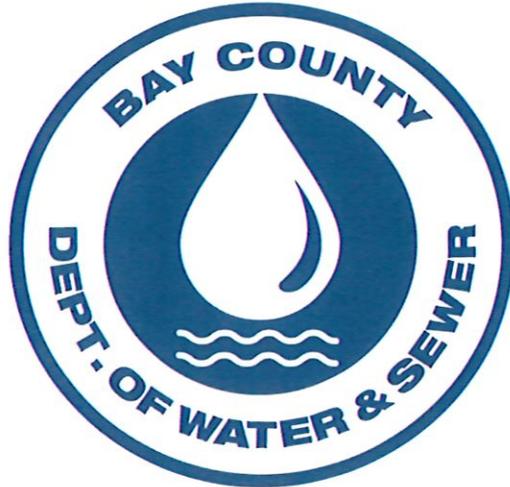


Bay Area WTP

Monthly Operations Report



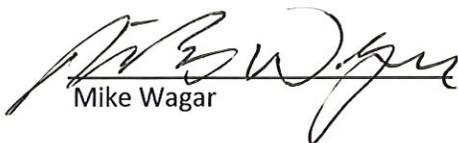
December, 2025

Water Systems Serial Number: 0465


Carl J. Overly

Water Plant Superintendent
Title

F-1, S-3, D-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

December, 2025
Month, Year

F-1
Water Plant Classification

Bay
County

Carl J. Overly
Operator-in-charge

F-1, S-3, D-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>7.4</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>14.33</u>	PSI
Maximum Approved Flux Rate	<u>36.25</u>	gpd/sq.ft.
Maximum Operating Flux Rate	<u>31.56</u>	gpd/sq.ft.

Chemical Data

Sodium Hypochlorite on hand:	<u>4,986</u>	Gallons	Estimated Supply:	<u>118.5</u>	days
Caustic Soda on hand:	<u>2,712</u>	Gallons	Estimated Supply:	<u>185.8</u>	days
Corrosion Inhibitor on hand:	<u>932</u>	Gallons	Estimated Supply:	<u>44.9</u>	days
Hydrofluosilicic Acid on hand:	<u>837</u>	Gallons	Estimated Supply:	<u>51.3</u>	days
Aluminum Chlorohydrate on hand:	<u>505</u>	Gallons	Estimated Supply:	<u>135.8</u>	days
Sulfuric Acid on hand:	<u>589</u>	Gallons	Estimated Supply:	<u>294.7</u>	days
Sodium Bisulfite on hand:	<u>402</u>	Gallons	Estimated Supply:	<u>138.6</u>	days
Citric Acid on hand:	<u>2,675</u>	Gallons	Estimated Supply:	<u>214.0</u>	days
Cost of All Chemicals per Million Gallons:	<u>126.94</u>	Dollars			

Utility Data

Estimated Electrical Kilo Watts per Million Gallons:	<u>965.94</u>	KW
Estimated Natural Gas Million Cubic Feet per Million Gallons:	<u>22.79</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

Pinning was done on multiple skids throughout December
On December 3rd, the tubing used for the HFS chemical feed system was replaced with new tubing of the same dimension and materials.
On December 19th, the post raw tank chlorination point was relocated into the mem-feed header.
The new dosing line was connected to the chlorination system for treated water.

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	FIT-5520-1	Total	FIT-5180	Total	FIT-4000-1	N. Euclid	Lauria Road	Total	Calculated
	FIT-1000-1	FIT-1000-2	Calculated						FIT-4040-1	FIT-4040-2	Calculated	
12/1/2025	0.00	6.89	6.89	0.16	0.08	0.08	6.82	3.31	2.84	6.16	6.16	
12/2/2025	0.00	7.05	7.05	0.18	0.08	0.08	6.93	3.28	2.80	6.08	6.08	
12/3/2025	0.00	6.58	6.58	0.15	0.09	0.09	6.20	3.05	2.67	5.71	5.71	
12/4/2025	0.00	6.43	6.43	0.15	0.09	0.09	6.22	3.04	2.70	5.74	5.74	
12/5/2025	0.00	6.61	6.61	0.16	0.08	0.08	6.89	3.19	2.85	6.04	6.04	
12/6/2025	0.00	6.20	6.20	0.12	0.08	0.08	5.83	2.88	2.49	5.37	5.37	
12/7/2025	0.00	5.81	5.81	0.13	0.08	0.08	6.61	3.22	2.81	6.03	6.03	
12/8/2025	0.00	6.85	6.85	0.20	0.08	0.08	7.21	3.41	2.95	6.36	6.36	
12/9/2025	0.00	7.32	7.32	0.18	0.08	0.08	6.21	3.06	2.68	5.74	5.74	
12/10/2025	0.00	6.72	6.72	0.17	0.08	0.08	6.28	3.11	2.73	5.84	5.84	
12/11/2025	0.00	5.80	5.80	0.17	0.08	0.08	6.94	3.23	2.86	6.10	6.10	
12/12/2025	0.00	6.12	6.12	0.18	0.08	0.08	6.31	3.09	2.66	5.75	5.75	
12/13/2025	0.00	6.47	6.47	0.17	0.08	0.08	6.66	3.20	2.82	6.02	6.02	
12/14/2025	0.00	6.79	6.79	0.17	0.08	0.08	6.65	3.17	2.78	5.94	5.94	
12/15/2025	0.00	7.01	7.01	0.17	0.08	0.08	6.70	3.25	2.85	6.10	6.10	
12/16/2025	0.00	6.74	6.74	0.18	0.08	0.08	6.74	3.24	2.90	6.13	6.13	
12/17/2025	0.00	6.99	6.99	0.17	0.08	0.08	6.45	3.10	2.69	5.80	5.80	
12/18/2025	0.00	6.85	6.85	0.18	0.08	0.08	7.13	3.39	3.04	6.44	6.44	
12/19/2025	0.00	6.43	6.43	0.21	0.08	0.08	6.86	3.24	2.88	6.12	6.12	
12/20/2025	0.00	6.48	6.48	0.14	0.08	0.08	6.37	3.16	2.75	5.91	5.91	
12/21/2025	0.00	6.71	6.71	0.20	0.08	0.08	7.07	3.38	2.97	6.35	6.35	
12/22/2025	0.00	6.82	6.82	0.18	0.08	0.08	7.15	3.35	3.00	6.35	6.35	
12/23/2025	0.00	7.55	7.55	0.16	0.08	0.08	6.33	3.19	2.80	5.99	5.99	
12/24/2025	0.00	7.39	7.39	0.19	0.08	0.08	7.42	3.49	3.10	6.59	6.59	
12/25/2025	0.00	6.55	6.55	0.15	0.08	0.08	6.21	2.95	2.59	5.54	5.54	
12/26/2025	0.00	5.95	5.95	0.15	0.08	0.08	6.30	2.98	2.60	5.58	5.58	
12/27/2025	0.00	5.84	5.84	0.15	0.08	0.08	6.40	3.09	2.71	5.80	5.80	
12/28/2025	0.00	6.39	6.39	0.16	0.08	0.08	5.98	2.87	2.53	5.41	5.41	
12/29/2025	0.00	6.32	6.32	0.18	0.08	0.08	7.01	3.33	2.93	6.26	6.26	
12/30/2025	0.00	6.05	6.05	0.17	0.08	0.08	6.61	3.18	2.81	5.99	5.99	
12/31/2025	0.00	6.69	6.69	0.17	0.08	0.08	6.37	3.09	2.74	5.83	5.83	
Total	0.00	204.39	204.39	5.19	2.44	2.44	204.85	98.52	86.53	185.04	185.04	
Avg	0.00	6.59	6.59	0.17	0.08	0.08	6.61	3.18	2.79	5.97	5.97	
Min	0.00	5.80	5.80	0.12	0.08	0.08	5.83	2.87	2.49	5.37	5.37	
Max	0.00	7.55	7.55	0.21	0.09	0.09	7.42	3.49	3.10	6.59	6.59	

Recovery Process Efficiency	
Sludge Flow / Recovery Flow	32.0%

Facility Water Efficiency	
Waste (MG)	8.14
Treated (MG)	204.85
T/W (G)	25.2

Raw Water Analysis

Date	Temp		pH		Turbidity		F ⁻		Free Cl		Bacti	
	Average		Average		Average		Grab		Average		Positive/Negative	
	°C		AIT-1000-2		NTU		Lab - Mem Feed		mg/L		Total Coliform	
	TIT-1000		AIT-1000-2		AIT-1000-1		AIT-1035-2		mg/L		Lab	
12/1/2025	8.8		7.93	0.41	0.58	0.08	0.59	Negative	Negative			
12/2/2025	8.6		7.95	0.35	0.41	0.08	0.57	Negative	Negative			
12/3/2025	8.5		7.95	0.31	0.59	0.08	0.53	Negative	Negative			
12/4/2025	8.4		7.96	0.34	0.47	0.08	0.49	Negative	Negative			
12/5/2025	8.2		7.95	0.41	0.58	0.07	0.48	Negative	Negative			
12/6/2025	8.1		7.95	0.41	0.66	0.07	0.51	Negative	Negative			
12/7/2025	7.6		7.97	1.16	3.20	0.07	0.44	Negative	Negative			
12/8/2025	7.3		7.96	0.55	0.83	0.08	0.50	Negative	Negative			
12/9/2025	6.9		7.97	0.50	0.79	0.08	0.51	Negative	Negative			
12/10/2025	6.8		7.95	0.28	0.66	0.08	0.52	Negative	Negative			
12/11/2025	6.6		7.93	0.28	0.38	0.08	0.53	Negative	Negative			
12/12/2025	6.4		7.88	3.33	9.69	0.09	0.32	Negative	Negative			
12/13/2025	6.3		7.95	0.95	1.18	0.09	0.51	Negative	Negative			
12/14/2025	6.0		7.96	0.86	1.39	0.09	0.58	Negative	Negative			
12/15/2025	5.2		7.95	0.58	0.76	0.09	0.59	Negative	Negative			
12/16/2025	5.0		7.96	0.44	0.72	0.09	0.50	Negative	Negative			
12/17/2025	5.1		7.97	0.42	0.56	0.08	0.44	Negative	Negative			
12/18/2025	5.4		7.97	0.35	0.44	0.07	0.42	Negative	Negative			
12/19/2025	5.4		7.96	0.39	0.44	0.08	0.44	Negative	Negative			
12/20/2025	5.0		7.96	0.34	0.44	0.07	0.42	Negative	Negative			
12/21/2025	4.8		7.96	0.43	1.37	0.07	0.54	Negative	Negative			
12/22/2025	4.6		7.97	0.39	0.58	0.07	0.52	Negative	Negative			
12/23/2025	5.2		7.97	0.34	0.42	0.08	0.50	Negative	Negative			
12/24/2025	4.7		7.96	0.29	0.36	0.08	0.51	Negative	Negative			
12/25/2025	4.8		7.96	0.27	0.33	0.08	0.55	Negative	Negative			
12/26/2025	4.9		7.95	0.23	0.28	0.08	0.55	Negative	Negative			
12/27/2025	5.0		7.95	1.86	3.33	0.08	0.45	Negative	Negative			
12/28/2025	4.6		7.94	1.15	1.94	0.08	0.56	Negative	Negative			
12/29/2025	4.1		7.94	0.77	0.97	0.08	0.60	Negative	Negative			
12/30/2025	3.7		7.96	0.83	3.19	0.08	0.45	Negative	Negative			
12/31/2025	3.6		7.97	2.16	5.60	0.08	0.36	Negative	Negative			
Avg	6.0		7.95	0.69	1.39	0.08	0.50					
Min	3.6		7.88	0.23	0.28	0.07	0.32					
Max	8.8		7.97	3.33	9.69	0.09	0.60					

F⁻ Ratio, Raw/Tap:	11.3
--------------------------------------	------

Finished Water Analysis

Date	Temp Average °C	pH Average	Phosphate Average mg/L	Fluoride		Free Cl ₂ Average mg/L	Hardness Grab mg/L	Alkalinity (as CaCO ₃)		Chloride Grab mg/L	Sulfate Grab mg/L	Calcium (as CaCO ₃) Grab mg/L	Dissolved Oxygen		Conductivity		Langelier Saturation Index	Chloride: Sulfate Mass Ratio	Larson- Skold Index	Bacti	
				Tap	Dist			Carbonate	Bicarbonate				Lab	Lab	Lab	Lab				Lab	Lab
12/1/2025	8.6	7.48	3.36	0.71	0.70	1.02	104.00	0	78	11	11	80	8.2	232	232	-0.96	1.04	0.43	Negative	Negative	
12/2/2025	8.6	7.48	3.36	0.67		1.02	102.00	0	79	11	10	76	11.2	235	235	-0.98	1.06	0.39	Negative	Negative	
12/3/2025	8.4	7.47	3.34	0.71		1.01	104.00	0	79	12	10	78	11.6	236	236	-0.99	1.19	0.42	Negative	Negative	
12/4/2025	8.2	7.48	3.32	0.68		1.00	102.00	0	77	10	9	76	11.9	237	237	-0.99	1.10	0.37	Negative	Negative	
12/5/2025	7.9	7.49	3.34	0.69		1.01	102.00	0	77	9	9	76	11.7	236	236	-0.99	1.04	0.36	Negative	Negative	
12/6/2025	7.8	7.49	3.36	0.67		1.01	100.00	0	75	10	11	76	11.7	236	236	-1.01	0.87	0.41	Negative	Negative	
12/7/2025	7.6	7.48	3.37	0.69		1.01	102.00	0	77	9	9	76	12.1	240	240	-1.01	1.04	0.36	Negative	Negative	
12/8/2025	7.2	7.48	3.36	0.70	0.64	1.02	102.00	0	77	10	10	74	12.8	240	240	-1.04	0.94	0.38	Negative	Negative	
12/9/2025	7.0	7.49	3.34	0.69		0.99	102.00	0	77	10	9	74	12.3	244	244	-1.04	1.06	0.36	Negative	Negative	
12/10/2025	6.9	7.49	3.35	0.69		1.00	98.00	0	78	12	10	74	12.4	244	244	-1.03	1.21	0.43	Negative	Negative	
12/11/2025	6.7	7.50	3.35	0.70		1.03	104.00	0	82	12	9	78	11.0	239	239	-0.98	1.34	0.40	Negative	Negative	
12/12/2025	6.5	7.54	3.35	0.71		1.04	104.00	0	79	11	10	78	12.2	239	239	-0.96	1.10	0.40	Negative	Negative	
12/13/2025	6.4	7.55	3.36	0.71		1.02	104.00	0	79	12	10	72	11.7	239	239	-0.99	1.18	0.42	Negative	Negative	
12/14/2025	6.1	7.55	3.36	0.69		1.02	102.00	0	78	11	9	78	8.5	234	234	-0.96	1.24	0.40	Negative	Negative	
12/15/2025	5.2	7.54	3.35	0.68	0.71	1.04	106.00	0	78	12	10	72	11.0	240	240	-1.03	1.16	0.42	Negative	Negative	
12/16/2025	4.8	7.54	3.35	0.69		1.03	108.00	0	76	11	12	78	11.0	238	238	-1.02	0.92	0.45	Negative	Negative	
12/17/2025	5.0	7.55	3.35	0.70		0.98	100.00	0	78	12	11	72	11.2	237	237	-1.03	1.05	0.44	Negative	Negative	
12/18/2025	4.9	7.55	3.35	0.70		0.99	102.00	0	76	10	9	76	12.1	240	240	-1.02	1.10	0.38	Negative	Negative	
12/19/2025	5.0	7.56	3.35	0.70		1.02	100.00	0	75	10	9	78	12.1	239	239	-1.00	0.97	0.39	Negative	Negative	
12/20/2025	4.9	7.56	3.35	0.70		1.00	100.00	0	76	10	9	78	11.5	242	242	-1.00	1.06	0.37	Negative	Negative	
12/21/2025	4.8	7.56	3.36	0.69		1.02	100.00	0	76	9	9	76	11.9	240	240	-1.02	1.01	0.36	Negative	Negative	
12/22/2025	4.6	7.54	3.35	0.70		1.04	100.00	0	75	9	9	76	12.2	240	240	-1.04	1.01	0.36	Negative	Negative	
12/23/2025	4.7	7.54	3.34	0.70		1.00	100.00	0	75	9	9	74	12.2	241	241	-1.06	1.00	0.36	Negative	Negative	
12/24/2025	4.8	7.53	3.35	0.71		0.99	100.00	0	75	10	10	74	12.6	241	241	-1.06	1.00	0.40	Negative	Negative	
12/25/2025	4.8	7.53	3.35	0.72		0.99	102.00	0	76	10	10	80	11.1	238	238	-1.02	1.04	0.41	Negative	Negative	
12/26/2025	4.9	7.53	3.35	0.72		1.00	104.00	0	76	10	10	78	9.2	238	238	-1.03	1.02	0.40	Negative	Negative	
12/27/2025	5.0	7.54	3.35	0.70		1.00	104.00	0	74	10	9	72	9.3	236	236	-1.06	1.14	0.40	Negative	Negative	
12/28/2025	5.0	7.60	3.34	0.70		0.98	102.00	0	72	10	11	74	9.9	240	240	-1.00	0.95	0.45	Negative	Negative	
12/29/2025	4.7	7.62	3.34	0.70	0.69	1.01	106.00	0	79	10	10	74	12.2	241	241	-0.95	1.04	0.39	Negative	Negative	
12/30/2025	4.4	7.62	3.34	0.69		0.99	104.00	0	78	10	9	74	12.2	245	245	-0.97	1.16	0.38	Negative	Negative	
12/31/2025	4.2	7.63	3.34	0.70		0.97	100.00	0	76	11	10	78	13.3	244	244	-0.95	1.09	0.42	Negative	Negative	
Avg	6.0	7.53	3.35	0.70	0.68	1.01	102.26	0	77	10	10	76	11.4	239	239	-1.01	1.07	0.40			
Min	4.2	7.47	3.32	0.67	0.64	0.97	98.00	0	72	9	9	72	8.2	232	232	-1.06	0.87	0.36			
Max	8.6	7.63	3.37	0.72	0.71	1.04	108.00	0	82	12	12	80	13.3	245	245	-0.95	1.34	0.45			

Plant Tap Disinfection Byproduct Monitoring - Results in ppb		
Total Trihalomethanes - TTHM		
Date	Result	OEL
12/1/25	22	32
Total Trihalomethanes - LRAA		36

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		
	AIT-1000-1		AIT-5030-1	AIT-1035-3	AIT-4000-1					Calculated		
NTU												
12/1/2025	0.41	0.58	6.02	0.39	0.023	0.024	96	0	0.0	0.023	0.023	
12/2/2025	0.35	0.41	3.61	0.31	0.023	0.024	96	0	0.0	0.023	0.023	
12/3/2025	0.31	0.59	1.60	0.29	0.023	0.024	96	0	0.0	0.023	0.023	
12/4/2025	0.34	0.47	0.68	0.24	0.023	0.024	96	0	0.0	0.023	0.023	
12/5/2025	0.41	0.58	0.65	0.26	0.023	0.024	96	0	0.0	0.023	0.023	
12/6/2025	0.41	0.66	0.53	0.26	0.023	0.024	96	0	0.0	0.023	0.023	
12/7/2025	1.16	3.20	0.68	0.53	0.023	0.024	96	0	0.0	0.023	0.023	
12/8/2025	0.55	0.83	2.04	0.56	0.023	0.023	96	0	0.0	0.023	0.023	
12/9/2025	0.50	0.79	1.50	0.54	0.024	0.027	96	0	0.0	0.025	0.025	
12/10/2025	0.28	0.66	1.43	0.44	0.026	0.026	96	0	0.0	0.026	0.026	
12/11/2025	0.28	0.38	1.52	0.33	0.026	0.026	96	0	0.0	0.026	0.026	
12/12/2025	3.33	9.69	1.61	0.91	0.026	0.026	96	0	0.0	0.026	0.026	
12/13/2025	0.95	1.18	1.58	1.04	0.026	0.027	96	0	0.0	0.026	0.026	
12/14/2025	0.86	1.39	1.30	0.84	0.026	0.026	96	0	0.0	0.026	0.026	
12/15/2025	0.58	0.76	1.24	0.64	0.026	0.027	96	0	0.0	0.026	0.026	
12/16/2025	0.44	0.72	1.30	0.50	0.026	0.027	96	0	0.0	0.026	0.026	
12/17/2025	0.42	0.56	1.12	0.43	0.026	0.027	96	0	0.0	0.026	0.026	
12/18/2025	0.35	0.44	1.35	0.36	0.026	0.027	96	0	0.0	0.026	0.026	
12/19/2025	0.39	0.44	1.40	0.34	0.026	0.027	96	0	0.0	0.026	0.026	
12/20/2025	0.34	0.44	0.68	0.31	0.026	0.027	96	0	0.0	0.026	0.026	
12/21/2025	0.43	1.37	1.61	0.32	0.026	0.027	96	0	0.0	0.026	0.026	
12/22/2025	0.39	0.58	1.63	0.34	0.026	0.027	96	0	0.0	0.026	0.026	
12/23/2025	0.34	0.42	1.23	0.31	0.026	0.027	96	0	0.0	0.026	0.026	
12/24/2025	0.29	0.36	1.56	0.27	0.026	0.027	96	0	0.0	0.026	0.026	
12/25/2025	0.27	0.33	1.02	0.23	0.026	0.027	96	0	0.0	0.026	0.026	
12/26/2025	0.23	0.28	0.87	0.21	0.026	0.026	96	0	0.0	0.026	0.026	
12/27/2025	1.86	3.33	1.03	0.49	0.026	0.026	96	0	0.0	0.026	0.026	
12/28/2025	1.15	1.94	1.97	0.97	0.026	0.027	96	0	0.0	0.026	0.026	
12/29/2025	0.77	0.97	2.92	0.80	0.026	0.027	96	0	0.0	0.026	0.026	
12/30/2025	0.83	3.19	3.43	0.65	0.026	0.026	96	0	0.0	0.026	0.026	
12/31/2025	2.16	5.60	4.27	1.30	0.026	0.028	96	0	0.0	0.026	0.026	
Avg	0.69	1.39	1.72	0.50	0.025	0.026	96	0	0.0	0.025	0.025	
Min	0.23	0.28	0.53	0.21	0.023	0.023	96	0	0.0	0.023	0.023	
Max	3.33	9.69	6.02	1.30	0.026	0.028	96	0	0.0	0.026	0.026	

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 Minimum Daily Value	Integrity Pass/Fail	Turbidity Max NTU	LRV Minimum Daily Value	Integrity Pass/Fail	Turbidity Max NTU	LRV Minimum Daily Value	Integrity Pass/Fail	Turbidity Max NTU	LRV Minimum Daily Value	Integrity Pass/Fail	Turbidity Max NTU	LRV Minimum Daily Value	Integrity Pass/Fail	Turbidity Max NTU	LRV Minimum Daily Value	Integrity Pass/Fail	Turbidity Max NTU	LRV Minimum Daily Value	Integrity Pass/Fail	Turbidity Max NTU	LRV Minimum Daily Value	Integrity Pass/Fail	Turbidity Max NTU
12/17/2025	5.47	PASS	0.024	4.94	PASS	0.026	5.20	PASS	0.025	5.51	PASS	0.024	5.38	PASS	0.023	5.22	PASS	0.024	5.52	PASS	0.024	5.17	PASS	0.023
12/17/2025	5.47	PASS	0.024	4.90	PASS	0.026	5.20	PASS	0.025	5.48	PASS	0.023	5.35	PASS	0.023	5.23	PASS	0.024	5.52	PASS	0.024	5.19	PASS	0.023
12/17/2025	5.48	PASS	0.024	4.89	PASS	0.026	5.17	PASS	0.025	5.49	PASS	0.024	5.32	PASS	0.024	5.26	PASS	0.024	5.53	PASS	0.024	5.15	PASS	0.023
12/14/2025	5.46	PASS	0.024	4.91	PASS	0.026	5.17	PASS	0.025	5.48	PASS	0.024	5.32	PASS	0.023	5.26	PASS	0.024	5.53	PASS	0.024	5.15	PASS	0.023
12/15/2025	5.46	PASS	0.024	4.92	PASS	0.026	5.21	PASS	0.025	5.47	PASS	0.024	5.31	PASS	0.023	4.92	PASS	0.024	5.50	PASS	0.024	5.20	PASS	0.023
12/16/2025	5.48	PASS	0.024	4.92	PASS	0.026	5.18	PASS	0.025	5.47	PASS	0.024	5.16	PASS	0.023	4.93	PASS	0.024	5.50	PASS	0.024	5.19	PASS	0.023
12/17/2025	5.45	PASS	0.024	4.90	PASS	0.026	5.17	PASS	0.025	5.44	PASS	0.024	5.24	PASS	0.023	4.95	PASS	0.024	5.50	PASS	0.024	5.17	PASS	0.023
12/18/2025	5.45	PASS	0.024	4.88	PASS	0.026	5.16	PASS	0.025	5.40	PASS	0.024	5.22	PASS	0.023	5.23	PASS	0.024	5.49	PASS	0.024	5.11	PASS	0.023
12/19/2025	5.47	PASS	0.046	4.91	PASS	0.035	5.13	PASS	0.031	5.40	PASS	0.027	5.20	PASS	0.026	4.98	PASS	0.028	5.48	PASS	0.027	5.11	PASS	0.026
12/10/2025	5.46	PASS	0.027	4.91	PASS	0.028	5.12	PASS	0.027	5.35	PASS	0.025	5.24	PASS	0.026	4.96	PASS	0.026	5.50	PASS	0.026	5.14	PASS	0.026
12/11/2025	5.46	PASS	0.027	4.93	PASS	0.028	5.11	PASS	0.027	5.31	PASS	0.026	5.24	PASS	0.026	5.06	PASS	0.027	5.48	PASS	0.026	5.12	PASS	0.026
12/12/2025	5.45	PASS	0.027	4.95	PASS	0.028	5.10	PASS	0.027	5.28	PASS	0.027	5.25	PASS	0.026	5.22	PASS	0.026	5.48	PASS	0.027	5.13	PASS	0.026
12/13/2025	5.42	PASS	0.027	4.92	PASS	0.029	5.05	PASS	0.027	5.22	PASS	0.027	5.24	PASS	0.026	5.19	PASS	0.026	5.56	PASS	0.027	5.13	PASS	0.026
12/14/2025	5.42	PASS	0.027	4.91	PASS	0.029	5.05	PASS	0.027	5.20	PASS	0.027	5.17	PASS	0.026	5.23	PASS	0.026	5.50	PASS	0.027	5.28	PASS	0.026
12/15/2025	5.41	PASS	0.029	4.94	PASS	0.029	5.08	PASS	0.027	5.16	PASS	0.031	5.14	PASS	0.026	5.24	PASS	0.026	5.50	PASS	0.027	5.27	PASS	0.026
12/16/2025	5.40	PASS	0.027	5.10	PASS	0.029	5.07	PASS	0.027	5.16	PASS	0.026	5.14	PASS	0.026	4.90	PASS	0.026	5.51	PASS	0.026	5.25	PASS	0.026
12/17/2025	5.38	PASS	0.027	5.09	PASS	0.029	5.09	PASS	0.027	5.14	PASS	0.026	5.25	PASS	0.026	4.89	PASS	0.026	5.51	PASS	0.027	5.17	PASS	0.026
12/18/2025	5.40	PASS	0.027	5.09	PASS	0.029	5.18	PASS	0.027	5.13	PASS	0.027	5.26	PASS	0.026	5.21	PASS	0.026	5.52	PASS	0.026	5.12	PASS	0.026
12/19/2025	5.41	PASS	0.027	5.07	PASS	0.029	5.18	PASS	0.027	5.13	PASS	0.027	5.26	PASS	0.026	5.21	PASS	0.026	5.55	PASS	0.026	5.08	PASS	0.026
12/20/2025	5.38	PASS	0.027	5.06	PASS	0.029	5.19	PASS	0.027	5.21	PASS	0.027	5.20	PASS	0.026	5.09	PASS	0.026	5.62	PASS	0.026	5.08	PASS	0.026
12/21/2025	5.30	PASS	0.027	5.03	PASS	0.029	5.22	PASS	0.027	5.15	PASS	0.026	5.14	PASS	0.026	5.07	PASS	0.026	5.56	PASS	0.026	5.10	PASS	0.026
12/22/2025	5.45	PASS	0.027	5.02	PASS	0.029	5.17	PASS	0.027	5.09	PASS	0.027	5.08	PASS	0.026	4.88	PASS	0.026	5.70	PASS	0.026	5.04	PASS	0.026
12/23/2025	5.40	PASS	0.027	5.08	PASS	0.029	5.20	PASS	0.027	5.12	PASS	0.026	5.20	PASS	0.026	4.87	PASS	0.026	5.69	PASS	0.027	5.13	PASS	0.026
12/24/2025	5.40	PASS	0.027	5.04	PASS	0.029	5.20	PASS	0.027	5.02	PASS	0.027	5.19	PASS	0.026	4.88	PASS	0.026	5.59	PASS	0.027	5.11	PASS	0.026
12/25/2025	5.41	PASS	0.027	5.04	PASS	0.029	5.22	PASS	0.027	5.06	PASS	0.027	5.18	PASS	0.026	5.37	PASS	0.026	5.59	PASS	0.027	5.13	PASS	0.026
12/26/2025	5.37	PASS	0.027	5.04	PASS	0.029	5.22	PASS	0.027	5.06	PASS	0.027	5.18	PASS	0.026	5.37	PASS	0.026	5.59	PASS	0.027	5.13	PASS	0.026
12/27/2025	5.37	PASS	0.027	5.06	PASS	0.029	5.13	PASS	0.027	5.07	PASS	0.028	5.14	PASS	0.026	5.06	PASS	0.026	5.54	PASS	0.026	5.16	PASS	0.026
12/28/2025	5.37	PASS	0.029	5.06	PASS	0.029	5.11	PASS	0.027	5.11	PASS	0.026	5.21	PASS	0.026	4.98	PASS	0.026	5.52	PASS	0.026	5.10	PASS	0.026
12/29/2025	5.37	PASS	0.029	5.07	PASS	0.029	5.20	PASS	0.027	5.11	PASS	0.026	5.16	PASS	0.026	4.96	PASS	0.026	5.53	PASS	0.027	5.12	PASS	0.026
12/30/2025	5.35	PASS	0.027	5.01	PASS	0.029	5.16	PASS	0.027	5.04	PASS	0.027	5.15	PASS	0.026	5.11	PASS	0.026	5.56	PASS	0.027	5.13	PASS	0.026
12/31/2025	5.37	PASS	0.028	5.00	PASS	0.030	5.15	PASS	0.028	4.98	PASS	0.027	5.17	PASS	0.027	5.13	PASS	0.027	5.59	PASS	0.027	5.09	PASS	0.026
Avg	5.42		0.027	4.99		0.028	5.15		0.027	5.23		0.026	5.22		0.026	5.07		0.026	5.54		0.026	5.14		0.025
Min	5.35		0.024	4.88		0.026	5.05		0.025	4.98		0.023	5.08		0.023	4.87		0.024	5.48		0.023	5.04		0.023
Max	5.50		0.046	5.10		0.035	5.22		0.031	5.51		0.031	5.38		0.027	5.37		0.028	5.70		0.027	5.28		0.026

In-Service Dates For Modules:		
Train 1	Train 2	
Skid 1	8/2024	12/2023
Skid 3	11/2023	7/2025
Skid 5	2/2023	10/2024
Skid 7	8/2025	1/2023
Skid 2		
Skid 4		
Skid 6		
Skid 8		

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.
 Operational Guidelines: We have established the following parameter values as control limits to trigger skids to be taken out of service and evaluated.
 Min LRV: A value of 3.3.
 Max NTU: A turbidity reading of 0.15 NTU or greater.
 Flow or Q: While not shown here, a skid will be evaluated if it cannot sustain a flow above 1,000 GPM.
 While not shown on this page, an AHT result of 0.84 PSI/Min or greater.
 Max Air Hold Test Result:

Treatment Chemical Dosages

Date	Sodium Hypochlorite				Phosphoric Acid			Hydrofluorosilicic Acid			
	Treated Water	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 mg/L			PO4 mg/L			F mg/L			
MG	AIT-1035-2	AIT-1035-4	AIT-1035-4	AIT-4030-1	AIT-4050-1	AIT-4040-5	AIT-4040-5	AIT-4040-5	Lab - Mem Feed	Added	Lab
12/1/2025	6.8	0.59	0.44	0.60	1.14	1.02	3.15	3.36	0.08	0.55	0.71
12/2/2025	6.9	0.57	0.45	0.60	1.14	1.02	3.15	3.36	0.08	0.55	0.67
12/3/2025	6.2	0.53	0.44	0.60	1.13	1.01	3.15	3.34	0.08	0.55	0.71
12/4/2025	6.2	0.49	0.42	0.65	1.13	1.00	3.17	3.32	0.08	0.55	0.68
12/5/2025	6.9	0.48	0.40	0.65	1.14	1.01	3.25	3.34	0.07	0.55	0.69
12/6/2025	5.8	0.51	0.40	0.65	1.10	1.01	3.25	3.36	0.07	0.56	0.67
12/7/2025	6.6	0.44	0.38	0.71	1.02	1.01	3.25	3.37	0.07	0.57	0.69
12/8/2025	7.2	0.50	0.39	0.67	1.03	1.02	3.25	3.36	0.08	0.57	0.70
12/9/2025	6.2	0.51	0.40	0.66	1.02	0.99	3.25	3.34	0.08	0.57	0.69
12/10/2025	6.3	0.52	0.41	0.67	1.04	1.00	3.25	3.35	0.08	0.57	0.69
12/11/2025	6.9	0.53	0.41	0.69	1.06	1.03	3.25	3.35	0.08	0.59	0.70
12/12/2025	6.3	0.32	0.36	0.77	1.04	1.04	3.25	3.35	0.09	0.59	0.71
12/13/2025	6.7	0.51	0.34	0.70	1.05	1.02	3.25	3.36	0.09	0.57	0.71
12/14/2025	6.6	0.58	0.40	0.66	1.05	1.02	3.25	3.36	0.09	0.56	0.69
12/15/2025	6.7	0.59	0.45	0.66	1.07	1.04	3.25	3.35	0.09	0.56	0.68
12/16/2025	6.7	0.50	0.45	0.60	1.03	1.03	3.25	3.35	0.09	0.57	0.69
12/17/2025	6.4	0.44	0.40	0.66	0.99	0.98	3.25	3.35	0.08	0.57	0.70
12/18/2025	7.1	0.42	0.38	0.70	1.01	0.99	3.25	3.35	0.07	0.57	0.70
12/19/2025	6.9	0.44	0.37	0.70	1.04	1.02	3.25	3.35	0.08	0.57	0.70
12/20/2025	6.4	0.42	0.36	0.70	1.01	1.00	3.25	3.35	0.07	0.57	0.70
12/21/2025	7.1	0.54	0.38	0.68	1.05	1.02	3.25	3.36	0.07	0.57	0.69
12/22/2025	7.1	0.52	0.42	0.62	1.03	1.04	3.25	3.35	0.07	0.57	0.70
12/23/2025	6.3	0.50	0.43	0.63	1.04	1.00	3.25	3.34	0.08	0.57	0.70
12/24/2025	7.4	0.51	0.42	0.63	1.06	0.99	3.25	3.35	0.08	0.57	0.71
12/25/2025	6.2	0.55	0.43	0.63	1.07	0.99	3.25	3.35	0.08	0.56	0.72
12/26/2025	6.3	0.55	0.44	0.63	1.07	1.00	3.25	3.35	0.08	0.55	0.72
12/27/2025	6.4	0.45	0.43	0.63	1.06	1.00	3.25	3.35	0.08	0.55	0.70
12/28/2025	6.0	0.56	0.40	0.67	1.06	0.98	3.25	3.34	0.08	0.55	0.70
12/29/2025	7.0	0.60	0.45	0.54	1.10	1.01	3.25	3.34	0.08	0.55	0.70
12/30/2025	6.6	0.45	0.43	0.56	1.05	0.99	3.25	3.34	0.08	0.55	0.69
12/31/2025	6.4	0.36	0.35	0.70	1.08	0.97	3.25	3.34	0.08	0.55	0.70
AVG	6.6	0.50	0.41	0.65	1.06	1.01	3.24	3.35	0.08	0.56	0.70
Min	5.8	0.32	0.34	0.54	0.99	0.97	3.15	3.32	0.07	0.55	0.67
Max	7.4	0.60	0.45	0.77	1.14	1.04	3.25	3.37	0.09	0.59	0.72

Date	Pipeline CT										Disinfection CT										FW Tank CT										Compliance																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Whitestone					Residual					CT					FW Tank 1					FW Tank 2					Plant					Contact Time					Free Cl ₂					CT					Total CT					Temp					CT																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Flow					RW					Achieved					Min Level					Min Level					MGD					Minutes					Min					mg/L					mg-min/L					mg-min/L					°C					mg-min/L																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	MGD					AIT-1035-2					mg-min/L					AIT-4005-1					LIT-4005-2					Calculated					Calculated					Calculated					Calculated					AIT-4040-1					Calculated					Calculated																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
12/1/2025	41.9	2,986	0.59	1761	28.3	22.7	6.2	567	0.99	281	2042	8.6	8.00	Y	12/2/2025	40.5	3,085	0.57	1754	28.2	20.6	6.1	590	0.97	268	2022	8.6	8.00	Y	12/3/2025	42.4	2,949	0.53	1568	27.8	14.4	5.7	507	0.99	250	1817	8.4	8.00	Y	12/4/2025	41.5	3,012	0.49	1481	28.2	21.2	5.7	590	0.96	284	1766	8.2	8.00	Y	12/5/2025	41.9	2,987	0.48	1441	28.3	21.2	6.0	562	0.98	274	1715	7.9	8.00	Y	12/6/2025	54.0	2,315	0.51	1190	28.2	20.5	5.4	621	0.97	300	1490	7.8	8.00	Y	12/7/2025	55.8	2,243	0.44	995	28.3	19.0	6.0	537	0.98	262	1258	7.6	8.00	Y	12/8/2025	47.3	2,647	0.50	1337	28.3	19.2	6.4	511	0.97	64	1584	7.2	8.00	Y	12/9/2025	40.7	3,070	0.51	1565	27.9	20.9	5.7	583	0.92	268	1834	7.0	8.00	Y	12/10/2025	41.4	3,019	0.52	1581	28.2	21.8	5.8	587	0.91	268	1849	6.9	8.00	Y	12/11/2025	40.4	3,099	0.53	1642	28.2	20.8	6.1	551	0.98	271	1913	6.7	8.00	Y	12/12/2025	41.7	2,999	0.32	972	28.2	22.2	5.7	601	1.01	302	1274	6.5	8.00	Y	12/13/2025	54.2	2,309	0.51	1170	28.2	22.3	6.0	576	0.97	278	1448	6.4	8.00	Y	12/14/2025	51.5	2,431	0.58	1404	28.2	21.3	5.9	571	0.98	280	1684	6.1	8.00	Y	12/15/2025	42.7	2,931	0.59	1729	28.2	21.7	6.1	561	0.98	275	2004	5.2	8.00	Y	12/16/2025	38.5	3,250	0.50	1613	28.2	23.8	6.1	582	0.82	238	1851	4.8	12.00	Y	12/17/2025	41.0	3,051	0.44	1331	28.2	21.1	5.8	583	0.90	264	1595	5.0	8.00	Y	12/18/2025	45.3	2,759	0.42	1170	28.2	21.6	6.4	531	0.93	247	1417	4.9	12.00	Y	12/19/2025	43.5	2,876	0.44	1256	27.8	21.0	5.9	546	0.97	265	1522	5.0	8.00	Y	12/20/2025	52.2	2,397	0.42	998	28.2	21.1	5.9	572	0.97	276	1274	4.9	12.00	Y	12/21/2025	51.8	2,413	0.54	1293	28.2	20.7	5.4	528	0.94	248	1541	4.8	12.00	Y	12/22/2025	44.2	2,831	0.52	1482	28.2	19.9	6.3	520	0.95	246	1728	4.6	12.00	Y	12/23/2025	40.1	3,121	0.50	1572	28.2	19.9	6.0	551	0.97	266	1839	4.7	12.00	Y	12/24/2025	42.8	2,923	0.51	1498	28.2	22.0	5.6	522	0.95	248	1746	4.8	12.00	Y	12/25/2025	44.6	2,808	0.55	1540	28.2	24.0	5.5	646	0.95	307	1847	4.8	12.00	Y	12/26/2025	39.5	3,168	0.55	1754	28.2	23.0	5.6	630	0.97	304	2058	4.9	12.00	Y	12/27/2025	51.5	2,427	0.45	1083	28.2	22.3	5.8	598	0.98	293	1377	5.0	8.00	Y	12/28/2025	50.5	2,476	0.56	1390	28.2	24.2	5.4	664	0.93	307	1697	5.0	12.00	Y	12/29/2025	41.1	3,042	0.60	1840	28.3	23.1	6.3	562	0.35	99	1939	4.7	12.00	Y	12/30/2025	35.8	3,495	0.45	1562	28.2	24.9	6.0	607	0.96	292	1854	4.4	12.00	Y	12/31/2025	37.6	3,325	0.36	1195	28.2	21.3	5.8	583	0.94	273	1468	4.2	12.00	Y	Avg	44.4	2,853	0.50	1425	28.2	21.4	6.0	571	0.94	267	1692	6.0	9.68	NA	Min	35.8	2,243	0.32	972	27.8	14.4	5.4	507	0.35	99	1258	4.2	8.00	NA	Max	55.8	3,495	0.60	1840	28.3	24.9	6.6	664	1.01	307	2058	8.6	12.00	NA
Avg	44.4	2,853	0.50	1425	28.2	21.4	6.0	571	0.94	267	1692	6.0	9.68	NA	Min	35.8	2,243	0.32	972	27.8	14.4	5.4	507	0.35	99	1258	4.2	8.00	NA	Max	55.8	3,495	0.60	1840	28.3	24.9	6.6	664	1.01	307	2058	8.6	12.00	NA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

Notes: Pipeline volume factor in SMMWSC to RW tank: 125.090 MG-min/day
 On 12/9 the tap chlorine analyzer experienced a 22 minute event where its reading was artificially low due to air bubble accumulation on the probe.
 Almost 9 minutes of the event, the reading was below the Distribution POE compliance threshold of 0.2 mg/L.
 After reviewing the historical data for finished water tank levels and treated water chlorine residuals, this 22 minute event was manually recalculated based on the average chlorine demand found between Treated and Tap.
 A new low level chlorine of 0.97 mg/L was found for the day.

Distribution System Monitoring
Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl₂)

WSSN:	0072 Akron			0990 Bangor Twp.			0400 Bangor Monitor Dist.			0470 Bay City							0485 Bay County					0517 Beaver Rd		0518 Beaver Twp		2180 Essexville	
	Date	1	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18	19	20	23	24	26	29	30	32		
12/1/2025		0.46	0.30	0.30	0.30	0.80				0.62	0.26	0.46	0.67	0.55	0.93	0.54	0.71	0.77	0.74	0.51			0.48				
12/2/2025																											
12/3/2025																											
12/4/2025	0.20						0.85	0.38		0.45	0.41	0.62	0.55	0.85	0.60												
12/5/2025																											
12/6/2025																											
12/7/2025																											
12/8/2025																											
12/9/2025																											
12/10/2025																											
12/11/2025									0.55	0.66	0.52	0.72	0.90	0.55		0.69	0.64	0.58	0.78	0.48	0.90		0.18				
12/12/2025																											
12/13/2025																											
12/14/2025																											
12/15/2025																											
12/16/2025										0.73	0.44	0.56	0.82	0.51	0.89	0.57											
12/17/2025										0.70	0.53	0.63	0.78	0.56	0.91	0.63											
12/18/2025																											
12/19/2025																											
12/20/2025																											
12/21/2025										0.71	0.57	0.63	0.74	0.45	0.81	0.65											
12/22/2025																											
12/23/2025																											
12/24/2025																											
12/25/2025																											
12/26/2025																											
12/27/2025																											
12/28/2025																											
12/29/2025																											
12/30/2025																											
12/31/2025																											
Average	0.20									0.68	0.61	0.73	0.79				0.67	0.67	0.78	0.90	0.90	0.33	0.48	1.11			
Min	0.20																								1.05		
Max	0.20																								1.19		

MONITORING STATION ADDRESSES

- 1. Sample station at corner of 5758 M-25 & F
- 3. Bangor Fire Station, 3921 Wheeler
- 4. BCDWS Admin. Bldg. 3933 Patterson Rd.
- 5. 7-11, 3543 S. Old Kawkawlin Rd.
- 6. Admiral Petroleum, 314 S Euclid Ave.
- 7. Sequin Lumber, 3881 Euclid Ave
- 9. Top Gun Liquor, 2981 Midland Rd
- 10. Little Caesars, 3475 E North Union Rd
- 11. Number 1 Fire Station, 1401 Center Ave
- 12. Number 2 Fire Station, 1000 Fremont Ave
- 13. Jack's Fruit Market, 1000 Salzburg Ave
- 14. Number 4 Fire Station, 212 S. Dean St
- 15. Number 5 Fire Station, 1209 Smith St
- 16. Bay City Hall, 301 Washington Ave
- 17. Skipper Buds Marina, 1809 S Water St
- 18. Bay Valley Animal Hospital 6015 WS Saginaw Rd
- 19. Dore's M-84 Party Store, 6183 WS Saginaw Rd
- 20. Pump Station #13, 6000 WS Saginaw Rd
- 23. Rail Trail Pump Station, 366 N. Tuscola Rd.
- 24. Little Learners Daycare, 1694 Cass Ave.
- 26. Wieland Contracting, 2443 S Mackinaw Rd
- 29. Sample Station, 2515 S. 11 Mile Rd
- 30. Sample Station, 340 W. Beaver Rd
- 32. Essexville City Hall, 1107 Woodside Ave

Shading Designation Legend	
TC- / EC-	TC
HPC	HPC
EC+	EC+

Distribution System Monitoring

WSSN:	Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl ₂)																										
	2465 Fraser Twp.			2960 Hampton Twp.			3565 Kawkawlin Twp.			3570 Kawkawlin Met.			3910 Linwood, LMWD		4280 Merritt Twp.		4440 Monitor Twp.		5330 City Pinconning		5335 Pinconning Twp.		5540 Porsmouth		7125 Williams Twp.		7134 Wisner
	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
12/1/2025																											
12/2/2025																											
12/3/2025																											
12/4/2025	0.78		0.64	0.38	0.29	0.38	0.95	0.63	0.85						0.79	0.66	0.59	0.58		0.77		0.43	0.58	0.48	0.27	0.26	
12/5/2025																											
12/6/2025																											
12/7/2025																											
12/8/2025																											
12/9/2025																											
12/10/2025														0.44													
12/11/2025	0.60								0.97	0.65		0.08			0.79	0.64	0.57	0.56									
12/12/2025																											
12/13/2025																											
12/14/2025																											
12/15/2025																											
12/16/2025																											
12/17/2025																											
12/18/2025																											
12/19/2025																											
12/20/2025																											
12/21/2025																											
12/22/2025																											
12/23/2025																											
12/24/2025																											
12/25/2025																											
12/26/2025																											
12/27/2025																											
12/28/2025																											
12/29/2025																											
12/30/2025																											
12/31/2025																											
Average																											
Min	0.69								0.85	0.65	0.08	0.08	0.44	0.44	0.57	0.67	0.55	0.57	0.43	0.55	0.43	0.49	0.58	0.48	0.27	0.26	
Max	0.60								0.63	0.65	0.08	0.44	0.44	0.44	0.57	0.57	0.33	0.56	0.43	0.33	0.43	0.27	0.62	0.40	0.26		
	0.78								0.97	0.65	0.08	0.44	0.44	0.44	0.79	0.64	0.57	0.56	0.43	0.77	0.43	0.62	0.40	0.26	0.26		

MONITORING STATION ADDRESSES

34. Fraser Elevated Tank, 2949 1/2 N. 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	61. Pinconning Meter Pit, 3005 N Huron Rd	74. Unwood Party and Sporting Goods, 211 W. Center St.
36. Shirts Mugs & More, 2728 Center Ave	63. Master Meter Pit, 2865 Pinconning Rd	
37. Hampton DPW, 950 Wagner Rd.	65. Ike's Welding, 50 N Finn Rd	
38. Bay County Golf Course, 584 W Hampton Rd.	68. Williams Township Hall, 1080 W Midland Rd	
39. Sewer Lift Station, 902 Nebobish Rd.	69. Pump Station, 480 W. Salzburg & 9 Mile Rd	
40. Bay Co. Road Commission, 2600 E Beaver Rd	70. 11 Mile Elevated Tank, 5003 S. 11 Mile Rd	
41. Parish Rd. Elevated Tank, 1770 E. Parish Rd	72. Lindy's Sales, 9051 M-25	
42. Linwood Tile, 205 S Huron Rd		

Notes: Linwood's sample from 12/11 had a free chlorine residual low enough to warrant running HPCs
Two HPCs were ran and both had counts of 0 CFU/mL

Shading Designation Legend	
TC- / EC-	TC
HPC	EC+

Distribution System Bacteriological

Water Supplier Bacteriological Analysis Report

Name of Water Supply:
Bay Area Water System - WSSN 0465

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

December, 2025

COUNTY	COMMUNITY	WSSN	DISTRIBUTION SYSTEM SAMPLES				BACTERIOLOGICAL MONITORING			
			AVERAGE FREE CL ₂ RESIDUAL	SAMPLES WITH NO DECTECTABLE* FREE CL ₂ RESIDUAL	PERCENT OF SAMPLES WITH NO DECTECTABLE* FREE CL ₂ RESIDUAL	NUMBER OF ROUTINE SAMPLES REQUIRED	NUMBER OF SAMPLES COLLECTED	NUMBER OF POSITIVE SAMPLES	REPEAT SAMPLES REQUIRED	NUMBER OF REPEAT SAMPLES GATHERED
Tuscola	Akron	0072	0.20	0	0	1	1	0	0	
BAY	Bangor Township	0390	0.59	0	0	10	10	0	0	
BAY	Bangor-Monitor Dist.	0400	0.59	0	0	3	3	0	0	
BAY	Bay City	0470	0.64	0	0	30	43	0	0	
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.67	0	0	9	10	0	0	
BAY	Beaver Road Area	0517	0.90	0	0	1	1	0	0	
BAY	Beaver Township	0518	0.33	0	0	2	2	0	0	
BAY	Essexville	2180	1.11	0	0	4	4	0	0	
BAY	Fraser Township	2455	0.69	0	0	2	2	0	0	
BAY	Hampton Township	2960	0.48	0	0	10	10	0	0	
BAY	Kawkawin Township	3565	0.85	0	0	3	3	0	0	
BAY	Kawkawin Metro Dist.	3570	0.65	0	0	2	2	0	0	
BAY	Linwood Metro Water District	3910	0.08	0	0	1	1	0	0	
BAY	Merritt Township	4280	0.44	0	0	2	2	0	0	
BAY	Monitor Township	4440	0.67	0	0	6	6	0	0	
BAY	City of Pinconning	5330	0.57	0	0	2	2	0	0	
BAY	Pinconning Township	5335	0.55	0	0	2	2	0	0	
BAY	Portsmouth Township	5540	0.43	0	0	1	1	0	0	
BAY	Williams Township	7125	0.49	0	0	6	6	0	0	
Tuscola	Wisner	7134	0.26	0	0	1	1	0	0	

Total Distribution - Free Chlorine Samples

Required Number of Routine Samples:	98
Total Number of Routine Samples Gathered:	112
Free Chlorine Analysis:	
Minimum Free Chlorine Residual:	0.08 mg/L
Average Free Chlorine Residual:	0.62 mg/L
Median Free Chlorine Residual:	0.61 mg/L
Maximum Free Chlorine Residual:	1.19 mg/L
Range of Free Chlorine Residual:	1.11 mg/L
Water Plant's Free Chlorine Residual at POE to Distribution:	
Minimum Free Chlorine Residual:	0.97 mg/L
Average Free Chlorine Residual:	1.01 mg/L
Maximum Free Chlorine Residual:	1.04 mg/L

DETECTABLE*: The detectable level of free chlorine is determined by having either a free chlorine residual greater than or equal to 0.02 mg/L at the time of sample collection or by HPC results less than or equal to 500 colony forming units (CFU) per mL.

if repeat samples were required, this space will be filled out to document those details.

Repeat Bacteriological Sampling Details