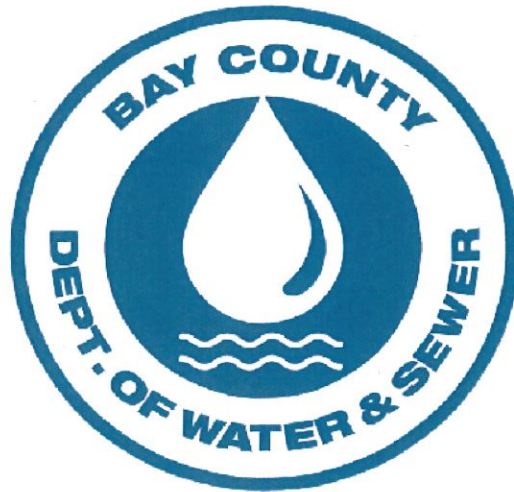


Bay Area WTP

Monthly Operations Report



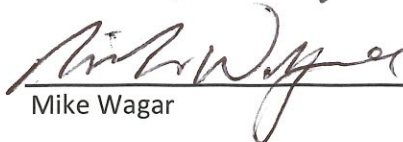
November, 2024

Water Systems Serial Number: 0465


Carl J. Overly

Water Plant Superintendent
Title

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


Mike Wagar

Operations Supervisor
Title

F-1, S-4
Classification

Bay Area Water Treatment Plant

Monthly Operations Report

11/15/24
 11/14/24
 11/13/24
 11/12/24
 11/11/24
 11/10/24
 11/9/24
 11/8/24
 11/7/24
 11/6/24
 11/5/24
 11/4/24
 11/3/24
 11/2/24
 11/1/24

Carl J. Overly
 Operator-in-charge

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

20001
 Operator Identification Number for Operator-in-charge

Supply Name: Bay Area Water System
 WSSN: 0465

November, 2024
 Month, Year

F-1
 Water Plant Classification

Bay
 County

Treatment Rate and Membrane Data

Treatment Rate, Approved Rated Plant Capacity	<u>17.4</u>	Millions of Gallons per Day
Treatment Rate, Maximum	<u>7.0</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>17.29</u>	PSI
Maximum Approved Flux Rate	<u>36.25</u>	gpd/sq.ft.
Maximum Operating Flux Rate	<u>29.84</u>	gpd/sq.ft.

Chemical Data

Sodium Hypochlorite on hand:	<u>3,196</u>	Gallons	Estimated Supply: <u>55.4</u> days
Caustic Soda on hand:	<u>2,693</u>	Gallons	Estimated Supply: <u>184.4</u> days
Corrosion Inhibitor on hand:	<u>1,298</u>	Gallons	Estimated Supply: <u>63.9</u> days
Hydrofluosilicic Acid on hand:	<u>673</u>	Gallons	Estimated Supply: <u>44.8</u> days
Aluminum Chlorohydrate on hand:	<u>658</u>	Gallons	Estimated Supply: <u>108.1</u> days
Sulfuric Acid on hand:	<u>614</u>	Gallons	Estimated Supply: <u>307.1</u> days
Sodium Bisulfite on hand:	<u>1,208</u>	Gallons	Estimated Supply: <u>416.5</u> days
Citric Acid on hand:	<u>2,550</u>	Gallons	Estimated Supply: <u>204.0</u> days
Cost of All Chemicals per Million Gallons:	<u>99.89</u>	Dollars	

Utility Data

Estimated Electrical Kilo Watts per Million Gallons:	<u>1,714.46</u>	KW
Estimated Natural Gas Million Cubic Feet per Million Gallons:	<u>5.66</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

On 11/11 Skids 2, 4, 6, and 8 were taken down to replace piping associated with the whole Train. Filtrate Exhaust and the Raw Vent were replaced with piping that was coated inside and out for increased corrosion protection.
 As of November 2024 a column for Hardness has been added to the Finished Water Analysis page along with a section in the bottom right of the page that will show Disinfection Byproduct monitoring results. These are in ppb.

Bay Area WTP Monthly Operating Report

Flows									
Date	Raw Water (MG)			Clarified (MG)	Sludge (MG)	Treated (MG)	Finished Water Pumped (MG)		
	N. Euclid	Lauria Road	Total	Total	Total	Total	N. Euclid	Lauria Road	Total
	FIT-1000-1	FIT-1000-2	Calculated	FIT-5520-1	FIT-5180	FIT-4000-1	FIT-4040-1	FIT-4040-2	Calculated
11/1/2024	0.00	6.31	6.31	0.23	0.08	6.69	3.23	2.82	6.05
11/2/2024	0.00	6.85	6.85	0.17	0.08	6.43	3.14	2.72	5.86
11/3/2024	0.00	7.16	7.16	0.17	0.08	7.00	3.38	2.97	6.35
11/4/2024	0.00	6.52	6.52	0.16	0.08	6.39	3.08	2.68	5.76
11/5/2024	0.00	6.09	6.09	0.17	0.08	6.69	3.22	2.81	6.03
11/6/2024	0.00	6.24	6.24	0.19	0.08	6.90	3.31	2.91	6.22
11/7/2024	0.00	7.22	7.22	0.17	0.08	6.54	3.08	2.76	5.84
11/8/2024	0.00	6.86	6.86	0.18	0.08	6.44	3.09	2.69	5.78
11/9/2024	0.00	6.15	6.15	0.16	0.08	6.17	3.02	2.64	5.66
11/10/2024	0.00	5.81	5.81	0.16	0.08	6.29	3.08	2.72	5.80
11/11/2024	0.00	6.83	6.83	0.17	0.08	6.60	3.19	2.74	5.93
11/12/2024	0.00	7.21	7.21	0.12	0.11	6.00	3.01	2.62	5.63
11/13/2024	0.00	5.88	5.88	0.15	0.08	6.60	3.10	2.73	5.83
11/14/2024	0.00	5.69	5.69	0.15	0.08	6.20	2.99	2.58	5.57
11/15/2024	0.00	6.64	6.64	0.15	0.08	6.08	2.94	2.52	5.45
11/16/2024	0.00	6.13	6.13	0.17	0.08	6.34	3.06	2.68	5.75
11/17/2024	0.00	6.09	6.09	0.17	0.08	6.24	3.01	2.65	5.65
11/18/2024	0.00	5.92	5.92	0.15	0.09	6.19	2.99	2.57	5.56
11/19/2024	0.00	6.59	6.59	0.16	0.08	6.39	3.08	2.65	5.73
11/20/2024	0.00	7.30	7.30	0.18	0.08	6.36	3.20	2.73	5.93
11/21/2024	0.00	6.06	6.06	0.19	0.09	6.74	3.27	2.79	6.06
11/22/2024	0.00	5.99	5.99	0.15	0.08	6.32	3.15	2.60	5.75
11/23/2024	0.00	6.68	6.68	0.16	0.08	6.31	3.08	2.56	5.64
11/24/2024	0.00	6.49	6.49	0.16	0.08	6.36	3.20	2.69	5.89
11/25/2024	0.00	6.49	6.49	0.16	0.08	6.71	3.31	2.75	6.07
11/26/2024	0.00	6.80	6.80	0.16	0.08	6.61	3.26	2.70	5.96
11/27/2024	0.00	6.61	6.61	0.16	0.08	6.95	3.42	2.91	6.34
11/28/2024	0.00	6.36	6.36	0.16	0.09	6.49	3.14	2.72	5.86
11/29/2024	0.00	6.36	6.36	0.17	0.10	6.67	3.15	2.68	5.84
11/30/2024	0.00	6.69	6.69	0.15	0.08	6.44	3.30	2.75	6.05
Total	0.00	194.03	194.03	4.97	2.51	194.15	94.49	81.34	175.83
Avg	0.00	6.47	6.47	0.17	0.08	6.47	3.15	2.71	5.86
Min	0.00	5.69	5.69	0.12	0.08	6.00	2.94	2.52	5.45
Max	0.00	7.30	7.30	0.23	0.11	7.00	3.42	2.97	6.35

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	
11/1/2024	14.6	7.96	0.83	1.27	0.09	0.13	Negative	Negative
11/2/2024	14.4	7.92	1.44	10.01	0.09	0.29	Negative	Negative
11/3/2024	13.7	7.84	0.66	1.20	0.09	0.66	Negative	Negative
11/4/2024	14.2	7.86	0.54	1.05	0.09	0.66	Negative	Negative
11/5/2024	15.0	7.86	0.59	0.78	0.09	0.59	Negative	Negative
11/6/2024	14.3	7.87	0.53	1.42	0.08	0.53	Negative	Negative
11/7/2024	13.1	7.87	0.49	0.82	0.08	0.56	Negative	Negative
11/8/2024	13.0	7.87	0.43	0.52	0.08	0.62	Negative	Negative
11/9/2024	12.7	7.86	0.55	0.95	0.08	0.59	Negative	Negative
11/10/2024	12.8	7.88	0.58	0.77	0.08	0.59	Negative	Negative
11/11/2024	12.7	7.89	0.56	0.65	0.09	0.51	Negative	Negative
11/12/2024	12.6	7.90	0.43	0.51	0.08	0.53	Negative	Negative
11/13/2024	12.7	7.90	0.56	1.38	0.08	0.49	Negative	Negative
11/14/2024	12.8	7.91	0.99	1.89	0.08	0.42	Negative	Negative
11/15/2024	12.7	7.94	0.95	1.21	0.09	0.31	Negative	Negative
11/16/2024	12.4	7.94	1.32	1.55	0.09	0.34	Negative	Negative
11/17/2024	12.4	7.93	0.82	1.41	0.09	0.49	Negative	Negative
11/18/2024	12.2	7.93	0.77	5.39	0.09	0.45	Negative	Negative
11/19/2024	12.2	7.94	0.92	1.32	0.09	0.44	Negative	Negative
11/20/2024	11.9	7.95	0.89	1.07	0.09	0.43	Negative	Negative
11/21/2024	11.3	7.95	1.37	1.94	0.09	0.32	Negative	Negative
11/22/2024	11.3	7.95	0.94	1.09	0.09	0.34	Negative	Negative
11/23/2024	11.1	7.94	0.94	2.13	0.09	0.46	Negative	Negative
11/24/2024	10.9	7.93	1.31	2.21	0.09	0.56	Negative	Negative
11/25/2024	10.9	7.93	0.96	1.31	0.09	0.55	Negative	Negative
11/26/2024	10.8	7.94	0.70	0.89	0.09	0.52	Negative	Negative
11/27/2024	10.5	7.96	0.91	1.14	0.09	0.36	Negative	Negative
11/28/2024	10.3	7.95	0.75	10.00	0.09	0.43	Negative	Negative
11/29/2024	10.1	7.94	0.41	0.49	0.09	0.51	Negative	Negative
11/30/2024	9.9	7.93	0.52	0.62	0.09	0.56	Negative	Negative
Avg	12.3	7.91	0.79	1.90	0.09	0.47	NA	NA
Min	9.9	7.84	0.41	0.49	0.08	0.13	NA	NA
Max	15.0	7.96	1.44	10.01	0.09	0.66	NA	NA

Finished Water Analysis																			
Date	Temp	pH	Phosphate	Fluoride		Free Cl ₂	Hardness	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	Grab	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	mg/L	uS/cm				Total Coliform	E. coli
	AIT-4040-1	AIT-4050-2	AIT-4040-5	Lab		AIT-4050-1	Lab	Lab		Lab	Lab	Lab	Lab	Lab	Calculated			Lab	
11/1/2024	14.5	7.73	3.37	0.71		1.27	112	0	84	13	13	76	9.7	227	-0.55	1.02	0.47	Negative	Negative
11/2/2024	14.2	7.70	3.36	0.72		1.26	106	0	86	13	13	72	9.6	223	-0.61	1.03	0.46	Negative	Negative
11/3/2024	13.9	7.66	3.35	0.72		1.34	104	0	85	14	12	74	10.0	218	-0.64	1.18	0.47	Negative	Negative
11/4/2024	13.6	7.62	3.35	0.70	0.70	1.33	102	0	80	13	13	76	10.1	215	-0.70	1.01	0.49	Negative	Negative
11/5/2024	13.7	7.48	3.35	0.72		1.31	100	0	80	13	13	78	10.2	214	-0.82	0.99	0.49	Negative	Negative
11/6/2024	13.3	7.61	3.33	0.69		1.32	102	0	79	12	12	74	10.3	215	-0.73	1.03	0.47	Negative	Negative
11/7/2024	13.1	7.65	3.34	0.69		1.31	102	0	79	11	11	74	10.1	215	-0.70	1.03	0.43	Negative	Negative
11/8/2024	12.8	7.72	3.35	0.68		1.31	102	0	79	11	12	76	10.3	211	-0.62	0.90	0.43	Negative	Negative
11/9/2024	12.6	7.68	3.33	0.69		1.31	102	0	79	11	12	74	10.1	211	-0.68	0.92	0.44	Negative	Negative
11/10/2024	12.5	7.57	3.30	0.70		1.31	102	0	79	12	12	76	10.2	210	-0.78	0.97	0.45	Negative	Negative
11/11/2024	12.3	7.63	3.35	0.71	0.69	1.31	102	0	81	11	12	76	10.3	212	-0.72	0.93	0.43	Negative	Negative
11/12/2024	12.4	7.47	3.35	0.69		1.29	102	0	79	12	12	74	10.5	212	-0.89	0.97	0.45	Negative	Negative
11/13/2024	12.5	7.37	3.34	0.67		1.32	108	0	80	11	13	80	10.5	210	-0.96	0.86	0.45	Negative	Negative
11/14/2024	12.6	7.52	3.34	0.69		1.29	102	0	77	13	14	76	10.4	211	-0.84	0.93	0.53	Negative	Negative
11/15/2024	12.3	7.61	3.34	0.70		1.28	106	0	84	12	13	70	8.3	211	-0.75	0.94	0.45	Negative	Negative
11/16/2024	12.0	7.75	3.32	0.71		1.28	106	0	85	13	12	72	10.3	223	-0.60	1.10	0.45	Negative	Negative
11/17/2024	11.9	7.73	3.33	0.72		1.32	104	0	84	12	14	70	10.5	225	-0.65	0.86	0.46	Negative	Negative
11/18/2024	11.6	7.68	3.33	0.72	0.69	1.32	102	0	83	13	13	74	9.6	223	-0.69	0.98	0.47	Negative	Negative
11/19/2024	11.4	7.72	3.33	0.71		1.29	104	0	85	14	15	72	8.8	223	-0.66	0.93	0.51	Negative	Negative
11/20/2024	11.2	7.77	3.33	0.71		1.32	106	0	82	12	11	74	8.6	224	-0.61	1.10	0.43	Negative	Negative
11/21/2024	10.9	7.66	3.34	0.72		1.31	110	0	83	11	11	84	8.1	223	-0.67	1.00	0.40	Negative	Negative
11/22/2024	10.9	7.67	3.33	0.72		1.30	106	0	83	12	13	86	8.3	215	-0.65	0.92	0.45	Negative	Negative
11/23/2024	10.7	7.68	3.28	0.71		1.29	108	0	82	12	14	74	9.8	244	-0.72	0.84	0.47	Negative	Negative
11/24/2024	10.5	7.58	3.27	0.71		1.33	100	0	80	11	13	74	9.9	258	-0.84	0.83	0.44	Negative	Negative
11/25/2024	10.5	7.57	3.32	0.70	0.69	1.28	98	0	79	11	14	76	8.4	259	-0.84	0.81	0.47	Negative	Negative
11/26/2024	10.5	7.60	3.35	0.72		1.20	110	0	78	12	15	70	8.8	253	-0.86	0.78	0.51	Negative	Negative
11/27/2024	10.3	7.62	3.35	0.71		1.20	102	0	82	13	15	72	10.7	258	-0.81	0.83	0.50	Negative	Negative
11/28/2024	10.1	7.66	3.35	0.71		1.19	106	0	82	12	14	70	10.2	263	-0.78	0.87	0.48	Negative	Negative
11/29/2024	9.8	7.73	3.35	0.71		1.20	100	0	82	12	13	70	10.1	260	-0.72	0.92	0.45	Negative	Negative
11/30/2024	9.7	7.65	3.34	0.72		1.22	102	0	82	12	13	72	10.3	258	-0.79	0.92	0.45	Negative	Negative
Avg	11.9	7.64	3.34	0.71	0.69	1.29	104	0	81	12	13	75	9.8	227	-0.73	0.95	0.46	NA	NA
Min	9.7	7.37	3.27	0.67	0.69	1.19	98	0	77	11	11	70	8.1	210	-0.96	0.78	0.40	NA	NA
Max	14.5	7.77	3.37	0.72	0.70	1.34	112	0	86	14	15	86	10.7	263	-0.55	1.18	0.53	NA	NA

Plant Tap Disinfection Byproduct Monitoring - Results in ppb						
Date	Total Trihalomethanes - TTHM			Haloacetic Acids - HAA5		
	Result	LRAA	OEL	Result	LRAA	OEL
11/4/24	33	37	37	12	14	12

Turbidity										
Date	Raw Water		Clarified Water	Membrane Feed Water	Combined Membrane Filtrate					Finished Water
	Avg	Max	Avg	Avg	Avg	Max	# Samples	# > 0.3	% Exceeded	Avg
	NTU									
	AIT-1000-1		AIT-5030-1	AIT-1035-3	AIT-4000-1					Calculated
11/1/2024	0.83	1.27	32.88	1.12	0.025	0.026	96	0	0.0	0.023
11/2/2024	1.44	10.01	31.08	1.15	0.024	0.026	96	0	0.0	0.022
11/3/2024	0.66	1.20	8.97	1.26	0.023	0.024	96	0	0.0	0.022
11/4/2024	0.54	1.05	6.36	1.00	0.023	0.029	96	0	0.0	0.022
11/5/2024	0.59	0.78	6.37	0.90	0.023	0.024	96	0	0.0	0.022
11/6/2024	0.53	1.42	15.54	0.86	0.023	0.023	96	0	0.0	0.022
11/7/2024	0.49	0.82	9.43	0.84	0.027	0.095	96	0	0.0	0.021
11/8/2024	0.43	0.52	4.68	0.78	0.022	0.024	96	0	0.0	0.021
11/9/2024	0.55	0.95	10.02	0.80	0.022	0.022	96	0	0.0	0.021
11/10/2024	0.58	0.77	4.71	0.84	0.022	0.022	96	0	0.0	0.021
11/11/2024	0.56	0.65	8.71	1.33	0.022	0.023	96	0	0.0	0.021
11/12/2024	0.43	0.51	8.95	1.40	0.023	0.023	96	0	0.0	0.021
11/13/2024	0.56	1.38	3.48	0.65	0.023	0.023	96	0	0.0	0.021
11/14/2024	0.99	1.89	5.03	0.73	0.023	0.023	96	0	0.0	0.021
11/15/2024	0.95	1.21	6.23	0.79	0.023	0.023	96	0	0.0	0.021
11/16/2024	1.32	1.55	16.92	1.01	0.023	0.024	96	0	0.0	0.022
11/17/2024	0.82	1.41	24.60	1.06	0.022	0.024	96	0	0.0	0.022
11/18/2024	0.77	5.39	8.72	0.91	0.022	0.024	96	0	0.0	0.022
11/19/2024	0.92	1.32	9.66	0.89	0.022	0.024	96	0	0.0	0.022
11/20/2024	0.89	1.07	20.11	0.99	0.022	0.022	96	0	0.0	0.022
11/21/2024	1.37	1.94	45.93	1.14	0.022	0.022	96	0	0.0	0.022
11/22/2024	0.94	1.09	17.44	1.10	0.022	0.022	96	0	0.0	0.022
11/23/2024	0.94	2.13	11.35	0.97	0.022	0.023	96	0	0.0	0.022
11/24/2024	1.31	2.21	12.88	1.14	0.021	0.021	96	0	0.0	0.021
11/25/2024	0.96	1.31	13.03	1.08	0.021	0.022	96	0	0.0	0.021
11/26/2024	0.70	0.89	7.20	0.92	0.021	0.022	96	0	0.0	0.021
11/27/2024	0.91	1.14	8.90	0.85	0.021	0.021	96	0	0.0	0.021
11/28/2024	0.75	10.00	15.45	1.00	0.021	0.021	96	0	0.0	0.022
11/29/2024	0.41	0.49	12.63	0.74	0.021	0.021	96	0	0.0	0.021
11/30/2024	0.52	0.62	5.28	0.53	0.021	0.021	96	0	0.0	0.021
Avg	0.79	1.90	13.08	0.96	0.022	0.025	96	0	0.0	0.022
Min	0.41	0.49	3.48	0.53	0.021	0.021	96	0	0.0	0.021
Max	1.44	10.01	45.93	1.40	0.027	0.095	96	0	0.0	0.023

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	Pass/Fail	Max	Minimum	Pass/Fail	Max	Minimum	Pass/Fail	Max	Minimum	Pass/Fail	Max	Minimum	Pass/Fail	Max	Minimum	Pass/Fail	Max	Minimum	Pass/Fail	Max	Minimum	Pass/Fail	Max		
Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU	Daily Value	Pass/Fail	NTU
11/1/2024	5.30	PASS	0.023	5.07	PASS	0.027	5.32	PASS	0.024	3.91	PASS	0.024	5.13	PASS	0.023	5.29	PASS	0.023	3.92	PASS	0.023	5.34	PASS	0.023		
11/2/2024	5.28	PASS	0.023	5.05	PASS	0.027	5.29	PASS	0.024	4.17	PASS	0.024	5.12	PASS	0.023	5.28	PASS	0.024	3.92	PASS	0.023	5.28	PASS	0.022		
11/3/2024	5.41	PASS	0.022	5.12	PASS	0.026	5.40	PASS	0.023	4.11	PASS	0.024	5.34	PASS	0.024	5.37	PASS	0.023	3.97	PASS	0.022	5.30	PASS	0.022		
11/4/2024	5.41	PASS	0.022	5.11	PASS	0.026	5.40	PASS	0.023	4.07	PASS	0.023	5.34	PASS	0.022	5.31	PASS	0.022	3.97	PASS	0.022	5.42	PASS	0.021		
11/5/2024	5.42	PASS	0.022	5.12	PASS	0.025	5.40	PASS	0.023	4.08	PASS	0.023	5.32	PASS	0.022	5.38	PASS	0.023	3.99	PASS	0.022	5.45	PASS	0.021		
11/6/2024	5.52	PASS	0.022	5.14	PASS	0.025	5.43	PASS	0.023	4.06	PASS	0.023	5.32	PASS	0.022	5.41	PASS	0.022	4.01	PASS	0.022	5.33	PASS	0.021		
11/7/2024	5.47	PASS	0.021	5.11	PASS	0.024	5.36	PASS	0.022	4.06	PASS	0.024	5.33	PASS	0.022	5.40	PASS	0.023	4.01	PASS	0.022	5.30	PASS	0.021		
11/8/2024	5.41	PASS	0.021	5.10	PASS	0.024	5.37	PASS	0.022	4.07	PASS	0.024	5.34	PASS	0.021	5.39	PASS	0.023	4.00	PASS	0.022	5.30	PASS	0.021		
11/9/2024	5.41	PASS	0.021	5.11	PASS	0.024	5.39	PASS	0.022	4.04	PASS	0.024	5.30	PASS	0.021	5.41	PASS	0.022	4.00	PASS	0.022	5.42	PASS	0.021		
11/10/2024	5.42	PASS	0.021	5.09	PASS	0.024	5.40	PASS	0.022	4.04	PASS	0.023	5.27	PASS	0.021	5.39	PASS	0.022	3.99	PASS	0.022	5.45	PASS	0.021		
11/11/2024	5.38	PASS	0.021	Train 2 down for pipe replacement from 11/11/24 to 11/18/24			5.38	PASS	0.022	Train 2 down for pipe replacement from 11/11/24 to 11/18/24			5.20	PASS	0.021	Train 2 down for pipe replacement from 11/11/24 to 11/18/24			3.98	PASS	0.021	Train 2 down for pipe replacement from 11/11/24 to 11/18/24				
11/12/2024	5.33	PASS	0.021				5.33	PASS	0.023				5.16	PASS	0.021				3.98	PASS	0.022					
11/13/2024	5.33	PASS	0.021				5.33	PASS	0.022				5.15	PASS	0.021				3.99	PASS	0.021					
11/14/2024	5.33	PASS	0.021				5.29	PASS	0.023				5.17	PASS	0.021				3.97	PASS	0.022					
11/15/2024	5.36	PASS	0.022				5.30	PASS	0.024				5.15	PASS	0.021				3.96	PASS	0.022					
11/16/2024	5.31	PASS	0.022				5.24	PASS	0.023				5.11	PASS	0.021				3.95	PASS	0.022					
11/17/2024	5.31	PASS	0.022				5.22	PASS	0.024				5.04	PASS	0.024				3.96	PASS	0.022					
11/18/2024	5.33	PASS	0.022	5.13	PASS	0.033	5.25	PASS	0.023	4.12	PASS	0.026	5.08	PASS	0.022	4.73	PASS	0.045	3.96	PASS	0.022	4.69	PASS	0.035		
11/19/2024	5.36	PASS	0.022	5.12	PASS	0.024	5.29	PASS	0.023	4.07	PASS	0.025	5.16	PASS	0.021	4.74	PASS	0.024	3.97	PASS	0.022	5.31	PASS	0.026		
11/20/2024	5.40	PASS	0.022	5.08	PASS	0.023	5.25	PASS	0.023	4.01	PASS	0.024	5.14	PASS	0.022	5.46	PASS	0.022	3.97	PASS	0.022	5.49	PASS	0.028		
11/21/2024	5.37	PASS	0.022	5.06	PASS	0.023	5.33	PASS	0.023	3.98	PASS	0.025	5.11	PASS	0.022	5.42	PASS	0.022	3.97	PASS	0.023	5.43	PASS	0.026		
11/22/2024	5.36	PASS	0.022	5.17	PASS	0.024	5.33	PASS	0.023	4.04	PASS	0.024	5.13	PASS	0.022	5.43	PASS	0.023	3.95	PASS	0.022	5.45	PASS	0.025		
11/23/2024	5.38	PASS	0.022	5.13	PASS	0.023	5.34	PASS	0.023	4.02	PASS	0.025	5.13	PASS	0.022	5.49	PASS	0.022	4.01	PASS	0.022	5.48	PASS	0.028		
11/24/2024	5.38	PASS	0.022	5.13	PASS	0.023	5.33	PASS	0.022	4.01	PASS	0.024	5.15	PASS	0.021	5.49	PASS	0.022	3.98	PASS	0.022	5.67	PASS	0.026		
11/25/2024	5.37	PASS	0.022	5.18	PASS	0.023	5.30	PASS	0.023	4.00	PASS	0.024	5.15	PASS	0.022	5.41	PASS	0.023	3.97	PASS	0.022	5.60	PASS	0.023		
11/26/2024	5.34	PASS	0.021	5.18	PASS	0.023	5.31	PASS	0.022	3.99	PASS	0.024	5.17	PASS	0.022	5.40	PASS	0.022	3.98	PASS	0.022	5.60	PASS	0.027		
11/27/2024	5.42	PASS	0.022	5.09	PASS	0.023	5.27	PASS	0.022	4.01	PASS	0.024	5.16	PASS	0.021	5.10	PASS	0.022	4.00	PASS	0.022	5.47	PASS	0.024		
11/28/2024	5.35	PASS	0.022	5.11	PASS	0.023	5.26	PASS	0.023	4.00	PASS	0.024	5.15	PASS	0.021	5.04	PASS	0.022	3.98	PASS	0.022	5.47	PASS	0.022		
11/29/2024	5.35	PASS	0.022	5.13	PASS	0.023	5.31	PASS	0.022	3.98	PASS	0.024	5.16	PASS	0.021	5.04	PASS	0.022	4.01	PASS	0.022	5.48	PASS	0.022		
11/30/2024	5.36	PASS	0.021	5.13	PASS	0.023	5.30	PASS	0.022	3.98	PASS	0.024	5.19	PASS	0.021	5.01	PASS	0.021	4.02	PASS	0.022	5.44	PASS	0.021		
Avg	5.37		0.022	5.12		0.024	5.32		0.023	4.04		0.024	5.19		0.022	5.28		0.023	3.98		0.022	5.40		0.024		
Min	5.28		0.021	5.05		0.023	5.22		0.022	3.91		0.023	5.04		0.021	4.73		0.021	3.92		0.021	4.69		0.021		
Max	5.52		0.023	5.18		0.033	5.43		0.024	4.17		0.026	5.34		0.024	5.49		0.045	4.02		0.023	5.67		0.035		

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

Max Air Hold Test Result: While not shown on this page, an AHT result of 0.84 PSI/Min or greater.

In Service Dates For Modules			
Train 1		Train 2	
Skid 1	8/2024	12/2023	Skid 2
Skid 3	11/2023	8/2015	Skid 4
Skid 5	2/2023	10/2024	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
11/1/2024	6.7	0.13	0.04	1.12	1.46	1.27	3.29	3.37	0.09	0.55	0.71
11/2/2024	6.4	0.29	0.05	1.20	1.54	1.26	3.29	3.36	0.09	0.55	0.72
11/3/2024	7.0	0.66	0.19	1.02	1.52	1.34	3.29	3.35	0.09	0.55	0.72
11/4/2024	6.4	0.66	0.28	0.90	1.50	1.33	3.29	3.35	0.09	0.55	0.70
11/5/2024	6.7	0.59	0.32	0.94	1.42	1.31	3.25	3.35	0.09	0.53	0.72
11/6/2024	6.9	0.53	0.31	0.94	1.48	1.32	3.23	3.33	0.08	0.53	0.69
11/7/2024	6.5	0.56	0.32	0.94	1.48	1.31	3.25	3.34	0.08	0.53	0.69
11/8/2024	6.4	0.62	0.36	0.88	1.46	1.31	3.25	3.35	0.08	0.53	0.68
11/9/2024	6.2	0.59	0.38	0.88	1.46	1.31	3.25	3.33	0.08	0.53	0.69
11/10/2024	6.3	0.59	0.38	0.88	1.46	1.31	3.30	3.30	0.08	0.53	0.70
11/11/2024	6.6	0.51	0.35	0.88	1.44	1.31	3.30	3.35	0.09	0.53	0.71
11/12/2024	6.0	0.53	0.33	0.92	1.46	1.29	3.30	3.35	0.08	0.53	0.69
11/13/2024	6.6	0.49	0.34	0.92	1.46	1.32	3.30	3.34	0.08	0.53	0.67
11/14/2024	6.2	0.42	0.32	0.94	1.42	1.29	3.30	3.34	0.08	0.53	0.69
11/15/2024	6.1	0.31	0.26	1.02	1.43	1.28	3.30	3.34	0.09	0.53	0.70
11/16/2024	6.3	0.34	0.21	1.09	1.48	1.28	3.30	3.32	0.09	0.53	0.71
11/17/2024	6.2	0.49	0.24	1.04	1.50	1.32	3.30	3.33	0.09	0.53	0.72
11/18/2024	6.2	0.45	0.27	1.02	1.47	1.32	3.30	3.33	0.09	0.53	0.72
11/19/2024	6.4	0.44	0.27	1.02	1.45	1.29	3.30	3.33	0.09	0.53	0.71
11/20/2024	6.4	0.43	0.28	1.02	1.48	1.32	3.30	3.33	0.09	0.53	0.71
11/21/2024	6.7	0.32	0.25	1.06	1.46	1.31	3.30	3.34	0.09	0.53	0.72
11/22/2024	6.3	0.34	0.22	1.06	1.44	1.30	3.30	3.33	0.09	0.53	0.72
11/23/2024	6.3	0.46	0.25	1.06	1.46	1.29	3.30	3.28	0.09	0.53	0.71
11/24/2024	6.4	0.56	0.30	1.00	1.49	1.33	3.30	3.27	0.09	0.53	0.71
11/25/2024	6.7	0.55	0.34	0.84	1.37	1.28	3.30	3.32	0.09	0.53	0.70
11/26/2024	6.6	0.52	0.35	0.86	1.33	1.20	3.30	3.35	0.09	0.53	0.72
11/27/2024	7.0	0.36	0.31	0.90	1.32	1.20	3.30	3.35	0.09	0.53	0.71
11/28/2024	6.5	0.43	0.27	0.92	1.32	1.19	3.30	3.35	0.09	0.53	0.71
11/29/2024	6.7	0.51	0.30	0.90	1.35	1.20	3.30	3.35	0.09	0.53	0.71
11/30/2024	6.4	0.56	0.34	0.84	1.34	1.22	3.30	3.34	0.09	0.53	0.72
Avg	6.5	0.47	0.28	0.97	1.44	1.29	3.29	3.34	0.09	0.53	0.71
Min	6.0	0.13	0.04	0.84	1.32	1.19	3.23	3.27	0.08	0.53	0.67
Max	7.0	0.66	0.38	1.20	1.54	1.34	3.30	3.37	0.09	0.55	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 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	AIT-4040-1	Calculated	Calculated
11/1/2024	42.8	2,925	0.13	368	28.5	24.4	6.1	599	1.19	357	725	14.5	6.00	Y
11/2/2024	53.6	2,335	0.29	673	28.7	23.1	5.9	606	1.19	361	1034	14.2	6.00	Y
11/3/2024	54.6	2,291	0.66	1505	28.7	23.5	6.3	564	1.31	369	1874	13.9	6.00	Y
11/4/2024	46.8	2,675	0.66	1753	28.5	24.3	5.8	628	1.30	409	2162	13.6	6.00	Y
11/5/2024	42.0	2,977	0.59	1757	28.5	23.2	6.0	588	1.29	379	2136	13.7	6.00	Y
11/6/2024	42.5	2,941	0.53	1566	28.7	23.3	6.2	573	1.30	371	1937	13.3	6.00	Y
11/7/2024	42.4	2,951	0.56	1642	28.2	21.3	5.8	581	1.22	354	1996	13.1	6.00	Y
11/8/2024	43.4	2,882	0.62	1786	28.6	24.3	5.8	627	1.27	400	2186	12.8	6.00	Y
11/9/2024	54.9	2,280	0.59	1346	28.6	23.7	5.7	633	1.30	412	1759	12.6	6.00	Y
11/10/2024	53.9	2,320	0.59	1379	28.6	21.9	5.8	596	1.27	380	1759	12.5	6.00	Y
11/11/2024	47.3	2,642	0.51	1351	28.6	24.3	5.9	611	1.25	383	1734	12.3	6.00	Y
11/12/2024	49.2	2,540	0.53	1339	28.6	20.8	5.6	600	1.25	374	1713	12.4	6.00	Y
11/13/2024	40.5	3,090	0.49	1521	28.5	20.5	5.8	576	1.30	373	1894	12.5	6.00	Y
11/14/2024	39.7	3,154	0.42	1325	28.5	21.8	5.6	619	1.25	386	1711	12.6	6.00	Y
11/15/2024	43.0	2,911	0.31	897	28.6	23.5	5.5	653	1.23	401	1297	12.3	6.00	Y
11/16/2024	55.8	2,241	0.34	772	28.6	23.8	5.7	624	1.22	380	1153	12.0	6.00	Y
11/17/2024	53.2	2,349	0.49	1153	28.5	22.8	5.7	623	1.27	395	1548	11.9	6.00	Y
11/18/2024	45.4	2,758	0.45	1229	28.5	23.8	5.6	645	1.25	402	1631	11.6	6.00	Y
11/19/2024	41.8	2,995	0.44	1308	28.5	23.0	5.7	616	1.23	380	1688	11.4	6.00	Y
11/20/2024	44.4	2,815	0.43	1221	28.5	23.4	5.9	601	1.29	387	1608	11.2	6.00	Y
11/21/2024	38.5	3,246	0.32	1047	28.5	24.0	6.1	594	1.29	383	1430	10.9	6.00	Y
11/22/2024	41.0	3,051	0.34	1048	28.5	24.5	5.7	633	1.27	403	1451	10.9	6.00	Y
11/23/2024	58.1	2,154	0.46	989	28.6	24.3	5.6	642	1.27	409	1399	10.7	6.00	Y
11/24/2024	55.1	2,269	0.56	1268	28.6	22.9	5.9	599	1.30	390	1657	10.5	6.00	Y
11/25/2024	46.2	2,705	0.55	1477	28.6	22.6	6.1	578	1.21	348	1825	10.6	6.00	Y
11/26/2024	40.7	3,070	0.52	1591	28.5	21.6	6.0	576	1.18	339	1930	10.5	6.00	Y
11/27/2024	40.4	3,095	0.36	1127	28.5	23.3	6.3	560	1.17	328	1455	10.3	6.00	Y
11/28/2024	39.9	3,137	0.43	1340	28.6	22.8	5.9	601	1.16	348	1688	10.1	6.00	Y
11/29/2024	42.3	2,956	0.51	1504	28.6	22.9	5.8	604	1.18	358	1862	9.8	8.00	Y
11/30/2024	53.0	2,362	0.56	1315	28.5	23.2	6.1	586	1.21	353	1668	9.7	8.00	Y
Avg	46.4	2,737	0.47	1287	28.5	23.1	5.9	604	1.25	377	1664	11.9	6.13	NA
Min	38.5	2,154	0.13	368	28.2	20.5	5.5	560	1.16	328	725	9.7	6.00	NA
Max	58.1	3,246	0.66	1786	28.7	24.5	6.3	653	1.31	412	2186	14.5	8.00	NA

Notes:

Pipeline volume factor in SMMWSC to RW tank: 125,090 MG-min/day

Distribution System Monitoring																								
Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl ₂)																								
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
11/1/2024																								
11/2/2024																								
11/3/2024																								
11/4/2024																								
11/5/2024	0.04	0.74	0.34	0.32	1.01				0.95		0.82	1.00		1.08	0.80	0.93	0.88	0.82	0.67	0.48		0.21		1.10
11/6/2024																								
11/7/2024									0.88	0.56	0.79	0.82	0.42	1.10	0.81									
11/8/2024																								
11/9/2024																								
11/10/2024																								
11/11/2024																								
11/12/2024		0.94	0.44													1.25	0.75	1.01	0.71	0.45		0.28		1.14
11/13/2024																								
11/14/2024								1.19													1.08			
11/15/2024																								
11/16/2024																								
11/17/2024																								
11/18/2024																								
11/19/2024		0.92	0.41		1.17	0.98	0.99		0.92	0.63	0.88	0.98	0.39	1.21	0.77									
11/20/2024																								
11/21/2024									0.79		0.70	0.99		1.04	0.68									
11/22/2024																								
11/23/2024																								
11/24/2024																								
11/25/2024																								1.20
11/26/2024					1.02							1.36	0.74	1.29	0.82									1.10
11/27/2024																								
11/28/2024																								
11/29/2024																								
11/30/2024																								
Average	0.04	0.73				1.05			0.84							0.80					1.08	0.25		1.14
Min	0.04	0.32				0.98			0.39							0.45					1.08	0.21		1.10
Max	0.04	1.17				1.19			1.36							1.25					1.08	0.28		1.20

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	
11/1/2024																												
11/2/2024																												
11/3/2024																												
11/4/2024																												
11/5/2024														0.44										0.59	0.59	0.78	0.56	0.20
11/6/2024																												
11/7/2024		0.83	0.86	0.20	0.84	0.49	1.04	0.74		0.78			0.76						0.53		0.39							
11/8/2024																												
11/9/2024																												
11/10/2024																												
11/11/2024																												
11/12/2024														0.38											0.63	0.80	0.40	
11/13/2024																												
11/14/2024	0.47			0.24	0.44	0.52			1.12	0.68						1.13	0.75	0.84	0.29		0.59							
11/15/2024																												
11/16/2024																												
11/17/2024																												
11/18/2024																												
11/19/2024				0.19	0.54	0.44										0.97	0.71	0.70										
11/20/2024																												
11/21/2024																												
11/22/2024																												
11/23/2024																												
11/24/2024																												
11/25/2024																												
11/26/2024																												
11/27/2024																												
11/28/2024																												
11/29/2024																												
11/30/2024																												
Average	0.65		0.48				0.97			0.73		0.76		0.41		0.85			0.41		0.49		0.59	0.63			0.20	
Min	0.47		0.19				0.74			0.68		0.76		0.38		0.70			0.29		0.39		0.59	0.40			0.20	
Max	0.83		0.86				1.12			0.78		0.76		0.44		1.13			0.53		0.59		0.59	0.80			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			
				November, 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	0.04	1	1	0	0
BAY	Bangor Township	0390	0.73	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	1.05	3	3	0	0
BAY	Bay City	0470	0.84	30	35	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.80	9	10	0	0
BAY	Beaver Road Area	0517	1.08	1	1	0	0
BAY	Beaver Township	0518	0.25	2	2	0	0
BAY	Essexville	2180	1.14	4	4	0	0
BAY	Fraser Township	2465	0.65	2	2	0	0
BAY	Hampton Township	2960	0.48	10	10	0	0
BAY	Kawkawlin Township	3565	0.97	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.73	2	2	0	0
BAY	Linwood Metro Water District	3910	0.76	1	1	0	0
BAY	Merritt Township	4280	0.41	2	2	0	0
BAY	Monitor Township	4440	0.85	6	6	0	0
BAY	City of Pinconning	5330	0.41	2	2	0	0
BAY	Pinconning Township	5335	0.49	2	2	0	0
BAY	Portsmouth Township	5540	0.59	1	1	0	0
BAY	Williams Township	7125	0.63	6	6	0	0
Tuscola	Wisner	7134	0.20	1	1	0	0
Average Free Cl2 Residual of All Distribution Sites				0.65	98	mg/L	
1. Total distribution samples			104				
2. Total distribution samples with detectable free cl2 residual			104				
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%				