

Bay Area WTP

Monthly Operations Report



March, 2018

Water Systems Serial Number:

0465



Ryan Goebel

Operations Supervisor

Title

F1

Classification



Mark Moers

Water Superintendent

Title

F1

Classification

Bay Area Water Treatment Plant

Monthly Operations Report

Supply Name: Bay Area Water System
 WSSN: 0465

Mark Moers
 Operator-in-charge

March, 2018
 Month, Year

F1
 Certification of Operator-in-charge

F1
 Water Plant Classification

Bay
 County

Treatment Rate and Membrane Data

Treatment Rate, Approved Rated Plant Capacity	17.4	Millions of Gallons per Day
Treatment Rate, Maximum	7.0	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	22	PSI
Maximum Operating Transmembrane Pressure	22	PSI

Chemical Data

Sodium Hypochlorite on hand:	4,120	Gallons	Estimated Supply:	64.8	days
Caustic Soda on hand:	794	Gallons	Estimated Supply:	142.7	days
Corrosion Inhibitor on hand:	719	Gallons	Estimated Supply:	39.1	days
Hydrofluosilicic Acid on hand:	483	Gallons	Estimated Supply:	28.4	days
Aluminum Chlorohydrate on hand:	571	Gallons	Estimated Supply:	89.4	days
Sulfuric Acid on hand:	5	Gallons	Estimated Supply:	1.3	days
Sodium Bisulfite on hand:	195	Gallons	Estimated Supply:	42.9	days
Citric Acid on hand:	587	Gallons	Estimated Supply:	75.2	days
Cost of All Chemicals per Million Gallons:	62.66	Dollars			
Estimated Electrical Cost per Million Gallons:	113.53	Dollars			

Remarks

Number of periods of filter confluence turbidity samples > 0.3 NTU 0
 Percent of membrane period confluence samples > 0.3 NTU: 0.00%

Did any individual membrane skid exceed:

1.0 NTU in two consecutive measurements taken 15 minutes apart?
 If yes, attach specific filter(s) information and indicate required follow-up status. No

0.5 NTU in two consecutive measurements taken 15 minutes apart after 4 hours of operation?
 If yes, attach specific filter(s) information and indicate required follow-up status. No

1.0 NTU in two consecutive measurements taken 15 minutes apart for 3 consecutive months?
 If yes, attach specific filter(s) information and indicate required follow-up status. No

2.0 NTU in two consecutive measurements taken 15 minutes apart for 2 consecutive months?
 If yes, attach specific filter(s) information and indicate required follow-up status. No

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. No

Did POE disinfectant residual fall below 0.2 ppm during the month?
 If yes, indicate date(s) and duration on a separate sheet. No

Was minimum C*T credit achieved for the entire month?
 If no, indicate on a separate sheet the date(s) not achieved. Yes

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. No

Notes

- *Fluoride feed out of service from 3/1/18 to 3/21/18 due to room and tank damage from 8/9/17 Hydrofluorosilicic Acid bulk tank leak.
- Fluoride feed back in service at 3PM on 3/21/18.



Bay Area WTP Monthly Operating Report

Date	Flows															
	Raw Water (MG)				Clarified (MG)		Wasted (MG)		Sludge (MG)		Treated (MG)		Finished Water Pumped (MG)			
	North	South	Total	Total	Total	Total	Total	Total	Total	Total	N. Euclid	Lauria Road	Total	Total		
	FIT-1000-1	FIT-1000-2	Calculated	FIT-5520-1	FIT-5520-2	FIT-5180	FIT-4000-1	FIT-4040-1	FIT-4040-1	FIT-4040-2	FIT-4040-1	FIT-4040-2	Calculated			
3/1/2018	0.00	6.77	6.77	0.24	0.00	0.07	6.99	3.50	3.39	6.89						
3/2/2018	0.00	6.48	6.48	0.27	0.00	0.05	7.00	3.23	3.09	6.32						
3/3/2018	0.00	6.40	6.40	0.25	0.00	0.06	6.12	3.15	3.01	6.15						
3/4/2018	0.00	6.46	6.46	0.27	0.00	0.05	6.49	3.22	3.10	6.32						
3/5/2018	0.00	6.57	6.57	0.25	0.00	0.05	6.61	3.24	3.06	6.31						
3/6/2018	0.00	6.64	6.64	0.27	0.00	0.05	6.62	3.21	3.07	6.29						
3/7/2018	0.00	6.57	6.57	0.26	0.00	0.05	6.30	3.12	2.98	6.10						
3/8/2018	0.00	6.48	6.48	0.27	0.00	0.05	6.48	3.04	2.96	6.00						
3/9/2018	0.00	6.47	6.47	0.27	0.00	0.05	6.13	3.04	3.01	6.05						
3/10/2018	0.00	6.26	6.26	0.27	0.00	0.05	6.12	2.97	2.96	5.93						
3/11/2018	0.00	5.84	5.84	0.26	0.00	0.04	6.10	3.02	3.01	6.03						
3/12/2018	0.00	5.91	5.91	0.23	0.00	0.05	6.45	3.09	3.07	6.16						
3/13/2018	0.00	5.98	5.98	0.24	0.00	0.04	6.38	3.10	3.06	6.16						
3/14/2018	0.00	6.63	6.63	0.24	0.00	0.04	6.33	3.07	3.06	6.13						
3/15/2018	0.00	6.84	6.84	0.23	0.00	0.05	6.34	3.02	2.99	6.01						
3/16/2018	0.00	6.47	6.47	0.24	0.00	0.05	6.35	3.15	3.12	6.27						
3/17/2018	0.00	6.26	6.26	0.22	0.00	0.05	6.57	3.06	3.07	6.13						
3/18/2018	0.00	6.48	6.48	0.26	0.00	0.05	6.71	3.24	3.25	6.49						
3/19/2018	0.00	6.92	6.92	0.27	0.00	0.05	6.22	2.99	2.99	5.98						
3/20/2018	0.00	6.73	6.73	0.27	0.00	0.05	6.33	3.09	3.08	6.17						
3/21/2018	0.00	6.21	6.21	0.26	0.00	0.05	6.45	3.10	3.08	6.18						
3/22/2018	0.00	6.07	6.07	0.24	0.00	0.05	6.57	3.20	3.18	6.39						
3/23/2018	0.00	6.57	6.57	0.24	0.00	0.06	6.34	3.03	3.00	6.02						
3/24/2018	0.00	6.15	6.15	0.24	0.00	0.08	6.38	3.08	3.00	6.09						
3/25/2018	0.00	5.79	5.79	0.22	0.00	0.07	6.42	3.15	3.13	6.28						
3/26/2018	0.00	6.80	6.80	0.26	0.00	0.05	6.40	3.12	3.10	6.22						
3/27/2018	0.00	6.58	6.58	0.21	0.00	0.07	6.06	2.94	2.93	5.87						
3/28/2018	0.00	6.40	6.40	0.25	0.00	0.06	6.35	2.97	2.95	5.92						
3/29/2018	0.00	6.43	6.43	0.23	0.00	0.05	5.96	2.99	2.97	5.95						
3/30/2018	0.00	6.51	6.51	0.27	0.00	0.05	6.46	3.05	3.05	6.10						
3/31/2018	0.00	6.20	6.20	0.27	0.00	0.04	6.34	3.07	3.07	6.14						
Total	0.00	198.86	198.86	7.77	0.00	1.60	198.37	96.27	94.79	191.06						
Avg	0.00	6.41	6.41	0.25	0.00	0.05	6.40	3.11	3.06	6.16						
Min	0.00	5.79	5.79	0.21	0.00	0.04	5.96	2.94	2.93	5.87						
Max	0.00	6.92	6.92	0.27	0.00	0.08	7.00	3.50	3.39	6.89						



Raw Water Analysis

Date	Temp		pH		Turbidity		F ⁻		Free Cl (Mem. Feed)		Bacti	
	Average		Average		Average	Maximum	Grab		Average		Total Coliform	E. coli
	°C		AIT-1000-2	NTU	AIT-1000-1		mg/L	mg/L	mg/L		Lab	Lab
3/1/2018	2.89		7.89	0.49	1.35		0.09	0.43		Negative	Negative	
3/2/2018	2.97		7.90	0.33	0.52		0.09	0.40		Negative	Negative	
3/3/2018	3.01		7.90	1.05	2.03		0.09	0.36		Negative	Negative	
3/4/2018	3.07		7.89	0.97	2.10		0.09	0.34		Negative	Negative	
3/5/2018	3.15		7.89	0.72	1.47		0.09	0.35		Negative	Negative	
3/6/2018	3.12		7.89	0.50	1.19		0.09	0.36		Negative	Negative	
3/7/2018	3.14		7.88	0.81	1.35		0.09	0.34		Negative	Negative	
3/8/2018	3.16		7.89	1.32	2.04		0.11	0.32		Negative	Negative	
3/9/2018	3.21		7.89	0.73	1.11		0.11	0.32		Negative	Negative	
3/10/2018	3.28		7.90	0.71	1.05		0.11	0.34		Negative	Negative	
3/11/2018	3.22		7.89	0.59	1.01		0.11	0.38		Negative	Negative	
3/12/2018	3.16		7.89	0.52	3.17		0.12	0.42		Negative	Negative	
3/13/2018	3.16		7.91	0.42	0.91		0.12	0.40		Negative	Negative	
3/14/2018	3.15		7.92	0.43	1.65		0.11	0.36		Negative	Negative	
3/15/2018	3.19		7.92	0.43	1.01		0.09	0.32		Negative	Negative	
3/16/2018	3.18		7.92	0.34	0.51		0.10	0.32		Negative	Negative	
3/17/2018	3.14		7.93	0.41	0.57		0.12	0.32		Negative	Negative	
3/18/2018	3.18		7.93	0.42	0.65		0.10	0.31		Negative	Negative	
3/19/2018	3.18		7.95	0.34	0.49		0.10	0.29		Negative	Negative	
3/20/2018	3.27		7.93	0.40	1.35		0.10	0.28		Negative	Negative	
3/21/2018	3.44		7.93	1.66	3.01		0.11	0.28		Negative	Negative	
3/22/2018	3.57		7.92	4.87	8.75		0.10	0.22		Negative	Negative	
3/23/2018	3.52		7.86	7.11	13.32		0.08	0.17		Negative	Negative	
3/24/2018	3.53		7.84	3.17	15.35		0.09	0.20		Negative	Negative	
3/25/2018	3.56		7.86	4.12	7.92		0.09	0.30		Negative	Negative	
3/26/2018	3.59		7.86	6.27	13.15		0.09	0.32		Negative	Negative	
3/27/2018	3.67		7.86	6.09	13.40		0.08	0.22		Negative	Negative	
3/28/2018	3.66		7.86	1.49	8.02		0.09	0.26		Negative	Negative	
3/29/2018	3.74		7.87	1.04	1.50		0.10	0.31		Negative	Negative	
3/30/2018	3.79		7.88	1.09	2.04		0.10	0.30		Negative	Negative	
3/31/2018	3.80		7.89	1.28	4.91		0.10	0.28		Negative	Negative	
Avg	3.3		7.89	1.62	3.77		0.10	0.32		NA	NA	
Min	2.9		7.84	0.33	0.49		0.08	0.17		NA	NA	
Max	3.8		7.95	7.11	15.35		0.12	0.43		NA	NA	



Finished Water Analysis																			
Date	Temp Average °C	pH Average	Phosphate Average mg/L	Fluoride		Free Cl ₂ Average mg/L	Alkalinity (as CaCO ₃)		Chloride mg/L	Sulfate mg/L	Calcium (as CaCO ₃) mg/L	Dissolved Oxygen		Conductivity us/cm	Langelier Saturation Index	Chloride: Sulfate Mass Ratio	Larson- Skold Index	Bacti	
				Tap	Dist		Carbonate	Bicarbonate				Grab	Lab					Grab	Lab
3/1/2018	2.1	7.74	AIT-4050-2, AIT-4040-5	0.09	Lab	AIT-4050-1	0	80	10	14	76	11.9	234	-0.88	0.71	0.44	Negative	Negative	
3/2/2018	2.6	7.75	3.21	0.09		1.50	0	80	9	14	76	12.4	235	-0.86	0.64	0.42	Negative	Negative	
3/3/2018	2.7	7.74	3.13	0.09		1.49	0	79	14	76	11.9	234	234	-0.87	0.64	0.42	Negative	Negative	
3/4/2018	2.7	7.74	3.12	0.09		1.49	0	80	10	14	76	11.4	243	-0.86	0.71	0.44	Negative	Negative	
3/5/2018	2.7	7.74	3.17	0.09	0.12	1.50	0	81	10	13	78	11.9	244	-0.85	0.77	0.42	Negative	Negative	
3/6/2018	2.7	7.75	3.21	0.09		1.51	0	86	11	17	74	12.6	237	-0.84	0.65	0.47	Negative	Negative	
3/7/2018	2.9	7.74	3.17	0.09		1.49	0	84	10	15	74	12.0	238	-0.85	0.67	0.43	Negative	Negative	
3/8/2018	3.0	7.74	3.18	0.11		1.47	0	84	10	19	70	12.3	235	-0.87	0.53	0.49	Negative	Negative	
3/9/2018	3.2	7.74	3.31	0.11		1.49	0	82	11	17	74	11.5	238	-0.86	0.65	0.50	Negative	Negative	
3/10/2018	3.4	7.74	3.26	0.11		1.50	0	82	10	17	80	12.6	234	-0.82	0.59	0.48	Negative	Negative	
3/11/2018	3.2	7.74	3.20	0.12		1.57	0	84	10	14	76	12.7	222	-0.83	0.71	0.42	Negative	Negative	
3/12/2018	3.4	7.73	3.17	0.12	0.12	1.55	0	82	9	17	70	12.5	221	-0.88	0.53	0.45	Negative	Negative	
3/13/2018	3.6	7.73	3.23	0.12		1.53	0	83	9	17	78	12.7	235	-0.82	0.53	0.45	Negative	Negative	
3/14/2018	3.7	7.75	3.19	0.11		1.52	0	82	8	17	70	12.4	238	-0.86	0.47	0.43	Negative	Negative	
3/15/2018	3.7	7.75	3.20	0.09		1.51	0	82	9	16	70	12.6	233	-0.85	0.56	0.44	Negative	Negative	
3/16/2018	3.7	7.75	3.15	0.10		1.52	0	81	9	17	72	12.3	237	-0.84	0.53	0.46	Negative	Negative	
3/17/2018	3.6	7.75	3.17	0.12		1.52	0	84	9	19	76	12.0	240	-0.81	0.47	0.47	Negative	Negative	
3/18/2018	3.6	7.75	3.16	0.10	0.09	1.51	0	84	9	17	76	12.7	240	-0.82	0.53	0.44	Negative	Negative	
3/19/2018	3.6	7.75	3.20	0.10		1.50	0	83	9	17	70	11.8	235	-0.83	0.53	0.45	Negative	Negative	
3/20/2018	3.6	7.77	3.20	0.19		1.54	0	83	9	17	74	12.0	235	-0.82	0.53	0.45	Negative	Negative	
3/21/2018	3.5	7.76	3.14	0.62		1.51	0	84	9	19	72	12.1	236	-0.92	0.47	0.47	Negative	Negative	
3/22/2018	3.6	7.66	3.14	0.70		1.49	0	84	9	18	74	12.2	238	-0.95	0.50	0.45	Negative	Negative	
3/23/2018	3.5	7.62	3.14	0.70		1.52	0	85	12	19	74	12.8	247	-0.94	0.63	0.53	Negative	Negative	
3/24/2018	3.6	7.63	3.20	0.75		1.51	0	85	12	22	76	12.1	246	-0.93	0.55	0.57	Negative	Negative	
3/25/2018	3.6	7.63	3.19	0.76	0.09	1.51	0	85	12	22	76	12.4	240	-0.98	0.58	0.52	Negative	Negative	
3/26/2018	3.5	7.61	3.16	0.74		1.48	0	82	11	21	80	11.5	257	-0.95	0.52	0.56	Negative	Negative	
3/27/2018	3.5	7.60	3.18	0.74		1.51	0	84	11	19	80	12.4	240	-0.94	0.58	0.52	Negative	Negative	
3/28/2018	3.5	7.60	3.14	0.75		1.51	0	84	11	15	80	12.4	256	-0.94	0.73	0.46	Negative	Negative	
3/29/2018	3.5	7.59	3.21	0.78		1.50	0	82	10	16	80	11.2	249	-0.96	0.63	0.46	Negative	Negative	
3/30/2018	3.4	7.60	3.24	0.81		1.49	0	80	9	15	76	11.5	248	-0.99	0.60	0.43	Negative	Negative	
3/31/2018	3.7	7.61	3.18	0.77		1.49	0	79	10	15	76	11.2	246	-0.98	0.67	0.46	Negative	Negative	
Avg	3.3	7.70	3.19	0.31	0.11	1.51	0	83	10	17	75	12.1	239	-0.88	0.59	0.46	NA	NA	
Min	2.1	7.59	3.12	0.09	0.09	1.47	0	79	8	13	70	11.2	221	-0.99	0.44	0.42	NA	NA	
Max	3.7	7.77	3.31	0.81	0.12	1.57	0	86	12	22	80	12.8	257	-0.80	0.77	0.57	NA	NA	



Turbidity												
Date	Raw Water		Clarified Water	Membrane Feed Water	Combined Membrane Filtrate				Finished Average			
	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			
3/1/2018	0.49	1.35	1.65	0.54	0.014	0.015	96	0	0.0	0.011		
3/2/2018	0.33	0.52	1.65	0.49	0.015	0.015	96	0	0.0	0.011		
3/3/2018	1.05	2.03	1.18	0.57	0.014	0.015	96	0	0.0	0.011		
3/4/2018	0.97	2.10	2.65	0.87	0.015	0.015	96	0	0.0	0.011		
3/5/2018	0.72	1.47	1.78	0.80	0.014	0.015	96	0	0.0	0.011		
3/6/2018	0.50	1.19	1.64	0.66	0.014	0.015	96	0	0.0	0.011		
3/7/2018	0.81	1.35	2.72	0.65	0.015	0.015	96	0	0.0	0.011		
3/8/2018	1.32	2.04	0.97	0.80	0.015	0.016	96	0	0.0	0.011		
3/9/2018	0.73	1.11	1.10	0.66	0.015	0.015	96	0	0.0	0.011		
3/10/2018	0.71	1.05	1.00	0.81	0.015	0.015	96	0	0.0	0.011		
3/11/2018	0.59	1.01	0.88	0.70	0.015	0.015	96	0	0.0	0.011		
3/12/2018	0.52	3.17	0.94	0.55	0.015	0.015	96	0	0.0	0.011		
3/13/2018	0.42	0.91	0.65	0.46	0.015	0.015	96	0	0.0	0.011		
3/14/2018	0.43	1.65	0.85	0.45	0.015	0.016	96	0	0.0	0.011		
3/15/2018	0.43	1.01	1.06	0.47	0.015	0.015	96	0	0.0	0.011		
3/16/2018	0.34	0.51	0.81	0.41	0.015	0.015	96	0	0.0	0.011		
3/17/2018	0.41	0.57	0.92	0.40	0.015	0.015	96	0	0.0	0.011		
3/18/2018	0.42	0.65	0.95	0.43	0.015	0.015	96	0	0.0	0.011		
3/19/2018	0.34	0.49	0.95	0.40	0.015	0.015	96	0	0.0	0.011		
3/20/2018	0.40	1.35	0.96	0.38	0.015	0.015	96	0	0.0	0.011		
3/21/2018	1.66	3.01	1.47	0.73	0.015	0.015	96	0	0.0	0.011		
3/22/2018	4.87	8.75	1.26	1.61	0.014	0.015	96	0	0.0	0.011		
3/23/2018	7.11	13.32	1.94	3.50	0.014	0.015	96	0	0.0	0.011		
3/24/2018	3.17	15.35	1.76	4.03	0.015	0.017	96	0	0.0	0.011		
3/25/2018	4.12	7.92	1.57	3.31	0.015	0.015	96	0	0.0	0.011		
3/26/2018	6.27	13.15	1.16	3.20	0.014	0.015	96	0	0.0	0.011		
3/27/2018	6.09	13.40	1.33	4.47	0.015	0.015	96	0	0.0	0.011		
3/28/2018	1.49	8.02	1.47	3.35	0.015	0.017	96	0	0.0	0.011		
3/29/2018	1.04	1.50	1.28	2.16	0.014	0.015	96	0	0.0	0.011		
3/30/2018	1.09	2.04	1.32	1.60	0.014	0.015	96	0	0.0	0.011		
3/31/2018	1.28	4.91	1.12	1.45	0.014	0.015	96	0	0.0	0.011		
Avg	1.62	3.77	1.32	1.32	0.015	0.015	96	0	0.0	0.011		
Min	0.33	0.49	0.65	0.38	0.014	0.015	96	0	0.0	0.011		
Max	7.11	15.35	2.72	4.47	0.015	0.017	96	0	0.0	0.011		

Note: % Exceeded are 4 hr compliance periods where 50% of the samples are greater than 0.3 NTU



Date	Membrane Integrity																							
	Membrane 1			Membrane 2			Membrane 3			Membrane 4			Membrane 5			Membrane 6			Membrane 7			Membrane 8		
	Air Hold Start Pressure (PSI)	Air Hold Stop Pressure (PSI)	Pass / Fail	Air Hold Start Pressure (PSI)	Air Hold Stop Pressure (PSI)	Pass / Fail	Air Hold Start Pressure (PSI)	Air Hold Stop Pressure (PSI)	Pass / Fail	Air Hold Start Pressure (PSI)	Air Hold Stop Pressure (PSI)	Pass / Fail	Air Hold Start Pressure (PSI)	Air Hold Stop Pressure (PSI)	Pass / Fail	Air Hold Start Pressure (PSI)	Air Hold Stop Pressure (PSI)	Pass / Fail	Air Hold Start Pressure (PSI)	Air Hold Stop Pressure (PSI)	Pass / Fail	Air Hold Start Pressure (PSI)	Air Hold Stop Pressure (PSI)	Pass / Fail
3/1/2018	15.3	15.0	PASS	14.6	14.2	PASS	15.1	14.8	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.4	14.1	PASS	15.2	14.9	PASS	14.4	13.9	PASS
3/2/2018	15.2	14.9	PASS	14.5	14.2	PASS	15.1	14.7	PASS	14.4	14.0	PASS	14.8	14.3	PASS	14.4	14.3	PASS	15.8	15.4	PASS	14.4	14.0	PASS
3/3/2018	15.1	14.7	PASS	14.6	14.2	PASS	15.2	14.8	PASS	14.5	14.1	PASS	14.8	14.3	PASS	14.4	14.0	PASS	15.0	14.8	PASS	14.4	13.9	PASS
3/4/2018	15.2	14.9	PASS	14.5	14.2	PASS	15.3	15.0	PASS	14.8	14.6	PASS	15.3	15.0	PASS	14.3	14.0	PASS	15.0	14.7	PASS	14.4	14.0	PASS
3/5/2018	15.2	14.8	PASS	14.5	14.1	PASS	15.2	14.9	PASS	14.5	14.1	PASS	15.4	15.1	PASS	14.5	14.1	PASS	14.7	14.4	PASS	14.7	14.4	PASS
3/6/2018	15.2	15.0	PASS	14.6	14.2	PASS	15.0	14.7	PASS	14.5	14.1	PASS	14.9	14.4	PASS	14.4	14.0	PASS	14.9	14.4	PASS	14.4	14.0	PASS
3/7/2018	15.1	14.7	PASS	14.5	14.2	PASS	15.0	14.7	PASS	14.4	14.0	PASS	15.0	14.5	PASS	14.4	14.1	PASS	15.0	14.6	PASS	14.8	14.6	PASS
3/8/2018	15.1	14.7	PASS	14.6	14.2	PASS	14.9	14.6	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.5	14.1	PASS
3/9/2018	15.2	14.8	PASS	14.5	14.1	PASS	15.0	14.6	PASS	14.4	14.1	PASS	14.9	14.4	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.5	14.1	PASS
3/10/2018	15.0	14.6	PASS	14.5	14.2	PASS	15.0	14.6	PASS	14.4	14.0	PASS	15.0	14.5	PASS	14.4	14.0	PASS	15.3	15.0	PASS	14.5	14.1	PASS
3/11/2018	15.0	14.6	PASS	14.5	14.2	PASS	14.9	14.5	PASS	14.4	14.0	PASS	15.0	14.5	PASS	14.4	14.0	PASS	15.0	14.5	PASS	14.4	14.1	PASS
3/12/2018	15.2	14.8	PASS	14.5	14.1	PASS	15.0	14.6	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.5	14.1	PASS
3/13/2018	15.2	14.9	PASS	14.5	14.1	PASS	15.0	14.5	PASS	14.4	14.1	PASS	14.9	14.5	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.5	14.1	PASS
3/14/2018	15.2	14.8	PASS	14.5	14.1	PASS	14.9	14.5	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.5	14.1	PASS
3/15/2018	15.0	14.6	PASS	14.5	14.1	PASS	15.1	14.7	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.4	14.0	PASS	15.1	14.8	PASS	14.5	14.1	PASS
3/16/2018	15.1	14.7	PASS	14.7	14.4	PASS	15.1	14.8	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.5	14.1	PASS
3/17/2018	15.0	14.7	PASS	14.8	14.6	PASS	14.8	14.4	PASS	14.4	14.1	PASS	14.8	14.4	PASS	14.4	14.0	PASS	14.9	14.6	PASS	14.4	14.0	PASS
3/18/2018	15.3	15.1	PASS	14.6	14.2	PASS	14.9	14.5	PASS	14.4	14.0	PASS	14.8	14.3	PASS	14.3	13.9	PASS	14.6	14.2	PASS	14.4	14.0	PASS
3/19/2018	15.1	14.8	PASS	14.6	14.2	PASS	14.9	14.5	PASS	14.4	14.0	PASS	15.0	14.5	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.5	14.1	PASS
3/20/2018	15.1	14.7	PASS	14.6	14.3	PASS	15.1	14.8	PASS	14.6	14.3	PASS	15.0	14.6	PASS	14.6	14.3	PASS	14.8	14.5	PASS	14.4	14.0	PASS
3/21/2018	15.1	14.7	PASS	14.6	14.2	PASS	15.4	15.3	PASS	14.4	14.0	PASS	14.8	14.3	PASS	14.8	14.3	PASS	14.8	14.4	PASS	14.4	14.0	PASS
3/22/2018	15.1	14.7	PASS	14.6	14.3	PASS	15.2	14.9	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.4	14.0	PASS	14.7	14.3	PASS	14.5	14.1	PASS
3/23/2018	15.1	14.7	PASS	14.5	14.2	PASS	15.4	15.3	PASS	14.5	14.1	PASS	14.8	14.3	PASS	14.4	14.0	PASS	14.7	14.3	PASS	14.4	14.0	PASS
3/24/2018	15.2	14.9	PASS	14.5	14.2	PASS	15.5	15.3	PASS	14.4	14.0	PASS	15.4	15.1	PASS	14.4	13.9	PASS	14.6	14.1	PASS	14.4	14.0	PASS
3/25/2018	15.1	14.7	PASS	14.5	14.2	PASS	15.1	14.9	PASS	14.4	13.9	PASS	15.2	14.8	PASS	14.4	14.0	PASS	14.7	14.4	PASS	14.4	14.0	PASS
3/26/2018	15.1	14.7	PASS	14.7	14.4	PASS	15.0	14.6	PASS	14.4	14.0	PASS	15.1	14.7	PASS	14.4	14.0	PASS	14.7	14.4	PASS	14.4	14.0	PASS
3/27/2018	15.0	14.6	PASS	14.5	14.2	PASS	15.1	14.8	PASS	14.4	14.0	PASS	15.4	15.1	PASS	14.4	14.0	PASS	15.1	14.9	PASS	14.4	14.0	PASS
3/28/2018	15.0	14.6	PASS	14.8	14.6	PASS	15.1	14.7	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.4	13.9	PASS
3/29/2018	15.0	14.6	PASS	14.5	14.2	PASS	15.0	14.7	PASS	14.4	14.0	PASS	15.0	14.5	PASS	14.4	14.0	PASS	14.7	14.4	PASS	14.5	14.1	PASS
3/30/2018	15.1	14.7	PASS	14.5	14.2	PASS	15.2	14.9	PASS	14.4	14.0	PASS	15.1	14.8	PASS	14.4	14.0	PASS	14.7	14.4	PASS	14.5	14.1	PASS
3/31/2018	15.0	14.7	PASS	14.5	14.2	PASS	15.0	14.6	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.4	14.0	PASS	14.7	14.3	PASS	14.4	14.0	PASS

Integrity test performed every 24-hours



Chlorination

Date	Treated Water		RW Tank		Membrane Feed Water		Added pre-FW Tanks		Treated Water		Post FW Tanks		Added Post FW Tank		
	Volume MG Daily FIT-4000-1	mg/L	OCL	Free Cl ₂		Free Cl ₂		OCL		Free Cl ₂		Free Cl ₂		OCL	
				Average	Added	Average	Added	Average	Added	Average	Added	Average	Added	Average	Added
				AIT-1035-2		AIT-4030-1		AIT-4030-1		AIT-4050-1		AIT-4050-1		AIT-4050-1	
3/1/2018	7.0	0.00	0.00	0.43	1.20	1.60	1.50	0.00	1.60	1.50	0.00	1.50	0.00		
3/2/2018	7.0	0.00	0.00	0.40	1.20	1.57	1.51	0.00	1.57	1.51	0.00	1.51	0.00		
3/3/2018	6.1	0.00	0.00	0.36	1.25	1.61	1.49	0.00	1.61	1.49	0.00	1.49	0.00		
3/4/2018	6.5	0.00	0.00	0.34	1.29	1.63	1.49	0.00	1.63	1.49	0.00	1.49	0.00		
3/5/2018	6.6	0.00	0.00	0.35	1.28	1.61	1.50	0.00	1.61	1.50	0.00	1.50	0.00		
3/6/2018	6.6	0.00	0.00	0.36	1.28	1.65	1.51	0.00	1.65	1.51	0.00	1.51	0.00		
3/7/2018	6.3	0.00	0.00	0.34	1.26	1.60	1.49	0.00	1.60	1.49	0.00	1.49	0.00		
3/8/2018	6.5	0.00	0.00	0.32	1.35	1.59	1.47	0.00	1.59	1.47	0.00	1.47	0.00		
3/9/2018	6.1	0.00	0.00	0.32	1.40	1.64	1.49	0.00	1.64	1.49	0.00	1.49	0.00		
3/10/2018	6.1	0.00	0.00	0.34	1.45	1.64	1.50	0.00	1.64	1.50	0.00	1.50	0.00		
3/11/2018	6.1	0.00	0.00	0.38	1.35	1.64	1.57	0.00	1.64	1.57	0.00	1.57	0.00		
3/12/2018	6.4	0.00	0.00	0.42	1.32	1.61	1.55	0.00	1.61	1.55	0.00	1.55	0.00		
3/13/2018	6.4	0.00	0.00	0.40	1.36	1.60	1.53	0.00	1.60	1.53	0.00	1.53	0.00		
3/14/2018	6.3	0.00	0.00	0.36	1.40	1.59	1.52	0.00	1.59	1.52	0.00	1.52	0.00		
3/15/2018	6.3	0.00	0.00	0.32	1.46	1.60	1.51	0.00	1.60	1.51	0.00	1.51	0.00		
3/16/2018	6.4	0.00	0.00	0.32	1.46	1.61	1.52	0.00	1.61	1.52	0.00	1.52	0.00		
3/17/2018	6.6	0.00	0.00	0.32	1.46	1.62	1.52	0.00	1.62	1.52	0.00	1.52	0.00		
3/18/2018	6.7	0.00	0.00	0.31	1.46	1.60	1.51	0.00	1.60	1.51	0.00	1.51	0.00		
3/19/2018	6.2	0.00	0.00	0.29	1.50	1.61	1.49	0.00	1.61	1.49	0.00	1.49	0.00		
3/20/2018	6.3	0.00	0.00	0.28	1.56	1.65	1.50	0.00	1.65	1.50	0.00	1.50	0.00		
3/21/2018	6.5	0.00	0.00	0.28	1.58	1.67	1.54	0.00	1.67	1.54	0.00	1.54	0.00		
3/22/2018	6.6	0.00	0.00	0.22	1.61	1.65	1.51	0.00	1.65	1.51	0.00	1.51	0.00		
3/23/2018	6.6	0.00	0.00	0.17	1.77	1.66	1.49	0.00	1.66	1.49	0.00	1.49	0.00		
3/24/2018	6.4	0.00	0.00	0.20	1.50	1.70	1.52	0.00	1.70	1.52	0.00	1.52	0.00		
3/25/2018	6.4	0.00	0.00	0.30	1.43	1.66	1.51	0.00	1.66	1.51	0.00	1.51	0.00		
3/26/2018	6.4	0.00	0.00	0.32	1.45	1.65	1.51	0.00	1.65	1.51	0.00	1.51	0.00		
3/27/2018	6.1	0.00	0.00	0.22	1.54	1.65	1.48	0.00	1.65	1.48	0.00	1.48	0.00		
3/28/2018	6.3	0.00	0.00	0.26	1.46	1.71	1.51	0.00	1.71	1.51	0.00	1.51	0.00		
3/29/2018	6.0	0.00	0.00	0.31	1.41	1.64	1.50	0.00	1.64	1.50	0.00	1.50	0.00		
3/30/2018	6.5	0.00	0.00	0.30	1.44	1.66	1.49	0.00	1.66	1.49	0.00	1.49	0.00		
3/31/2018	6.3	0.00	0.00	0.28	1.45	1.64	1.49	0.00	1.64	1.49	0.00	1.49	0.00		
AVG	6.4	0.00	0.00	0.32	1.42	1.63	1.51	0.00	1.63	1.51	0.00	1.51	0.00		
Min	6.0	0.00	0.00	0.17	1.20	1.57	1.47	0.00	1.57	1.47	0.00	1.47	0.00		
Max	7.0	0.00	0.00	0.43	1.77	1.71	1.57	0.00	1.71	1.57	0.00	1.57	0.00		



Disinfection CT															
Pipeline CT					FW Tank CT										
Date	Whitestone Flow MGD	Travel Time Min	Residual RW mg/L	CT Achieved mg-min/L	FW Tank 1 Min Level ft	FW Tank 2 Min Level ft	Plant Flow MGD	Contact Time Min	Free Cl ₂ Min mg/L	CT		Temp Avg °C	Total CT Achieved mg-min/L	Compliance Required mg-min/L	CT
										Calculated	Calculated				
3/1/2018	37.7	3,322	0.43	1417	22.3	22.0	6.9	441	1.47	648.05	2,065.04	2.9	2,065.04	12.00	Y
3/2/2018	39.6	3,155	0.40	1256	22.3	22.0	6.3	480	1.48	709.55	1,965.85	3.0	1,965.85	12.00	Y
3/3/2018	53.3	2,346	0.36	838	23.9	23.6	6.2	529	1.48	781.67	1,619.85	3.0	1,619.85	12.00	Y
3/4/2018	53.9	2,319	0.34	785	23.4	23.2	6.3	506	1.47	743.67	1,528.88	3.1	1,528.88	12.00	Y
3/5/2018	40.6	3,082	0.35	1065	23.6	23.3	6.3	509	1.46	741.37	1,806.04	3.2	1,806.04	12.00	Y
3/6/2018	36.6	3,421	0.36	1227	24.1	23.9	6.3	523	1.48	772.99	1,999.96	3.1	1,999.96	12.00	Y
3/7/2018	38.3	3,267	0.34	1115	24.7	24.4	6.1	551	1.46	802.72	1,918.09	3.1	1,918.09	12.00	Y
3/8/2018	41.1	3,047	0.32	979	23.6	23.3	6.0	535	1.40	746.55	1,725.47	3.2	1,725.47	12.00	Y
3/9/2018	45.1	2,775	0.32	891	23.2	22.9	6.0	523	1.44	751.30	1,642.13	3.2	1,642.13	12.00	Y
3/10/2018	55.2	2,267	0.34	776	25.4	25.1	5.9	583	1.46	849.16	1,625.43	3.3	1,625.43	12.00	Y
3/11/2018	54.5	2,294	0.38	864	23.7	23.4	6.0	535	1.53	816.92	1,680.76	3.2	1,680.76	12.00	Y
3/12/2018	54.7	2,287	0.42	958	23.7	23.4	6.2	524	1.53	800.20	1,758.68	3.2	1,758.68	12.00	Y
3/13/2018	47.2	2,651	0.40	1051	23.6	23.3	6.2	520	1.51	786.79	1,837.79	3.2	1,837.79	12.00	Y
3/14/2018	39.9	3,132	0.36	1114	23.7	23.4	6.1	527	1.48	782.09	1,895.68	3.2	1,895.68	12.00	Y
3/15/2018	40.2	3,114	0.32	1009	23.5	23.2	6.0	532	1.48	789.75	1,798.66	3.2	1,798.66	12.00	Y
3/16/2018	44.6	2,804	0.32	895	23.1	22.8	6.3	501	1.50	751.21	1,646.42	3.2	1,646.42	12.00	Y
3/17/2018	55.9	2,238	0.32	719	22.4	22.2	6.1	498	1.49	742.98	1,462.09	3.1	1,462.09	12.00	Y
3/18/2018	56.1	2,231	0.31	682	23.1	22.8	6.5	485	1.48	719.64	1,401.25	3.2	1,401.25	12.00	Y
3/19/2018	50.0	2,500	0.29	734	24.9	24.6	6.0	566	1.48	840.72	1,574.69	3.2	1,574.69	12.00	Y
3/20/2018	44.7	2,797	0.28	785	24.2	23.9	6.2	534	1.48	788.45	1,573.02	3.3	1,573.02	12.00	Y
3/21/2018	43.3	2,889	0.28	805	24.2	24.0	6.2	534	1.51	808.16	1,613.33	3.4	1,613.33	12.00	Y
3/22/2018	40.1	3,121	0.22	678	22.9	22.6	6.4	489	1.44	705.09	1,383.36	3.6	1,383.36	12.00	Y
3/23/2018	42.7	2,927	0.17	509	23.6	23.3	6.0	533	1.31	699.21	1,207.92	3.5	1,207.92	12.00	Y
3/24/2018	54.2	2,306	0.20	456	22.0	21.7	6.1	492	1.48	726.78	1,183.24	3.5	1,183.24	12.00	Y
3/25/2018	54.4	2,299	0.30	693	22.0	21.7	6.3	477	1.46	695.41	1,388.15	3.6	1,388.15	12.00	Y
3/26/2018	49.3	2,540	0.32	824	24.1	23.8	6.2	529	1.46	773.65	1,597.23	3.6	1,597.23	12.00	Y
3/27/2018	41.6	3,005	0.22	667	23.6	23.3	5.9	548	1.46	798.18	1,464.68	3.7	1,464.68	12.00	Y
3/28/2018	39.9	3,137	0.26	816	23.7	23.4	5.9	545	1.47	800.88	1,616.61	3.7	1,616.61	12.00	Y
3/29/2018	40.2	3,116	0.31	975	22.6	22.3	6.0	518	1.45	750.58	1,725.32	3.7	1,725.32	12.00	Y
3/30/2018	44.5	2,814	0.30	845	23.4	23.1	6.1	522	1.46	764.33	1,609.61	3.8	1,609.61	12.00	Y
3/31/2018	56.1	2,232	0.28	629	23.6	23.3	6.1	522	1.47	768.16	1,397.31	3.8	1,397.31	12.00	Y
Avg	46.3	2,756	0.32	873	23.5	23.2	6.2	520	1.47	763.10	1,635.89	3.3	1,635.89	12.00	NA
Min	36.6	2,231	0.17	456	22.0	21.7	5.9	441	1.31	648.05	1,183.24	2.9	1,183.24	12.00	NA
Max	56.1	3,421	0.43	1,417	25.4	25.1	6.9	583	1.53	849.16	2,065.04	3.8	2,065.04	12.00	NA



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

Distribution System Monitoring
Akron (0072), Bangor Township (0390), Bangor Monitor Dist. (0400), Bay City (0470), Bay County (0485)
Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl2)

Date	Akron			Bangor Township			Bangor Monitor Dist.			Bay City							Bay County (Frankenlust, Monitor, Portsmouth)								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
3/1/2018	0.49		1.13	1.00	1.03	1.37	1.38											1.15	1.06						
3/2/2018											1.15	0.81	1.01	0.92	1.27	1.18									
3/3/2018																									
3/4/2018																									
3/5/2018											1.14	0.71	0.89	0.94	0.77	1.14	1.08								
3/6/2018																									
3/7/2018																									
3/8/2018									1.23																
3/9/2018																									
3/10/2018																									
3/11/2018																									
3/12/2018											1.00	0.44	0.88	1.03	0.58	0.96	1.05								
3/13/2018																									
3/14/2018											1.13	0.86	0.98	1.10	0.76	1.20	1.15								
3/15/2018																									
3/16/2018																									
3/17/2018																									
3/18/2018																									
3/19/2018											0.89	0.90	0.89	0.91	0.82	1.50	1.09								
3/20/2018																									
3/21/2018											0.91	0.84	0.90	0.95	0.88	1.38	1.01								
3/22/2018																									
3/23/2018																									
3/24/2018																									
3/25/2018																									
3/26/2018											1.01	0.70	0.86	1.10	0.76	1.16	0.95								
3/27/2018																									
3/28/2018											1.02	0.89	1.01	0.90	0.76	1.33	1.06								
3/29/2018																									
3/30/2018																									
3/31/2018																									
Average	0.49					1.02		1.31						0.97											
Min	0.49					0.55		1.23						0.44											
Max	0.49					1.37		1.38						1.50											



MONITORING STATION ADDRESSES	
1. William Sanders, 6116 Slocum Dr	11. Number 1 Fire Station, 1401 Center Ave
2. TBD	12. Number 2 Fire Station, 1000 Fremont Ave
3. Bangor Twp Hall, 3921 Wheeler	13. Skizak's Sport Shop, 807 Saizburg Ave
4. BCDWS Admin. Bldg, 3933 Patterson Rd.	14. Number 4 Fire Station, 212 S. Dean St
5. 7-11, 3543 S. Old Kawkawlin Rd.	15. Number 5 Fire Station, 1209 Smith St
6. Admiral Petroleum, 314 S Euclid Ave.	16. Bay City Hall, 301 Washington Ave
7. Sequin Lumber, 3881 Euclid Ave	17. Skipper Buds Marina, 1809 S Water St
8. Euclid Auto, 823 N Euclid Ave	
9. Monitor Pharmacy, 2981 Midland Rd	
10. Little Caesars, 3475 E North Union Rd	
	18. Bay Valley Animal Hospital 6015 WS Saginaw Rd
	19. Dore's Mobile Mart, 6183 WS Saginaw Rd
	20. Pump Station #13, 6000 WS Saginaw Rd
	21. TBD
	22. The Char House, 432 N. Tuscola Rd
	23. Krzyziak's Market, 1605 Michigan Ave
	24. Little Learners Daycare, 1694 Cass Ave.
	25. J&T Tool & Die, 354 S Tuscola Rd

Distribution System Monitoring
Beaver Rd. Area (0517), Beaver Twp (0518), Essexville (2180), Fraser Twp (2465), Hampton (2960), Kawkawlin Twp (3565), Kawkawlin Metro (3570), Merritt Twp (4280)
Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl2)

Date	Beaver Rd. Area			Beaver Township			Essexville			Fraser Township			Hampton Township			Kawkawlin Twp.			Kawkawlin Metro			Merritt Township		
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
3/1/2018																								
3/2/2018							1.11			0.99	1.10	1.14	1.05	1.14	1.23	1.05		0.98						
3/3/2018																								
3/4/2018																								
3/5/2018																								
3/6/2018																								
3/7/2018																								
3/8/2018																								
3/9/2018																								
3/10/2018																								
3/11/2018																								
3/12/2018																								
3/13/2018	1.07	1.19	1.03	0.93									1.15	1.02	1.13	1.02		0.96				1.28	1.22	
3/14/2018							1.50																	
3/15/2018																								
3/16/2018																								
3/17/2018																								
3/18/2018																								
3/19/2018							1.38						1.40	1.05	1.03	1.03								
3/20/2018				0.83																				
3/21/2018																								
3/22/2018																								
3/23/2018																								
3/24/2018																								
3/25/2018																								
3/26/2018																								
3/27/2018																								
3/28/2018																								
3/29/2018																								
3/30/2018																								
3/31/2018																								
Average	1.10			0.88			1.34			1.05			1.07			1.14		0.97				1.13		
Min	1.03			0.83			1.11			0.99			0.81			1.05		0.96				0.90		
Max	1.19			0.93			1.50			1.10			1.40			1.23		0.98				1.28		



MONITORING STATION ADDRESSES

- 26. Wieland Contracting, 2443 S Mackinaw Rd
- 27. St. Bartholomew School, 1033 E Beaver Rd
- 28. Dore's Party Store, 825 E Beaver Rd
- 29. Karmen Roberts, 2515 S 11 Mile Rd
- 30. Parkview Country Store, 3 W Beaver Rd
- 31. TBD
- 32. Essexville City Hall, 1107 Woodside Ave
- 33. TBD
- 34. Fraser Elevated Tank, N. Huron Rd
- 35. Lloyd's Cabinet, 1947 N Huron Rd
- 36. TBD
- 37. Hampton DPW, 950 Wagner Rd.
- 38. Bay County Golf Course, 584 W Hampton Rd.
- 39. Sewer Lift Station, 902 Nebobish Rd.
- 40. Bay Co. Road Commission, 2600 E Beaver Rd
- 41. Parish Rd. Elevated Tank, West of S Huron Rd
- 42. Linwood Tile, 205 S Huron Rd
- 43. Kawkawlin Party Store, 105 Grove St
- 44. Days of Discovery Preschool, 3473 S Huron Rd
- 45. Kawkawlin Restaurant, 103 S Huron Rd
- 46. John's Bar, 1476 S Tuscola Rd
- 47. Crop Production Services, 107 S Farley Rd
- 48. Tool Shed Bar, 12 W Mlunger Rd

Distribution System Monitoring
Monitor Twp (4440), City of Pinconning (5330), Pinconning Twp (5335), Portsmouth Twp (5540), Williams Twp (7125), Wisner (7134)

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

Date	Monitor Township			City of Pinconning			Pinconning Township			Portsmouth Twp			Williams Township			Wisner									
	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73
3/1/2018	1.34	1.17	1.17	1.10																					
3/2/2018																									
3/3/2018																									
3/4/2018																									
3/5/2018																									
3/6/2018																									
3/7/2018																									
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3/24/2018																									
3/25/2018																									
3/26/2018																									
3/27/2018																									
3/28/2018																									
3/29/2018																									
3/30/2018																									
3/31/2018																									
Average																									
Min																									
Max																									



MONITORING STATION ADDRESSES

49. Traxler's Party Store, 2951 E Wilder Rd	57. H&H Bakery, 200 S Mable Rd	65. Ike's Welding, 50 N Finn Rd
50. Monitor Township Hall, 2483 E Midland Rd	58. Pinconning City Hall, 208 S Manitou St	66. TBD
51. Pump Station #14, 2000 E Midland Rd	59. Marathon Gas Station, 511 S Mabel St	67. Fruitland Market, 1646 W Midland Rd
52. Midland Rd Elevated Tank, East of Mackinaw	60. TBD	68. Williams Township Hall, 1080 W Midland Rd
53. Dale Ramseyer, 2186 E Wheeler Rd	61. Pinconning Meter Pit, 3005 N Huron Rd	69. Salzbürg Rd Pump Station, 9 Mile @ Salzbürg
54. Michigan Sugar, 1459 S Valley Center Dr	62. Keith Pickvett, 4732 Maloney Rd	70. 11 Mile Elevated Tank, 11 Mile @ US-10
55. Auburn Fertilizer, 4640 S 7 Mile Rd	63. Master Meter Pit, Pinconning @ Maloney Rd	71. Mieske's Market, 2509 W Midland Rd
56. Trinity Lutheran School, 20 E Salzbürg Rd	64. TBD	72. Lindy's Sales, 9051 M-25
		73. TBD

Distribution System Bacteriological

Water Supplier Bacteriological Analysis Report

Name of Water Supply
Bay Area Water Treatment Plant

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

March, 2018

COUNTY	COMMUNITY	WSSN NUMBER	DISTRIBUTION SYSTEM SAMPLES				
			avg free cl2 mg/L	NUMBER REQUIRED	NUMBER COLLECTED	NUMBER POSITIVE	NUMBER REPEAT SAMPLES
Tuscola	Akron	0072	0.49	1	1	0	0
BAY	Bangor Township	0390	1.02	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	1.31	3	3	0	0
BAY	Bay City	0470	0.97	40	55	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	1.13	10	10	0	0
BAY	Beaver Road Area	0517	1.10	1	3	0	0
BAY	Beaver Township	0518	0.88	2	2	0	0
BAY	Essexville	2180	1.34	4	4	0	0
BAY	Fraser Township	2465	1.05	2	2	0	0
BAY	Hampton Township	2960	1.07	10	12	0	0
BAY	Kawkawlin Township	3565	1.14	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.97	2	2	0	0
BAY	Merritt Township	4280	1.13	2	3	0	0
BAY	Monitor Township	4440	1.16	6	6	0	0
BAY	City of Pinconning	5330	0.93	2	2	0	0
BAY	Pinconning Township	5335	0.92	2	3	0	0
BAY	Portsmouth Township	5540	0.97	1	1	0	0
BAY	Williams Township	7125	1.00	6	6	0	0
Tuscola	Wisner	7134	0.86	1	1	0	0

Average Free Cl2 Residual of All Distribution Sites

1.02 mg/L

- Total distribution samples
- Total distribution samples with detectable free cl2 residual
- Total distribution samples with no detectable free cl2 residual
- Total distribution samples with no detectable free cl2 residual and HPC was <500
- Total distribution samples with no detectable free cl2 residual and HPC was >500
- Percent of distribution samples with no detectable free cl2 residual
- Percent shown line #6 in previous monthly report

129
129
0
NA
NA
0.00%
0.00%

