/4/2024	0.00	6.33	6.33	0.27	0.10	6.52	3.03	2.72	5.76
3/5/2024	0.00	6.21	6.21	0.30	0.08	6.00	2.91	2.61	5.52
3/6/2024	0.00	5.45	5.45	0.31	0.07	6.99	3.34	2.94	6.27
3/7/2024	0.00	7.97	7.97	0.27	0.08	6.20	2.97	2.68	5.65
3/8/2024	0.00	7.08	7.08	0.28	0.08	6.29	2.94	2.63	5.57
3/9/2024	0.00	5.56	5.56	0.26	0.11	6.60	3.06	2.78	5.85
3/10/2024	0.00	5.87	5.87	0.27	0.07	6.42	3.05	2.75	5.80
3/11/2024	0.00	7.55	7.55	0.29	0.08	6.59	3.10	2.81	5.91
3/12/2024	0.00	7.00	7.00	0.29	0.08	6.34	2.97	2.68	5.65
3/13/2024	0.00	5.79	5.79	0.26	0.08	6.60	3.13	2.79	5.92
3/14/2024	0.00	6.13	6.13	0.29	0.08	6.23	2.93	2.56	5.49
3/15/2024	0.00	6.71	6.71	0.28	0.08	6.67	3.17	2.79	5.96
3/16/2024	0.00	6.57	6.57	0.29	0.08	6.24	3.03	2.67	5.70
3/17/2024	0.00	6.55	6.55	0.27	0.09	6.49	3.08	2.72	5.80
3/18/2024	0.00	6.31	6.31	0.26	0.08	6.10	2.95	2.60	5.56
3/19/2024	0.00	6.38	6.38	0.28	0.08	6.43	3.03	2.67	5.71
3/20/2024	0.00	6.51	6.51	0.32	0.08	6.63	3.04	2.72	5.76
3/21/2024	0.00	6.51	6.51	0.29	0.08	6.53	3.12	2.78	5.90
3/22/2024	0.00	6.52	6.52	0.29	0.08	6.70	3.17	2.83	5.99
3/23/2024	0.00	6.82	6.82	0.29	0.08	6.40	3.04	2.71	5.75
3/24/2024	0.00	6.40	6.40	0.28	0.08	6.59	3.11	2.80	5.91
3/25/2024	0.00	6.51	6.51	0.29	0.08	6.44	3.08	2.73	5.81
3/26/2024	0.00	6.68	6.68	0.27	0.08	6.69	3.18	2.78	5.96
3/27/2024	0.00	7.04	7.04	0.30	0.08	6.63	3.11	2.78	5.89
3/28/2024	0.00	6.65	6.65	0.24	0.09	6.43	3.05	2.65	5.70
3/29/2024	0.00	6.32	6.32	0.26	0.08	6.26	3.05	2.66	5.72
3/30/2024	0.00	5.62	5.62	0.32	0.08	6.41	3.10	2.69	5.80
3/31/2024	0.00	5.84	5.84	0.32	0.08	6.16	2.96	2.54	5.50
Total	0.00	199.73	199.73	8.77	2.45	199.53	94.57	84.12	178.69
Avg	0.00	6.44	6.44	0.28	0.08	6.44	3.05	2.71	5.76
Min	0.00	5.45	5.45	0.24	0.07	6.00	2.91	2.54	5.49
Max	0.00	7.97	7.97	0.32	0.11	6.99	3.34	2.94	6.27

Raw Water Analysis								
Date	Temp	pH	Turbidity		F ⁻	Free Cl	Bacti	
	Average	Average	Average	Maximum	Grab	Average	Positive/Negative	
	°C		NTU		mg/L	mg/L	Total Coliform	E. coli
	TIT-1000	AIT-1000-2	AIT-1000-1		Lab	AIT-1035-2	Lab	
3/1/2024	2.9	7.93	0.46	0.36	0.09	0.44	Negative	Negative
3/2/2024	3.1	7.82	0.35	0.65	0.09	0.43	Negative	Negative
3/3/2024	3.6	7.77	0.23	2.19	0.09	0.43	Negative	Negative
3/4/2024	3.0	7.80	0.56	2.18	0.09	0.44	Negative	Negative
3/5/2024	2.8	7.81	0.62	1.19	0.09	0.44	Negative	Negative
3/6/2024	2.9	7.82	0.15	0.27	0.09	0.42	Negative	Negative
3/7/2024	3.0	7.85	0.19	0.80	0.09	0.43	Negative	Negative
3/8/2024	3.2	7.86	2.20	1.93	0.09	0.32	Negative	Negative
3/9/2024	3.4	7.85	1.16	2.42	0.09	0.38	Negative	Negative
3/10/2024	3.2	7.86	0.37	0.45	0.09	0.41	Negative	Negative
3/11/2024	3.2	7.87	0.37	3.70	0.09	0.41	Negative	Negative
3/12/2024	3.4	7.85	0.38	0.66	0.09	0.40	Negative	Negative
3/13/2024	3.5	7.84	0.23	0.35	0.09	0.41	Negative	Negative
3/14/2024	3.6	7.83	0.20	0.48	0.09	0.41	Negative	Negative
3/15/2024	3.5	7.83	0.23	0.31	0.08	0.43	Negative	Negative
3/16/2024	3.5	7.84	0.31	3.40	0.09	0.42	Negative	Negative
3/17/2024	3.4	7.85	0.20	0.28	0.08	0.42	Negative	Negative
3/18/2024	3.3	7.87	0.22	0.61	0.08	0.41	Negative	Negative
3/19/2024	3.2	7.87	0.19	0.27	0.09	0.41	Negative	Negative
3/20/2024	3.1	7.88	0.18	0.28	0.09	0.38	Negative	Negative
3/21/2024	3.1	7.87	0.22	0.47	0.09	0.42	Negative	Negative
3/22/2024	3.0	7.87	0.26	0.47	0.09	0.40	Negative	Negative
3/23/2024	2.9	7.86	0.31	0.41	0.09	0.43	Negative	Negative
3/24/2024	2.9	7.86	0.29	0.36	0.09	0.47	Negative	Negative
3/25/2024	2.8	7.87	0.29	0.34	0.09	0.44	Negative	Negative
3/26/2024	3.2	7.85	0.32	0.47	0.09	0.38	Negative	Negative
3/27/2024	3.2	7.89	0.44	4.79	0.09	0.24	Negative	Negative
3/28/2024	3.0	7.89	0.38	1.56	0.09	0.32	Negative	Negative
3/29/2024	3.0	7.88	0.31	0.41	0.09	0.37	Negative	Negative
3/30/2024	3.0	7.86	0.27	0.34	0.09	0.43	Negative	Negative
3/31/2024	3.1	7.85	0.26	0.40	0.09	0.44	Negative	Negative
Avg	3.2	7.85	0.39	1.06	0.09	0.40	NA	NA
Min	2.8	7.77	0.15	0.27	0.08	0.24	NA	NA
Max	3.6	7.93	2.20	4.79	0.09	0.47	NA	NA

Finished Water Analysis																		
Date	Temp	pH	Phosphate	Fluoride		Free Cl ₂	Alkalinity (as CaCO ₃)		Chloride	Sulfate	Calcium (as CaCO ₃)	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				Calculated	
	AIT-4040-1	AIT-4050-2	AIT-4040-5	Lab		AIT-4050-1	Lab		Lab	Lab	Lab	Lab	Lab	Lab				
3/1/2024	3.2	7.58	3.36	0.80		1.02	0	75	9	9	80	14.1	216	-1.01	1.00	0.36	Negative	Negative
3/2/2024	3.3	7.58	3.36	0.78		1.03	0	74	10	9	78	12.8	219	-1.02	1.11	0.39	Negative	Negative
3/3/2024	3.3	7.61	3.36	0.78		1.03	0	73	9	10	78	13.6	216	-1.00	0.90	0.39	Negative	Negative
3/4/2024	3.3	7.56	3.38	0.78	0.76	1.01	0	73	9	9	78	14.1	216	-1.05	1.00	0.37	Negative	Negative
3/5/2024	3.4	7.44	3.43	0.76		1.01	0	73	9	10	78	13.5	212	-1.17	0.90	0.39	Negative	Negative
3/6/2024	3.5	7.62	3.40	0.75		1.03	0	80	12	12	68	13.8	216	-1.01	1.00	0.45	Negative	Negative
3/7/2024	3.5	7.67	3.92	0.76		1.03	0	78	10	9	70	13.5	216	-0.96	1.11	0.37	Negative	Negative
3/8/2024	3.6	7.69	3.44	0.76		1.01	0	78	10	9	68	12.9	219	-0.95	1.11	0.37	Negative	Negative
3/9/2024	3.7	7.70	3.40	0.76		1.00	0	77	11	10	66	13.3	219	-0.95	1.10	0.41	Negative	Negative
3/10/2024	3.7	7.72	3.41	0.76		1.01	0	77	10	10	66	14.0	218	-0.93	1.00	0.39	Negative	Negative
3/11/2024	3.8	7.72	3.40	0.76	0.75	1.02	0	79	9	9	68	13.8	216	-0.90	1.00	0.34	Negative	Negative
3/12/2024	4.0	7.72	3.40	0.76		1.00	0	77	10	9	68	13.7	216	-0.91	1.11	0.37	Negative	Negative
3/13/2024	4.1	7.69	3.40	0.75		1.02	0	75	10	11	70	13.3	214	-0.93	0.91	0.42	Negative	Negative
3/14/2024	4.2	7.69	3.41	0.76		1.02	0	73	9	9	78	14.2	215	-0.90	1.00	0.37	Negative	Negative
3/15/2024	4.1	7.60	3.39	0.75		1.01	0	74	9	9	78	13.9	214	-0.98	1.00	0.37	Negative	Negative
3/16/2024	4.0	7.57	3.39	0.76		1.01	0	75	10	9	76	13.5	210	-1.02	1.11	0.38	Negative	Negative
3/17/2024	4.0	7.57	3.39	0.75		1.02	0	70	11	9	78	14.0	204	-1.03	1.22	0.44	Negative	Negative
3/18/2024	4.0	7.58	3.39	0.73	0.73	1.01	0	76	11	10	80	14.0	204	-0.98	1.10	0.42	Negative	Negative
3/19/2024	4.0	7.61	3.39	0.73		1.00	0	72	10	10	72	10.1	207	-1.02	1.00	0.42	Negative	Negative
3/20/2024	4.0	7.61	3.39	0.70		1.00	0	76	12	11	78	14.0	215	-0.96	1.09	0.46	Negative	Negative
3/21/2024	4.0	7.61	3.39	0.69		1.01	0	79	9	10	64	12.9	217	-1.03	0.90	0.36	Negative	Negative
3/22/2024	4.0	7.60	3.39	0.69		1.01	0	76	10	10	68	13.4	216	-1.04	1.00	0.40	Negative	Negative
3/23/2024	3.9	7.61	3.39	0.69		1.02	0	78	10	10	68	13.9	217	-1.01	1.00	0.39	Negative	Negative
3/24/2024	3.8	7.63	3.38	0.69		1.02	0	79	9	9	68	13.2	217	-1.00	1.00	0.34	Negative	Negative
3/25/2024	3.7	7.63	3.38	0.69	0.69	1.03	0	77	10	9	70	12.8	218	-1.00	1.11	0.37	Negative	Negative
3/26/2024	3.9	7.62	3.38	0.70		1.01	0	79	10	9	68	13.6	219	-1.00	1.11	0.37	Negative	Negative
3/27/2024	3.9	7.63	3.38	0.68		1.00	0	79	10	11	70	13.5	220	-0.98	0.91	0.40	Negative	Negative
3/28/2024	3.8	7.64	3.38	0.68		1.00	0	78	11	11	78	14.0	227	-0.93	1.00	0.43	Negative	Negative
3/29/2024	3.9	7.65	3.39	0.68		1.00	0	77	10	10	82	13.7	225	-0.91	1.00	0.39	Negative	Negative
3/30/2024	3.9	7.65	3.39	0.68		1.02	0	78	11	9	66	13.0	223	-0.99	1.22	0.39	Negative	Negative
3/31/2024	3.8	7.65	3.38	0.68		1.02	0	79	10	9	78	13.4	220	-0.91	1.11	0.37	Negative	Negative
Avg	3.8	7.63	3.41	0.73	0.73	1.01	0	76	10	10	73	13.5	216	-0.98	1.04	0.39	NA	NA
Min	3.2	7.44	3.36	0.68	0.69	1.00	0	70	9	9	64	10.1	204	-1.17	0.90	0.34	NA	NA
Max	4.2	7.72	3.92	0.80	0.76	1.03	0	80	12	12	82	14.2	227	-0.90	1.22	0.46	NA	NA

Note: Fluoride feed reduced on 3/19 to better align with the 0.7 mg/L recommendation.

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
3/1/2024	0.46	0.36	0.89	0.92	0.022	0.022	96	0	0.0	0.014
3/2/2024	0.35	0.65	0.90	0.86	0.022	0.022	96	0	0.0	0.014
3/3/2024	0.23	2.19	1.16	0.66	0.022	0.022	96	0	0.0	0.014
3/4/2024	0.56	2.18	1.10	0.56	0.022	0.022	96	0	0.0	0.014
3/5/2024	0.62	1.19	0.97	0.51	0.022	0.022	96	0	0.0	0.014
3/6/2024	0.15	0.27	2.85	0.53	0.022	0.022	96	0	0.0	0.014
3/7/2024	0.19	0.80	1.44	0.40	0.022	0.022	96	0	0.0	0.014
3/8/2024	2.20	1.93	1.64	1.29	0.022	0.022	96	0	0.0	0.014
3/9/2024	1.16	2.42	2.28	1.98	0.022	0.022	96	0	0.0	0.014
3/10/2024	0.37	0.45	1.98	1.31	0.022	0.022	96	0	0.0	0.014
3/11/2024	0.37	3.70	1.67	0.83	0.022	0.022	96	0	0.0	0.014
3/12/2024	0.38	0.66	1.59	0.71	0.027	0.030	96	0	0.0	0.018
3/13/2024	0.23	0.35	1.61	0.56	0.030	0.030	96	0	0.0	0.020
3/14/2024	0.20	0.48	1.41	0.45	0.030	0.030	96	0	0.0	0.019
3/15/2024	0.23	0.31	1.53	0.39	0.030	0.030	96	0	0.0	0.019
3/16/2024	0.31	3.40	1.53	0.44	0.030	0.030	96	0	0.0	0.019
3/17/2024	0.20	0.28	1.33	0.41	0.030	0.030	96	0	0.0	0.019
3/18/2024	0.22	0.61	1.29	0.37	0.030	0.030	96	0	0.0	0.019
3/19/2024	0.19	0.27	2.08	0.38	0.030	0.030	96	0	0.0	0.019
3/20/2024	0.18	0.28	1.89	0.31	0.030	0.030	96	0	0.0	0.019
3/21/2024	0.22	0.47	1.61	0.32	0.030	0.030	96	0	0.0	0.019
3/22/2024	0.26	0.47	2.07	0.35	0.030	0.030	96	0	0.0	0.019
3/23/2024	0.31	0.41	2.22	0.42	0.030	0.031	96	0	0.0	0.019
3/24/2024	0.29	0.36	2.39	0.44	0.030	0.030	96	0	0.0	0.019
3/25/2024	0.29	0.34	3.41	0.45	0.030	0.031	96	0	0.0	0.019
3/26/2024	0.32	0.47	1.91	0.44	0.030	0.030	96	0	0.0	0.019
3/27/2024	0.44	4.79	2.41	0.51	0.030	0.031	96	0	0.0	0.019
3/28/2024	0.38	1.56	3.12	0.55	0.030	0.030	96	0	0.0	0.019
3/29/2024	0.31	0.41	1.93	0.53	0.030	0.030	96	0	0.0	0.019
3/30/2024	0.27	0.34	2.47	0.48	0.030	0.030	96	0	0.0	0.019
3/31/2024	0.26	0.40	2.09	0.43	0.030	0.030	96	0	0.0	0.019
Avg	0.39	1.06	1.83	0.61	0.027	0.027	96	0	0.0	0.017
Min	0.15	0.27	0.89	0.31	0.022	0.022	96	0	0.0	0.014
Max	2.20	4.79	3.41	1.98	0.030	0.031	96	0	0.0	0.020

Note: % Exceeded are 4 hr compliance periods where the average of samples are greater than 0.3 NTU
Turbidity readings shifted up on CFE after the transition to our new Lovibond was installed.

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	Minimum		Max	Minimum		Max	Minimum		Max	Minimum		Max	Minimum		Max	Minimum		Max	Minimum		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
3/1/2024	4.19	PASS	0.020	5.44	PASS	0.023	4.88	PASS	0.020	4.27	PASS	0.020	5.50	PASS	0.021	4.20	PASS	0.023	4.27	PASS	0.026	5.63	PASS	0.022
3/2/2024	4.23	PASS	0.020	5.45	PASS	0.023	5.10	PASS	0.019	4.30	PASS	0.020	5.48	PASS	0.027	4.20	PASS	0.023	4.28	PASS	0.026	5.59	PASS	0.022
3/3/2024	4.22	PASS	0.020	5.44	PASS	0.023	5.08	PASS	0.019	4.29	PASS	0.020	5.49	PASS	0.021	4.24	PASS	0.024	4.28	PASS	0.025	5.58	PASS	0.022
3/4/2024	4.22	PASS	0.020	5.43	PASS	0.023	5.08	PASS	0.019	4.28	PASS	0.020	5.49	PASS	0.021	4.23	PASS	0.023	4.28	PASS	0.026	5.60	PASS	0.022
3/5/2024	4.19	PASS	0.020	5.45	PASS	0.023	5.09	PASS	0.019	4.29	PASS	0.020	5.53	PASS	0.020	4.24	PASS	0.022	4.30	PASS	0.026	5.64	PASS	0.022
3/6/2024	4.24	PASS	0.022	5.44	PASS	0.023	5.06	PASS	0.019	4.28	PASS	0.020	5.52	PASS	0.030	4.26	PASS	0.022	4.28	PASS	0.026	5.54	PASS	0.022
3/7/2024	4.21	PASS	0.020	5.43	PASS	0.023	5.06	PASS	0.019	4.27	PASS	0.020	5.53	PASS	0.023	4.23	PASS	0.023	4.29	PASS	0.026	5.54	PASS	0.022
3/8/2024	4.21	PASS	0.021	5.42	PASS	0.025	5.07	PASS	0.024	4.31	PASS	0.020	5.50	PASS	0.022	4.21	PASS	0.027	4.31	PASS	0.027	5.60	PASS	0.027
3/9/2024	4.20	PASS	0.023	5.40	PASS	0.024	5.09	PASS	0.027	4.29	PASS	0.017	5.51	PASS	0.021	4.22	PASS	0.027	4.34	PASS	0.027	5.58	PASS	0.025
3/10/2024	4.21	PASS	0.023	5.42	PASS	0.024	5.09	PASS	0.028	4.26	PASS	0.017	5.51	PASS	0.024	4.19	PASS	0.023	4.31	PASS	0.029	5.59	PASS	0.022
3/11/2024	4.22	PASS	0.021	5.42	PASS	0.024	5.09	PASS	0.022	4.28	PASS	0.020	5.53	PASS	0.033	4.19	PASS	0.024	4.27	PASS	0.027	5.59	PASS	0.023
3/12/2024	4.21	PASS	0.023	5.41	PASS	0.024	5.08	PASS	0.022	4.28	PASS	0.018	5.53	PASS	0.022	4.23	PASS	0.023	4.38	PASS	0.027	5.58	PASS	0.022
3/13/2024	4.23	PASS	0.021	5.41	PASS	0.024	5.26	PASS	0.022	4.25	PASS	0.016	5.53	PASS	0.021	4.20	PASS	0.023	4.30	PASS	0.028	5.59	PASS	0.022
3/14/2024	4.25	PASS	0.021	5.42	PASS	0.024	5.13	PASS	0.025	4.30	PASS	0.020	5.52	PASS	0.022	4.21	PASS	0.023	4.30	PASS	0.027	5.61	PASS	0.022
3/15/2024	4.24	PASS	0.021	5.40	PASS	0.024	5.11	PASS	0.022	4.30	PASS	0.018	5.49	PASS	0.028	4.21	PASS	0.023	4.29	PASS	0.028	5.60	PASS	0.022
3/16/2024	4.23	PASS	0.022	5.41	PASS	0.024	5.12	PASS	0.022	4.27	PASS	0.019	5.55	PASS	0.021	4.21	PASS	0.023	4.41	PASS	0.027	5.67	PASS	0.022
3/17/2024	4.19	PASS	0.022	5.40	PASS	0.024	5.11	PASS	0.024	4.28	PASS	0.016	5.54	PASS	0.021	4.21	PASS	0.024	4.30	PASS	0.027	5.62	PASS	0.022
3/18/2024	4.19	PASS	0.021	5.41	PASS	0.024	5.12	PASS	0.024	4.28	PASS	0.018	5.56	PASS	0.021	4.24	PASS	0.024	4.29	PASS	0.027	5.62	PASS	0.022
3/19/2024	4.17	PASS	0.021	5.42	PASS	0.024	5.11	PASS	0.022	4.27	PASS	0.017	5.56	PASS	0.033	4.21	PASS	0.023	4.27	PASS	0.027	5.62	PASS	0.022
3/20/2024	4.16	PASS	0.020	5.41	PASS	0.024	5.09	PASS	0.022	4.26	PASS	0.017	5.53	PASS	0.021	4.21	PASS	0.023	4.26	PASS	0.028	5.62	PASS	0.022
3/21/2024	4.16	PASS	0.021	5.40	PASS	0.024	5.13	PASS	0.022	4.27	PASS	0.016	5.53	PASS	0.021	4.25	PASS	0.024	4.27	PASS	0.029	5.62	PASS	0.021
3/22/2024	4.16	PASS	0.021	5.40	PASS	0.024	5.08	PASS	0.022	4.52	PASS	0.016	5.51	PASS	0.021	4.22	PASS	0.024	4.28	PASS	0.027	5.60	PASS	0.022
3/23/2024	4.17	PASS	0.021	5.44	PASS	0.024	5.09	PASS	0.022	4.48	PASS	0.016	5.52	PASS	0.024	4.20	PASS	0.024	4.26	PASS	0.027	5.57	PASS	0.022
3/24/2024	4.17	PASS	0.021	5.47	PASS	0.024	5.08	PASS	0.022	4.42	PASS	0.016	5.55	PASS	0.021	4.38	PASS	0.025	4.26	PASS	0.027	5.63	PASS	0.022
3/25/2024	4.16	PASS	0.021	5.40	PASS	0.024	5.09	PASS	0.022	4.40	PASS	0.015	5.52	PASS	0.021	4.35	PASS	0.024	4.26	PASS	0.028	5.60	PASS	0.021
3/26/2024	4.13	PASS	0.023	5.41	PASS	0.024	5.08	PASS	0.021	4.49	PASS	0.015	5.57	PASS	0.023	4.31	PASS	0.024	4.33	PASS	0.027	5.56	PASS	0.022
3/27/2024	4.13	PASS	0.023	5.40	PASS	0.025	5.08	PASS	0.022	4.38	PASS	0.016	5.53	PASS	0.022	4.30	PASS	0.024	4.28	PASS	0.025	5.56	PASS	0.021
3/28/2024	4.14	PASS	0.022	5.39	PASS	0.025	5.07	PASS	0.024	4.36	PASS	0.017	5.54	PASS	0.021	4.30	PASS	0.023	4.24	PASS	0.028	5.59	PASS	0.022
3/29/2024	4.14	PASS	0.021	5.39	PASS	0.024	5.09	PASS	0.022	4.36	PASS	0.017	5.53	PASS	0.021	4.27	PASS	0.023	4.25	PASS	0.026	5.65	PASS	0.021
3/30/2024	4.17	PASS	0.021	5.39	PASS	0.024	5.06	PASS	0.021	4.36	PASS	0.016	5.53	PASS	0.048	4.26	PASS	0.023	4.32	PASS	0.027	5.54	PASS	0.020
3/31/2024	4.18	PASS	0.021	5.41	PASS	0.024	5.05	PASS	0.021	4.39	PASS	0.016	5.62	PASS	0.021	4.28	PASS	0.023	4.30	PASS	0.027	5.56	PASS	0.021
Avg	4.19		0.021	5.42		0.024	5.09		0.022	4.32		0.018	5.53		0.024	4.24		0.024	4.29		0.027	5.60		0.022
Min	4.13		0.020	5.39		0.023	4.88		0.019	4.25		0.015	5.48		0.020	4.19		0.022	4.24		0.025	5.54		0.020
Max	4.25		0.023	5.47		0.025	5.26		0.028	4.52		0.020	5.62		0.048	4.38		0.027	4.41		0.029	5.67		0.027

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 ₂					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
3/1/2024	6.3	0.44	0.34	0.86	1.08	1.02	3.22	3.36	0.09	0.59	0.80
3/2/2024	6.3	0.43	0.37	0.84	1.08	1.03	3.22	3.36	0.09	0.59	0.78
3/3/2024	6.3	0.43	0.37	0.84	1.08	1.03	3.22	3.36	0.09	0.59	0.78
3/4/2024	6.5	0.44	0.38	0.80	1.05	1.01	3.22	3.38	0.09	0.59	0.78
3/5/2024	6.0	0.44	0.37	0.82	1.08	1.01	3.22	3.43	0.09	0.59	0.76
3/6/2024	7.0	0.42	0.36	0.84	1.08	1.03	3.22	3.40	0.09	0.59	0.75
3/7/2024	6.2	0.43	0.37	0.82	1.08	1.03	3.14	3.92	0.09	0.59	0.76
3/8/2024	6.3	0.32	0.34	0.88	1.05	1.01	3.22	3.44	0.09	0.59	0.76
3/9/2024	6.6	0.38	0.29	0.90	1.06	1.00	3.22	3.40	0.09	0.59	0.76
3/10/2024	6.4	0.41	0.31	0.90	1.07	1.01	3.22	3.41	0.09	0.59	0.76
3/11/2024	6.6	0.41	0.33	0.84	1.07	1.02	3.22	3.40	0.09	0.59	0.76
3/12/2024	6.3	0.40	0.33	0.88	1.07	1.00	3.22	3.40	0.09	0.59	0.76
3/13/2024	6.6	0.41	0.34	0.88	1.08	1.02	3.22	3.40	0.09	0.59	0.75
3/14/2024	6.2	0.41	0.34	0.86	1.07	1.02	3.22	3.41	0.09	0.60	0.76
3/15/2024	6.7	0.43	0.35	0.86	1.06	1.01	3.22	3.39	0.08	0.60	0.75
3/16/2024	6.2	0.42	0.35	0.86	1.07	1.01	3.22	3.39	0.09	0.61	0.76
3/17/2024	6.5	0.42	0.35	0.86	1.07	1.02	3.22	3.39	0.08	0.61	0.75
3/18/2024	6.1	0.41	0.35	0.86	1.06	1.01	3.22	3.39	0.08	0.61	0.73
3/19/2024	6.4	0.41	0.34	0.86	1.05	1.00	3.22	3.39	0.09	0.57	0.73
3/20/2024	6.6	0.38	0.33	0.90	1.05	1.00	3.22	3.39	0.09	0.54	0.70
3/21/2024	6.5	0.42	0.34	0.88	1.06	1.01	3.22	3.39	0.09	0.54	0.69
3/22/2024	6.7	0.40	0.34	0.88	1.07	1.01	3.22	3.39	0.09	0.54	0.69
3/23/2024	6.4	0.43	0.35	0.88	1.07	1.02	3.22	3.39	0.09	0.54	0.69
3/24/2024	6.6	0.47	0.36	0.74	1.09	1.02	3.22	3.38	0.09	0.54	0.69
3/25/2024	6.4	0.44	0.38	0.71	1.07	1.03	3.22	3.38	0.09	0.54	0.69
3/26/2024	6.7	0.38	0.36	0.74	1.07	1.01	3.22	3.38	0.09	0.54	0.70
3/27/2024	6.6	0.24	0.28	0.83	1.05	1.00	3.22	3.38	0.09	0.54	0.68
3/28/2024	6.4	0.32	0.21	0.82	1.08	1.00	3.22	3.38	0.09	0.54	0.68
3/29/2024	6.3	0.37	0.22	0.80	1.08	1.00	3.22	3.39	0.09	0.54	0.68
3/30/2024	6.4	0.43	0.26	0.76	1.09	1.02	3.22	3.39	0.09	0.54	0.68
3/31/2024	6.2	0.44	0.30	0.72	1.07	1.02	3.22	3.38	0.09	0.54	0.68
Avg	6.4	0.40	0.33	0.84	1.07	1.01	3.22	3.41	0.09	0.57	0.73
Min	6.0	0.24	0.21	0.71	1.05	1.00	3.14	3.36	0.08	0.54	0.68
Max	7.0	0.47	0.38	0.90	1.09	1.03	3.22	3.92	0.09	0.61	0.80

Note: The PO4 residual on 3/7 of 3.92 mg/L is high for us and this was due to an error with the pump. Carl emailed on 3/8 fully detailing the event.

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 ₂	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
3/1/2024	54.3	2,303	0.44	1002	28.7	24.7	5.6	655	1.00	327	1329	2.9	12.00	Y
3/2/2024	52.0	2,405	0.43	1031	28.7	25.4	5.6	661	1.01	335	1366	3.1	12.00	Y
3/3/2024	52.9	2,364	0.43	1005	28.6	24.8	5.7	641	1.01	322	1327	3.6	12.00	Y
3/4/2024	44.5	2,814	0.44	1227	28.6	25.7	5.8	647	0.98	319	1546	3.0	12.00	Y
3/5/2024	39.8	3,141	0.44	1371	28.7	24.2	5.5	656	0.98	323	1694	2.8	12.00	Y
3/6/2024	39.1	3,200	0.42	1341	28.2	22.2	6.3	550	1.00	275	1616	2.9	12.00	Y
3/7/2024	61.3	2,042	0.43	870	28.2	22.1	5.6	610	1.02	311	1181	3.0	12.00	Y
3/8/2024	49.5	2,528	0.32	804	28.6	24.3	5.6	651	0.99	323	1127	3.2	12.00	Y
3/9/2024	47.1	2,658	0.38	1022	28.7	25.3	5.8	633	0.98	309	1331	3.4	12.00	Y
3/10/2024	48.5	2,579	0.41	1067	28.6	25.0	5.8	634	0.99	314	1382	3.2	12.00	Y
3/11/2024	49.1	2,549	0.41	1050	28.6	25.3	5.9	625	1.01	314	1364	3.2	12.00	Y
3/12/2024	44.9	2,784	0.40	1120	28.6	25.8	5.6	660	0.98	325	1445	3.4	12.00	Y
3/13/2024	40.6	3,082	0.41	1274	28.6	24.1	5.9	610	1.00	305	1579	3.5	12.00	Y
3/14/2024	43.2	2,895	0.41	1175	28.7	24.9	5.5	669	1.01	336	1511	3.6	12.00	Y
3/15/2024	53.1	2,356	0.43	1008	28.7	25.1	6.0	618	1.00	308	1317	3.5	12.00	Y
3/16/2024	53.6	2,332	0.42	973	28.6	24.2	5.7	635	0.99	315	1288	3.5	12.00	Y
3/17/2024	52.2	2,395	0.42	1005	28.6	24.0	5.8	621	1.00	310	1316	3.4	12.00	Y
3/18/2024	50.9	2,459	0.41	999	28.6	21.9	5.6	623	0.99	309	1308	3.3	12.00	Y
3/19/2024	43.7	2,860	0.41	1164	28.6	20.9	5.7	595	0.99	295	1459	3.2	12.00	Y
3/20/2024	39.6	3,163	0.38	1193	28.7	22.8	5.8	612	0.98	299	1492	3.1	12.00	Y
3/21/2024	41.6	3,008	0.42	1250	28.6	25.6	5.9	630	0.99	312	1563	3.1	12.00	Y
3/22/2024	49.9	2,508	0.40	1014	28.7	25.5	6.0	620	0.99	308	1322	3.0	12.00	Y
3/23/2024	50.4	2,483	0.43	1064	28.7	25.6	5.7	647	1.01	325	1389	2.9	12.00	Y
3/24/2024	49.5	2,527	0.47	1182	28.7	25.4	5.9	627	1.01	315	1497	2.9	12.00	Y
3/25/2024	50.0	2,501	0.44	1100	28.7	24.5	5.8	626	1.01	315	1415	2.8	12.00	Y
3/26/2024	42.2	2,966	0.38	1119	28.7	23.3	6.0	597	0.98	294	1413	3.2	12.00	Y
3/27/2024	37.7	3,314	0.24	779	28.7	25.1	5.9	626	0.98	308	1087	3.2	12.00	Y
3/28/2024	36.4	3,439	0.32	1084	28.7	25.1	5.7	647	0.96	312	1396	3.0	12.00	Y
3/29/2024	41.7	3,000	0.37	1119	28.6	23.6	5.7	627	0.98	309	1428	3.0	12.00	Y
3/30/2024	52.7	2,373	0.43	1027	28.7	24.9	5.8	633	1.00	316	1343	3.0	12.00	Y
3/31/2024	54.3	2,306	0.44	1013	28.6	23.7	5.5	652	0.99	323	1336	3.1	12.00	Y
Avg	47.3	2,688	0.40	1079	28.6	24.4	5.8	630	0.99	313	1393	3.2	12.00	NA
Min	36.4	2,042	0.24	779	28.2	20.9	5.5	550	0.96	275	1087	2.8	12.00	NA
Max	61.3	3,439	0.47	1371	28.7	25.8	6.3	669	1.02	336	1694	3.6	12.00	NA

Note: Pipeline volume factor in SMMWSC to RW tank: 125,090 MG-min/day
As previously discussed, CT achieved for Finished Water Tanks now reflect a baffle factor. Calculation will toggle between .5 and .3 depending on tank elevations.

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
3/1/2024																								
3/2/2024																								
3/3/2024																								
3/4/2024																								0.88
3/5/2024						0.65	0.80																	
3/6/2024									0.96	0.51	0.70	0.87	0.49	0.91	0.68									
3/7/2024	0.40	0.48	0.57	0.38	0.78											0.81	0.87	0.75	0.77	0.65		0.37		
3/8/2024																								
3/9/2024																								
3/10/2024																								
3/11/2024																								0.98
3/12/2024								0.95	0.81	0.48	0.70	0.88	0.39	0.94	0.66						0.78			
3/13/2024																								
3/14/2024		0.81	0.53						0.88	0.56	0.66	0.84	0.38	0.96	0.67	0.83	0.84	0.83	0.70	0.67		0.58		
3/15/2024																								
3/16/2024																								
3/17/2024																								
3/18/2024																								0.89
3/19/2024																								
3/20/2024									0.88	0.59	0.71	0.79	0.41	0.95	0.79									
3/21/2024		0.51	0.56	0.56	0.98																			
3/22/2024																								
3/23/2024																								
3/24/2024																								
3/25/2024									0.85	0.58	0.70	0.87	0.41	0.96	0.68									0.90
3/26/2024																								
3/27/2024									0.84	0.54	0.65	0.89	0.38	0.94	0.72									
3/28/2024																								
3/29/2024																								
3/30/2024																								
3/31/2024																								
Average	0.40			0.62				0.80				0.72							0.77		0.78		0.48	0.91
Min	0.40			0.38				0.65				0.38							0.65		0.78		0.37	0.88
Max	0.40			0.98				0.95				0.96							0.87		0.78		0.58	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. 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 Cl ₂)																												
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	
3/1/2024																												
3/2/2024																												
3/3/2024																												
3/4/2024																												
3/5/2024		0.81	0.44	0.47	0.45	0.48	1.05	0.69		0.66			0.51			0.77	0.67		0.60		0.64							
3/6/2024																												
3/7/2024														0.58									0.65	0.44	0.53	0.69	0.52	
3/8/2024																												
3/9/2024																												
3/10/2024																												
3/11/2024																												
3/12/2024	0.57			0.56	0.72	0.60				0.85	0.66					0.92	0.78		0.57		0.64							
3/13/2024																												
3/14/2024														0.60										0.57	0.67	0.57		
3/15/2024																												
3/16/2024																												
3/17/2024																												
3/18/2024																												
3/19/2024				0.57	0.61	0.60										0.86	0.70											
3/20/2024																												
3/21/2024																												
3/22/2024																												
3/23/2024																												
3/24/2024																												
3/25/2024																												
3/26/2024																												
3/27/2024																												
3/28/2024																												
3/29/2024																												
3/30/2024																												
3/31/2024																												
Average	0.69			0.55				0.86		0.66		0.51		0.59		0.78		0.59		0.64		0.65		0.58			0.52	
Min	0.57			0.44				0.69		0.66		0.51		0.58		0.67		0.57		0.64		0.65		0.44			0.52	
Max	0.81			0.72				1.05		0.66		0.51		0.60		0.92		0.60		0.64		0.65		0.69			0.52	

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			
				March, 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	0.40	1	1	0	0
BAY	Bangor Township	0390	0.62	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	0.80	3	3	0	0
BAY	Bay City	0470	0.72	30	42	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.77	9	10	0	0
BAY	Beaver Road Area	0517	0.78	1	1	0	0
BAY	Beaver Township	0518	0.48	2	2	0	0
BAY	Essexville	2180	0.91	4	4	0	0
BAY	Fraser Township	2465	0.69	2	2	0	0
BAY	Hampton Township	2960	0.55	10	10	0	0
BAY	Kawkawlin Township	3565	0.86	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.66	2	2	0	0
BAY	Linwood Metro Water District	3910	0.51	1	1	0	0
BAY	Merritt Township	4280	0.59	2	2	0	0
BAY	Monitor Township	4440	0.78	6	6	0	0
BAY	City of Pinconning	5330	0.59	2	2	0	0
BAY	Pinconning Township	5335	0.64	2	2	0	0
BAY	Portsmouth Township	5540	0.65	1	1	0	0
BAY	Williams Township	7125	0.58	6	6	0	0
Tuscola	Wisner	7134	0.52	1	1	0	0
Average Free Cl2 Residual of All Distribution Sites			0.65	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%				