

Bay Area WTP

Monthly Operations Report



April, 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

April, 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	7.5	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	22	PSI
Maximum Operating Transmembrane Pressure	22	PSI

Chemical Data

Sodium Hypochlorite on hand:	6,434	Gallons	Estimated Supply:	104.5	days
Caustic Soda on hand:	514	Gallons	Estimated Supply:	50.0	days
Corrosion Inhibitor on hand:	1,768	Gallons	Estimated Supply:	91.0	days
Hydrofluosilicic Acid on hand:	569	Gallons	Estimated Supply:	33.4	days
Aluminum Chlorohydrate on hand:	401	Gallons	Estimated Supply:	72.8	days
Sulfuric Acid on hand:	745	Gallons	Estimated Supply:	138.1	days
Sodium Bisulfite on hand:	1,021	Gallons	Estimated Supply:	119.8	days
Citric Acid on hand:	347	Gallons	Estimated Supply:	42.6	days
Cost of All Chemicals per Million Gallons:	69.70	Dollars			
Estimated Electrical Cost per Million Gallons:	112.25	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



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	
	FIT-1000-1	FIT-1000-2	Calculated	FIT-5520-1	FIT-5520-2	FIT-5180	FIT-4000-1	FIT-4040-1	FIT-4040-2	Calculated				
4/1/2018	0.00	6.02	6.02	0.26	0.00	0.04	6.38	2.93	2.94	5.87				
4/2/2018	0.00	6.07	6.07	0.27	0.00	0.04	5.96	3.03	3.02	6.05				
4/3/2018	0.00	6.08	6.08	0.25	0.00	0.04	6.53	3.09	3.07	6.16				
4/4/2018	0.00	6.38	6.38	0.26	0.00	0.04	6.01	2.91	2.89	5.79				
4/5/2018	0.00	6.85	6.85	0.26	0.00	0.04	6.23	3.01	2.97	5.98				
4/6/2018	0.00	6.36	6.36	0.21	0.00	0.07	6.27	3.07	2.97	6.04				
4/7/2018	0.00	5.94	5.94	0.27	0.00	0.04	6.50	3.12	3.08	6.21				
4/8/2018	0.00	6.40	6.40	0.25	0.00	0.05	6.36	3.11	3.08	6.18				
4/9/2018	0.00	6.41	6.41	0.27	0.00	0.05	6.56	3.16	3.15	6.31				
4/10/2018	0.00	6.31	6.31	0.26	0.00	0.05	6.61	3.24	3.21	6.44				
4/11/2018	0.00	7.00	7.00	0.26	0.00	0.04	6.59	3.17	3.14	6.32				
4/12/2018	0.00	6.83	6.83	0.23	0.00	0.05	6.19	3.19	3.17	6.37				
4/13/2018	0.00	5.75	5.75	0.24	0.00	0.04	6.62	3.08	3.05	6.13				
4/14/2018	0.00	6.44	6.44	0.25	0.00	0.05	6.52	3.14	3.07	6.21				
4/15/2018	0.00	6.48	6.48	0.25	0.00	0.05	6.96	3.34	3.30	6.64				
4/16/2018	0.00	6.83	6.83	0.20	0.00	0.10	6.57	3.18	3.16	6.33				
4/17/2018	0.00	7.33	7.33	0.17	0.00	0.12	6.90	3.33	3.33	6.66				
4/18/2018	0.00	7.44	7.44	0.17	0.00	0.12	6.55	3.19	3.13	6.31				
4/19/2018	0.00	7.29	7.29	0.20	0.00	0.12	6.52	3.17	3.15	6.31				
4/20/2018	0.00	6.20	6.20	0.20	0.00	0.12	6.62	3.20	3.07	6.28				
4/21/2018	0.00	6.43	6.43	0.22	0.00	0.10	6.61	3.31	3.19	6.49				
4/22/2018	0.00	6.44	6.44	0.21	0.00	0.09	6.98	3.35	3.24	6.60				
4/23/2018	0.00	6.50	6.50	0.18	0.00	0.08	6.74	3.45	3.33	6.78				
4/24/2018	0.00	6.51	6.51	0.26	0.00	0.05	7.07	3.38	3.22	6.60				
4/25/2018	0.00	7.47	7.47	0.25	0.00	0.05	6.83	3.38	3.27	6.64				
4/26/2018	0.00	7.45	7.45	0.27	0.00	0.05	6.68	3.24	3.11	6.35				
4/27/2018	0.00	7.09	7.09	0.25	0.00	0.04	6.31	3.23	3.08	6.31				
4/28/2018	0.00	6.24	6.24	0.26	0.00	0.05	6.57	3.24	3.11	6.35				
4/29/2018	0.00	5.82	5.82	0.24	0.00	0.05	6.52	3.29	3.11	6.40				
4/30/2018	0.00	7.03	7.03	0.26	0.00	0.05	7.48	3.67	3.54	7.20				
Total	0.00	197.40	197.40	7.12	0.00	1.92	197.23	96.19	94.13	190.32				
Avg	0.00	6.58	6.58	0.24	0.00	0.06	6.57	3.21	3.14	6.34				
Min	0.00	5.75	5.75	0.17	0.00	0.04	5.96	2.91	2.89	5.79				
Max	0.00	7.47	7.47	0.27	0.00	0.12	7.48	3.67	3.54	7.20				



Raw Water Analysis

Date	Temp		pH		Turbidity		F ⁻		Free Cl (Mem. Feed)		Bacti	
	Average		Average		Average		Grab		Average		Positive/Negative	
	°C				NTU		mg/L		mg/L		Total Coliform	
	TIT-1000		AIT-1000-2		AIT-1000-1		Lab		AIT-1035-2		Lab	
4/1/2018	3.82	7.90	1.30	3.04	0.10	0.26	Negative	Negative				
4/2/2018	3.79	7.89	0.91	1.51	0.09	0.25	Negative	Negative				
4/3/2018	3.71	7.87	0.65	1.60	0.09	0.28	Negative	Negative				
4/4/2018	3.65	7.89	0.78	1.01	0.08	0.27	Negative	Negative				
4/5/2018	3.82	7.88	3.49	10.23	0.10	0.19	Negative	Negative				
4/6/2018	4.03	7.84	5.89	19.24	0.10	0.15	Negative	Negative				
4/7/2018	3.93	7.86	1.47	2.09	0.10	0.25	Negative	Negative				
4/8/2018	3.84	7.87	1.46	2.94	0.10	0.29	Negative	Negative				
4/9/2018	3.71	7.87	0.94	7.00	0.10	0.32	Negative	Negative				
4/10/2018	3.64	7.88	0.83	2.29	0.09	0.31	Negative	Negative				
4/11/2018	3.59	7.87	0.53	5.36	0.10	0.33	Negative	Negative				
4/12/2018	3.59	7.86	0.32	1.86	0.09	0.37	Negative	Negative				
4/13/2018	3.56	7.86	0.21	0.43	0.07	0.40	Negative	Negative				
4/14/2018	3.75	7.86	0.37	1.46	0.07	0.43	Negative	Negative				
4/15/2018	3.92	7.84	8.05	26.35	0.08	0.37	Negative	Negative				
4/16/2018	4.48	7.86	34.36	100.07	0.08	0.16	Negative	Negative				
4/17/2018	4.47	7.91	61.79	88.54	0.08	0.08	Negative	Negative				
4/18/2018	4.19	7.89	23.17	72.48	0.08	0.18	Negative	Negative				
4/19/2018	4.00	7.82	3.26	43.84	0.08	0.36	Negative	Negative				
4/20/2018	3.77	7.82	2.34	11.27	0.08	0.45	Negative	Negative				
4/21/2018	3.50	7.79	5.07	13.22	0.08	0.54	Negative	Negative				
4/22/2018	3.44	7.80	2.98	23.21	0.08	0.59	Negative	Negative				
4/23/2018	3.54	7.81	1.59	6.05	0.08	0.56	Negative	Negative				
4/24/2018	3.68	7.82	1.40	3.16	0.08	0.50	Negative	Negative				
4/25/2018	3.80	7.82	2.16	6.46	0.08	0.44	Negative	Negative				
4/26/2018	4.15	7.82	2.85	6.07	0.07	0.32	Negative	Negative				
4/27/2018	4.37	7.82	1.08	1.86	0.07	0.33	Negative	Negative				
4/28/2018	4.50	7.83	8.96	16.38	0.08	0.39	Negative	Negative				
4/29/2018	4.70	7.83	17.94	35.27	0.08	0.49	Negative	Negative				
4/30/2018	5.02	7.78	9.88	32.09	0.09	0.49	Negative	Negative				
Avg	3.9	7.85	6.87	18.21	0.09	0.35	NA	NA				
Min	3.4	7.78	0.21	0.43	0.07	0.08	NA	NA				
Max	5.0	7.91	61.79	100.07	0.10	0.59	NA	NA				



Finished Water Analysis

Date	Temp		pH	Phosphate		Fluoride		Free Cl ₂		Alkalinity (as CaCO ₃)		Chloride	Sulfate		Calcium (as CaCO ₃)		Dissolved Oxygen		Conductivity		Langelier Saturation Index	Chloride: Sulfate Mass Ratio	Larson-Skold Index	Bacti							
	Average	°C		Average	mg/L	Tap	Dist	Average	mg/L	AIT-4050-1	Carbonate		Bicarbonate	mg/L	Grab	mg/L	Grab	mg/L	Grab	mg/L				Lab	Lab	us/cm	Grab	Lab	Calculated	Total Coliform	E. coli
4/1/2018	3.7	7.62	3.18	0.78	0.75	0.75	0.71	1.48	0	80	10	13	76	11.7	241	11.7	11.7	11.7	241	-0.96	0.77	0.42	Negative	Negative							
4/2/2018	3.7	7.61	3.15	0.75	0.75	0.75	0.71	1.48	0	84	10	15	78	11.8	241	11.8	11.8	11.8	241	-0.94	0.67	0.43	Negative	Negative							
4/3/2018	3.7	7.61	3.15	0.79	0.79	0.79	0.71	1.50	0	81	12	17	82	12.2	235	12.2	12.2	12.2	235	-0.93	0.71	0.52	Negative	Negative							
4/4/2018	3.6	7.62	3.18	0.76	0.76	0.76		1.48	0	84	8	16	80	11.9	240	11.9	11.9	11.9	240	-0.92	0.50	0.41	Negative	Negative							
4/5/2018	3.5	7.62	3.18	0.77	0.77	0.77		1.47	0	86	11	21	76	13.8	244	13.8	13.8	13.8	244	-0.94	0.52	0.53	Negative	Negative							
4/6/2018	3.6	7.61	3.22	0.78	0.78	0.78		1.47	0	83	10	19	78	11.6	246	11.6	11.6	11.6	246	-0.95	0.53	0.50	Negative	Negative							
4/7/2018	3.6	7.61	3.23	0.79	0.79	0.79		1.51	0	82	11	16	82	12.3	228	12.3	12.3	12.3	228	-0.93	0.69	0.54	Negative	Negative							
4/8/2018	3.5	7.59	3.21	0.77	0.77	0.77	0.67	1.50	0	82	11	20	84	10.8	235	10.8	10.8	10.8	235	-0.94	0.55	0.54	Negative	Negative							
4/9/2018	3.5	7.59	3.18	0.77	0.77	0.77		1.50	0	80	11	20	74	11.4	235	11.4	11.4	11.4	235	-1.01	0.55	0.56	Negative	Negative							
4/10/2018	3.4	7.58	3.20	0.75	0.75	0.75		1.49	0	79	10	20	72	12.5	232	12.5	12.5	12.5	232	-1.03	0.50	0.54	Negative	Negative							
4/11/2018	3.4	7.59	3.16	0.77	0.77	0.77		1.49	0	79	10	20	70	12.4	234	12.4	12.4	12.4	234	-1.04	0.50	0.54	Negative	Negative							
4/12/2018	3.5	7.58	3.16	0.79	0.79	0.79		1.50	0	78	10	18	68	11.6	226	11.6	11.6	11.6	226	-1.06	0.56	0.52	Negative	Negative							
4/13/2018	3.6	7.61	3.15	0.70	0.70	0.70		1.51	0	77	9	18	68	12.2	220	12.2	12.2	12.2	220	-1.03	0.50	0.50	Negative	Negative							
4/14/2018	3.6	7.60	3.17	0.70	0.70	0.70		1.53	0	77	10	18	68	12.8	220	12.8	12.8	12.8	220	-1.05	0.56	0.52	Negative	Negative							
4/15/2018	3.7	7.60	3.14	0.77	0.77	0.77		1.51	0	77	10	18	70	11.7	228	11.7	11.7	11.7	228	-1.03	0.56	0.52	Negative	Negative							
4/16/2018	3.7	7.59	3.18	0.75	0.75	0.75		1.48	0	80	10	17	74	11.9	230	11.9	11.9	11.9	230	-1.00	0.59	0.49	Negative	Negative							
4/17/2018	3.8	7.60	3.17	0.78	0.78	0.78	0.68	1.47	0	82	10	17	74	12.2	242	12.2	12.2	12.2	242	-0.98	0.59	0.48	Negative	Negative							
4/18/2018	3.8	7.62	3.19	0.76	0.76	0.76		1.51	0	82	10	17	74	12.3	238	12.3	12.3	12.3	238	-0.96	0.59	0.48	Negative	Negative							
4/19/2018	3.7	7.59	3.14	0.74	0.74	0.74		1.53	0	79	11	18	72	11.7	227	11.7	11.7	11.7	227	-1.02	0.61	0.53	Negative	Negative							
4/20/2018	4.1	7.55	3.19	0.73	0.73	0.73		1.53	0	82	11	16	76	11.2	224	11.2	11.2	11.2	224	-1.00	0.69	0.48	Negative	Negative							
4/21/2018	4.5	7.53	3.25	0.74	0.74	0.74		1.55	0	76	10	13	72	11.9	226	11.9	11.9	11.9	226	-1.07	0.77	0.45	Negative	Negative							
4/22/2018	4.7	7.50	3.27	0.74	0.74	0.74		1.52	0	76	9	14	68	11.8	217	11.8	11.8	11.8	217	-1.11	0.64	0.44	Negative	Negative							
4/23/2018	4.8	7.50	3.25	0.73	0.73	0.73	0.68	1.51	0	75	9	15	68	10.3	220	10.3	10.3	10.3	220	-1.12	0.60	0.46	Negative	Negative							
4/24/2018	5.0	7.50	3.26	0.74	0.74	0.74		1.51	0	76	9	13	74	11.5	225	11.5	11.5	11.5	225	-1.07	0.69	0.42	Negative	Negative							
4/25/2018	5.1	7.50	3.25	0.78	0.78	0.78		1.49	0	75	9	18	74	11.3	224	11.3	11.3	11.3	224	-1.08	0.50	0.51	Negative	Negative							
4/26/2018	5.3	7.51	3.34	0.75	0.75	0.75		1.50	0	76	10	12	76	11.7	228	11.7	11.7	11.7	228	-1.05	0.83	0.43	Negative	Negative							
4/27/2018	5.6	7.51	3.31	0.74	0.74	0.74		1.50	0	76	9	13	76	11.4	227	11.4	11.4	11.4	227	-1.04	0.69	0.42	Negative	Negative							
4/28/2018	5.8	7.52	3.28	0.72	0.72	0.72		1.52	0	75	9	13	76	11.3	227	11.3	11.3	11.3	227	-1.03	0.69	0.43	Negative	Negative							
4/29/2018	5.8	7.52	3.31	0.73	0.73	0.73		1.53	0	77	10	13	74	12.2	232	12.2	12.2	12.2	232	-1.03	0.77	0.44	Negative	Negative							
4/30/2018	5.8	7.52	3.32	0.72	0.72	0.72		1.50	0	80	11	13	78	11.7	245	11.7	11.7	11.7	245	-0.99	0.85	0.45	Negative	Negative							
Avg	4.2	7.57	3.21	0.75	0.75	0.75	0.69	1.50	0	79	10	16	74	11.8	231	11.8	11.8	11.8	231	-1.01	0.62	0.48	NA	NA							
Min	3.4	7.50	3.14	0.70	0.70	0.70	0.67	1.47	0	75	8	12	68	10.3	217	10.3	10.3	10.3	217	-1.12	0.50	0.41	NA	NA							
Max	5.8	7.62	3.34	0.79	0.79	0.79	0.71	1.55	0	86	12	21	84	13.8	246	13.8	13.8	13.8	246	-0.92	0.85	0.56	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	Avg	
	NTU											
	AIT-1000-1		AIT-5030-1	AIT-1035-3	AIT-4000-1					Calculated		
4/1/2018	1.30	3.04	1.11	1.34	0.014	0.015	96	0	0.0	0.011	0.011	
4/2/2018	0.91	1.51	1.06	1.19	0.014	0.015	96	0	0.0	0.011	0.011	
4/3/2018	0.65	1.60	1.02	0.94	0.014	0.015	96	0	0.0	0.011	0.011	
4/4/2018	0.78	1.01	1.10	0.85	0.014	0.015	96	0	0.0	0.011	0.011	
4/5/2018	3.49	10.23	1.48	1.37	0.014	0.016	96	0	0.0	0.012	0.012	
4/6/2018	5.89	19.24	1.24	3.89	0.014	0.015	96	0	0.0	0.011	0.011	
4/7/2018	1.47	2.09	0.97	2.63	0.014	0.015	96	0	0.0	0.011	0.011	
4/8/2018	1.46	2.94	1.06	1.75	0.014	0.015	96	0	0.0	0.011	0.011	
4/9/2018	0.94	7.00	1.13	1.29	0.014	0.017	96	0	0.0	0.011	0.011	
4/10/2018	0.83	2.29	1.11	1.08	0.014	0.015	96	0	0.0	0.011	0.011	
4/11/2018	0.53	5.36	1.47	0.83	0.014	0.015	96	0	0.0	0.011	0.011	
4/12/2018	0.32	1.86	0.88	0.58	0.014	0.015	96	0	0.0	0.011	0.011	
4/13/2018	0.21	0.43	0.64	0.42	0.014	0.015	96	0	0.0	0.011	0.011	
4/14/2018	0.37	1.46	0.80	0.36	0.014	0.014	96	0	0.0	0.011	0.011	
4/15/2018	8.05	26.35	1.20	1.55	0.014	0.015	96	0	0.0	0.011	0.011	
4/16/2018	34.36	100.07	1.27	11.10	0.015	0.017	96	0	0.0	0.011	0.011	
4/17/2018	61.79	88.54	2.67	29.32	0.015	0.019	96	0	0.0	0.012	0.012	
4/18/2018	23.17	72.48	2.52	38.91	0.015	0.022	96	0	0.0	0.012	0.012	
4/19/2018	3.26	43.84	1.06	19.38	0.015	0.016	96	0	0.0	0.011	0.011	
4/20/2018	2.34	11.27	1.04	9.39	0.014	0.016	96	0	0.0	0.012	0.012	
4/21/2018	5.07	13.22	1.03	6.08	0.014	0.015	96	0	0.0	0.011	0.011	
4/22/2018	2.98	23.21	1.83	4.84	0.014	0.014	96	0	0.0	0.011	0.011	
4/23/2018	1.59	6.05	2.02	2.96	0.014	0.014	96	0	0.0	0.011	0.011	
4/24/2018	1.40	3.16	1.14	2.02	0.014	0.014	96	0	0.0	0.011	0.011	
4/25/2018	2.16	6.46	1.61	1.68	0.014	0.015	96	0	0.0	0.011	0.011	
4/26/2018	2.85	6.07	1.79	2.67	0.014	0.015	96	0	0.0	0.011	0.011	
4/27/2018	1.08	1.86	1.15	2.06	0.014	0.015	96	0	0.0	0.011	0.011	
4/28/2018	8.96	16.38	1.45	2.72	0.014	0.014	96	0	0.0	0.011	0.011	
4/29/2018	17.94	35.27	1.43	8.73	0.014	0.015	96	0	0.0	0.011	0.011	
4/30/2018	9.88	32.09	1.43	11.82	0.014	0.015	96	0	0.0	0.011	0.011	
Avg	6.87	18.21	1.32	5.79	0.014	0.015	96	0	0.0	0.011	0.011	
Min	0.21	0.43	0.64	0.36	0.014	0.014	96	0	0.0	0.011	0.011	
Max	61.79	100.07	2.67	38.91	0.015	0.022	96	0	0.0	0.012	0.012	

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 Pressure (PSI)	Stop Pressure (PSI)	Pass / Fail	Air Hold Pressure (PSI)	Stop Pressure (PSI)	Pass / Fail	Air Hold Pressure (PSI)	Stop Pressure (PSI)	Pass / Fail	Air Hold Pressure (PSI)	Stop Pressure (PSI)	Pass / Fail	Air Hold Pressure (PSI)	Stop Pressure (PSI)	Pass / Fail	Air Hold Pressure (PSI)	Stop Pressure (PSI)	Pass / Fail	Air Hold Pressure (PSI)	Stop Pressure (PSI)	Pass / Fail	Air Hold Pressure (PSI)	Stop Pressure (PSI)	Pass / Fail
4/1/2018	15.0	14.7	PASS	14.6	14.2	PASS	15.1	14.8	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
4/2/2018	15.0	14.5	PASS	14.5	14.2	PASS	15.0	14.6	PASS	14.4	14.0	PASS	15.1	14.7	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.4	14.0	PASS
4/3/2018	15.0	14.6	PASS	14.6	14.2	PASS	15.0	14.6	PASS	14.4	14.0	PASS	15.1	14.7	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.4	14.0	PASS
4/4/2018	15.3	15.0	PASS	14.5	14.1	PASS	15.1	14.8	PASS	14.4	14.0	PASS	15.1	14.8	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.4	14.0	PASS
4/5/2018	15.1	14.7	PASS	14.5	14.2	PASS	15.2	14.8	PASS	14.4	14.0	PASS	15.1	14.8	PASS	14.4	14.0	PASS	15.0	14.7	PASS	14.4	14.0	PASS
4/6/2018	15.1	14.8	PASS	14.6	14.4	PASS	15.0	14.7	PASS	14.4	14.0	PASS	15.1	15.2	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.4	14.0	PASS
4/7/2018	15.1	14.7	PASS	14.5	14.2	PASS	14.9	14.5	PASS	14.5	14.1	PASS	15.1	14.7	PASS	14.5	14.0	PASS	14.7	14.3	PASS	14.4	14.0	PASS
4/8/2018	14.9	14.5	PASS	14.5	14.2	PASS	15.4	15.3	PASS	14.4	14.0	PASS	15.4	15.1	PASS	14.5	14.2	PASS	14.7	14.3	PASS	14.4	14.0	PASS
4/9/2018	15.0	14.6	PASS	14.6	14.2	PASS	15.1	14.7	PASS	14.5	14.1	PASS	15.2	14.9	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.4	14.0	PASS
4/10/2018	15.1	14.7	PASS	14.6	14.2	PASS	15.2	14.9	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.4	14.0	PASS
4/11/2018	15.1	14.7	PASS	14.5	14.2	PASS	15.0	14.6	PASS	14.4	14.0	PASS	15.3	14.9	PASS	14.4	14.0	PASS	14.5	14.1	PASS	14.4	14.0	PASS
4/12/2018	15.3	15.0	PASS	14.6	14.2	PASS	15.0	14.5	PASS	14.4	14.0	PASS	15.1	14.8	PASS	14.4	14.0	PASS	15.2	15.0	PASS	14.4	14.0	PASS
4/13/2018	15.2	14.9	PASS	14.5	14.2	PASS	15.1	14.7	PASS	14.4	14.0	PASS	15.3	15.3	PASS	14.3	14.0	PASS	14.9	14.6	PASS	14.4	14.0	PASS
4/14/2018	15.2	14.9	PASS	14.5	14.2	PASS	14.8	14.3	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.4	14.0	PASS	14.7	14.3	PASS	14.4	14.0	PASS
4/15/2018	15.2	15.0	PASS	14.5	14.2	PASS	15.2	14.9	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.4	14.0	PASS	15.3	15.1	PASS	14.4	14.0	PASS
4/16/2018	15.2	14.9	PASS	14.6	14.2	PASS	14.8	14.4	PASS	14.4	14.0	PASS	15.3	15.1	PASS	14.4	14.0	PASS	15.0	14.7	PASS	14.4	14.0	PASS
4/17/2018	15.3	15.1	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	14.8	14.5	PASS	14.4	14.0	PASS
4/18/2018	15.0	14.6	PASS	14.6	14.2	PASS	15.0	14.7	PASS	14.8	14.6	PASS	15.1	14.8	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.4	14.0	PASS
4/19/2018	15.2	14.9	PASS	14.5	14.2	PASS	14.9	14.5	PASS	14.6	14.4	PASS	15.1	14.7	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.4	14.0	PASS
4/20/2018	15.2	15.0	PASS	14.5	14.1	PASS	15.0	14.7	PASS	14.6	14.2	PASS	15.0	14.6	PASS	14.6	14.3	PASS	14.8	14.5	PASS	14.4	14.0	PASS
4/21/2018	14.9	14.5	PASS	14.6	14.2	PASS	15.0	14.7	PASS	14.6	14.4	PASS	15.5	15.2	PASS	14.5	14.2	PASS	15.1	14.8	PASS	14.4	14.0	PASS
4/22/2018	15.1	14.8	PASS	14.5	14.2	PASS	15.0	14.7	PASS	14.5	14.1	PASS	15.1	14.7	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.4	14.0	PASS
4/23/2018	14.9	14.4	PASS	14.5	14.1	PASS	15.3	15.0	PASS	14.7	14.4	PASS	15.3	15.0	PASS	14.4	14.0	PASS	15.0	14.7	PASS	14.4	14.0	PASS
4/24/2018	15.0	14.7	PASS	14.5	14.1	PASS	15.1	14.8	PASS	14.9	14.7	PASS	15.4	15.1	PASS	14.5	14.0	PASS	14.9	14.6	PASS	14.4	14.1	PASS
4/25/2018	15.0	14.6	PASS	14.7	14.5	PASS	15.1	14.8	PASS	14.8	14.6	PASS	15.4	15.2	PASS	14.5	14.2	PASS	15.4	15.2	PASS	14.5	14.1	PASS
4/26/2018	15.3	15.0	PASS	14.5	14.2	PASS	15.2	14.9	PASS	14.6	14.4	PASS	15.0	14.6	PASS	14.4	14.0	PASS	15.0	14.7	PASS	14.5	14.1	PASS
4/27/2018	14.7	14.2	PASS	14.5	14.1	PASS	15.0	14.7	PASS	14.5	14.2	PASS	15.2	14.8	PASS	14.5	14.1	PASS	15.1	14.8	PASS	14.4	14.0	PASS
4/28/2018	15.0	14.7	PASS	14.5	14.1	PASS	15.1	14.8	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
4/29/2018	15.2	14.9	PASS	14.5	14.2	PASS	15.0	14.6	PASS	14.7	14.5	PASS	15.1	14.7	PASS	14.4	14.0	PASS	15.1	14.8	PASS	14.4	14.0	PASS
4/30/2018	14.8	14.5	PASS	14.5	14.1	PASS	15.1	14.8	PASS	14.6	14.3	PASS	15.4	15.2	PASS	14.4	14.0	PASS	15.4	15.1	PASS	14.4	14.1	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/L	mg/L	mg/L	Free Cl ₂	mg/L	OCL	mg/L	Free Cl ₂	mg/L	Free Cl ₂	mg/L	OCL	mg/L
	Daily	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	FIT-4000-1	Added	Added	Added	AIT-1035-2	Added	Added	AIT-4030-1	Added	AIT-4050-1	Added	Added	Added	
4/1/2018	6.4	0.00	0.00	0.26	1.47	1.63	1.48	0.00	1.63	1.48	0.00	0.00		
4/2/2018	6.0	0.00	0.00	0.25	1.53	1.66	1.48	0.00	1.66	1.48	0.00	0.00		
4/3/2018	6.5	0.00	0.00	0.28	1.48	1.62	1.50	0.00	1.62	1.50	0.00	0.00		
4/4/2018	6.0	0.00	0.00	0.27	1.56	1.65	1.48	0.00	1.65	1.48	0.00	0.00		
4/5/2018	6.2	0.00	0.00	0.19	1.63	1.64	1.47	0.00	1.64	1.47	0.00	0.00		
4/6/2018	6.3	0.00	0.00	0.15	1.71	1.68	1.47	0.00	1.68	1.47	0.00	0.00		
4/7/2018	6.5	0.00	0.00	0.25	1.54	1.69	1.51	0.00	1.69	1.51	0.00	0.00		
4/8/2018	6.4	0.00	0.00	0.29	1.50	1.67	1.50	0.00	1.67	1.50	0.00	0.00		
4/9/2018	6.6	0.00	0.00	0.32	1.46	1.66	1.50	0.00	1.66	1.50	0.00	0.00		
4/10/2018	6.6	0.00	0.00	0.31	1.46	1.64	1.49	0.00	1.64	1.49	0.00	0.00		
4/11/2018	6.6	0.00	0.00	0.33	1.44	1.66	1.49	0.00	1.66	1.49	0.00	0.00		
4/12/2018	6.2	0.00	0.00	0.37	1.40	1.66	1.50	0.00	1.66	1.50	0.00	0.00		
4/13/2018	6.6	0.00	0.00	0.40	1.37	1.67	1.51	0.00	1.67	1.51	0.00	0.00		
4/14/2018	6.5	0.00	0.00	0.43	1.32	1.61	1.53	0.00	1.61	1.53	0.00	0.00		
4/15/2018	7.0	0.00	0.00	0.37	1.39	1.59	1.51	0.00	1.59	1.51	0.00	0.00		
4/16/2018	6.6	0.00	0.00	0.16	1.75	1.59	1.48	0.00	1.59	1.48	0.00	0.00		
4/17/2018	6.9	0.00	0.00	0.08	1.83	1.65	1.47	0.00	1.65	1.47	0.00	0.00		
4/18/2018	6.5	0.00	0.00	0.18	1.63	1.69	1.51	0.00	1.69	1.51	0.00	0.00		
4/19/2018	6.5	0.00	0.00	0.36	1.45	1.65	1.53	0.00	1.65	1.53	0.00	0.00		
4/20/2018	6.6	0.00	0.00	0.45	1.42	1.65	1.53	0.00	1.65	1.53	0.00	0.00		
4/21/2018	6.6	0.00	0.00	0.54	1.27	1.65	1.55	0.00	1.65	1.55	0.00	0.00		
4/22/2018	7.0	0.00	0.00	0.59	1.27	1.62	1.52	0.00	1.62	1.52	0.00	0.00		
4/23/2018	6.7	0.00	0.00	0.56	1.31	1.60	1.51	0.00	1.60	1.51	0.00	0.00		
4/24/2018	7.1	0.00	0.00	0.50	1.37	1.60	1.51	0.00	1.60	1.51	0.00	0.00		
4/25/2018	6.8	0.00	0.00	0.44	1.45	1.59	1.49	0.00	1.59	1.49	0.00	0.00		
4/26/2018	6.7	0.00	0.00	0.32	1.60	1.63	1.50	0.00	1.63	1.50	0.00	0.00		
4/27/2018	6.3	0.00	0.00	0.33	1.60	1.62	1.50	0.00	1.62	1.50	0.00	0.00		
4/28/2018	6.6	0.00	0.00	0.39	1.58	1.64	1.52	0.00	1.64	1.52	0.00	0.00		
4/29/2018	6.5	0.00	0.00	0.49	1.40	1.64	1.53	0.00	1.64	1.53	0.00	0.00		
4/30/2018	7.5	0.00	0.00	0.49	1.42	1.59	1.50	0.00	1.59	1.50	0.00	0.00		
Avg	6.6	0.00	0.00	0.35	1.49	1.64	1.50	0.00	1.64	1.50	0.00	0.00		
Min	6.0	0.00	0.00	0.08	1.27	1.59	1.47	0.00	1.59	1.47	0.00	0.00		
Max	7.5	0.00	0.00	0.59	1.83	1.69	1.55	0.00	1.69	1.55	0.00	0.00		



Date	Disinfection CT										Compliance									
	Pipeline CT					FW Tank CT					Temp					CT				
	Whitestone Flow	Travel Time Min	Residual RW	CT Achieved	FW Tank 1 Min Level	FW Tank 2 Min Level	Plant Flow	Contact Time Min	Free Cl ₂ Min	CT Achieved	Total CT Achieved	Avg °C	Required	Met						
	MGD	Minutes	mg/L	mg-min/L	ft	ft	MGD	Minutes	mg/L	mg-min/L	mg-min/L	TIT-1000	mg-min/L	Y/N						
4/1/2018	56.2	2,227	0.26	582	24.3	24.0	5.9	564	1.42	802.39	3.8	12.00	Y							
4/2/2018	55.3	2,261	0.25	568	23.4	23.1	6.1	527	1.44	761.08	3.8	12.00	Y							
4/3/2018	47.0	2,660	0.28	753	23.8	23.5	6.2	526	1.47	1,328.84	3.7	12.00	Y							
4/4/2018	40.8	3,063	0.27	821	25.0	24.7	5.8	589	1.45	774.04	3.6	12.00	Y							
4/5/2018	39.8	3,142	0.19	612	23.8	23.5	6.0	542	1.42	854.12	3.8	12.00	Y							
4/6/2018	42.9	2,919	0.15	451	25.0	24.7	6.0	565	1.39	767.33	4.0	12.00	Y							
4/7/2018	58.1	2,152	0.25	541	23.4	23.1	6.2	514	1.47	1,235.69	3.9	12.00	Y							
4/8/2018	58.4	2,144	0.29	627	25.4	25.1	6.2	559	1.47	1,297.32	3.8	12.00	Y							
4/9/2018	56.2	2,227	0.32	704	24.4	24.0	6.3	525	1.48	1,449.01	3.7	12.00	Y							
4/10/2018	48.3	2,591	0.31	814	24.7	24.4	6.4	522	1.44	1,479.98	3.6	12.00	Y							
4/11/2018	45.1	2,775	0.33	921	24.5	24.2	6.3	529	1.46	1,563.51	3.6	12.00	Y							
4/12/2018	45.2	2,766	0.37	1,034	20.8	20.5	6.4	444	1.46	1,695.59	3.6	12.00	Y							
4/13/2018	47.8	2,618	0.40	1,055	13.1	12.8	6.1	289	1.42	1,684.36	3.6	12.00	Y							
4/14/2018	57.2	2,188	0.43	932	23.2	23.2	6.2	515	1.46	1,464.27	3.7	12.00	Y							
4/15/2018	57.4	2,180	0.37	816	23.1	22.8	6.6	474	1.48	1,516.10	3.9	12.00	Y							
4/16/2018	54.6	2,292	0.16	367	23.4	23.0	6.3	502	1.44	1,685.53	4.5	12.00	Y							
4/17/2018	45.9	2,725	0.08	227	24.7	24.4	6.7	505	1.44	700.27	4.5	12.00	Y							
4/18/2018	39.0	3,207	0.18	563	24.4	24.1	6.3	527	1.47	1,091.38	4.2	12.00	Y							
4/19/2018	37.9	3,301	0.36	1,180	24.5	24.2	6.3	529	1.51	1,338.00	4.0	12.00	Y							
4/20/2018	42.9	2,917	0.45	1,313	24.9	24.6	6.3	541	1.50	1,976.18	3.8	12.00	Y							
4/21/2018	61.1	2,046	0.54	1,087	22.6	22.3	6.5	475	1.54	2,123.97	3.5	12.00	Y							
4/22/2018	61.4	2,037	0.59	1,193	24.0	23.7	6.6	496	1.49	1,827.98	3.4	12.00	Y							
4/23/2018	59.4	2,107	0.56	1,174	22.3	22.0	6.8	447	1.46	1,932.43	3.5	12.00	Y							
4/24/2018	44.3	2,824	0.50	1,414	24.0	23.7	6.5	495	1.49	1,827.53	3.7	12.00	Y							
4/25/2018	40.7	3,074	0.44	1,358	25.8	25.6	6.6	530	1.40	2,151.25	3.8	12.00	Y							
4/26/2018	39.5	3,164	0.32	1,016	26.1	25.8	6.3	559	1.46	2,097.50	4.1	12.00	Y							
4/27/2018	40.3	3,101	0.33	1,030	23.9	23.6	6.3	516	1.49	1,835.11	4.4	12.00	Y							
4/28/2018	54.3	2,304	0.39	904	23.8	23.5	6.4	510	1.49	1,799.75	4.5	12.00	Y							
4/29/2018	54.5	2,296	0.49	1,127	23.8	23.5	6.4	507	1.50	1,664.18	4.7	12.00	Y							
4/30/2018	53.7	2,331	0.49	1,146	23.9	23.6	7.2	451	1.46	1,887.17	5.0	8.00	Y							
Avg	49.5	2,588	0.35	878	23.7	23.4	6.3	509	1.46	744.46	3.9	11.87	NA							
Min	37.9	2,037	0.08	227	13.1	12.8	5.8	289	1.39	409.58	3.4	8.00	NA							
Max	61.4	3,301	0.59	1,414	26.1	25.8	7.2	589	1.54	2,151.25	5.0	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
4/1/2018											0.99	0.79	0.81	0.73	0.63	1.16	1.06								
4/2/2018																									
4/3/2018						1.21																			
4/4/2018		1.10	0.79	0.90							1.03	0.90	0.81		0.91	0.84		1.03	1.19	0.84			0.98	0.78	1.03
4/5/2018								1.26																	
4/6/2018									1.25																
4/7/2018																									
4/8/2018																									
4/9/2018																									
4/10/2018					0.89	1.37					1.02	0.73	0.91	1.29	0.68	1.27	0.82								
4/11/2018											1.01	1.02	0.96	1.12	0.87	1.16	0.91		1.08	1.02		1.03		1.00	1.01
4/12/2018									1.18																
4/13/2018																									
4/14/2018																									
4/15/2018																									
4/16/2018											1.10	0.99	1.02	1.16	0.85	1.23	1.07								
4/17/2018																									
4/18/2018											0.91	0.76	0.89	1.07	0.78	0.96	0.95		1.02	1.22	0.89			0.94	1.00
4/19/2018	0.60		0.90	1.03	1.20	1.40																			
4/20/2018																									
4/21/2018																									
4/22/2018																									
4/23/2018											1.10	0.76	0.84	1.07	0.68	1.20	1.01								
4/24/2018																									
4/25/2018											1.07	0.85	1.00	1.08	0.74	1.24	1.23								
4/26/2018																									
4/27/2018																									
4/28/2018																									
4/29/2018																									
4/30/2018																									
Average	0.60										1.00	0.93	0.85	0.92	1.06	0.90	0.98								
Min	0.60													0.96											
Max	0.60										1.23			0.63											
											1.18			1.29											
											1.26														

18. Bay Valley Animal Hospital 6015 WS Saginaw Rd	1.00
19. Dore's Mobile Mart, 6183 WS Saginaw Rd	0.78
20. Pump Station #13, 6000 WS Saginaw Rd	1.22
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	

MONITORING STATION ADDRESSES

- | | |
|--|--|
| <ul style="list-style-type: none"> 1. William Sanders, 6116 Slocum Dr 2. TBD 3. Bangor Twp Hall, 3921 Wheeler 4. BCDWS Admin. Bldg. 3933 Patterson Rd. 5. 7-11, 3543 S. Old Kawkawin Rd. 6. Admiral Petroleum, 314 S Euclid Ave. 7. Sequin Lumber, 3881 Euclid Ave 8. Euclid Auto, 823 N Euclid Ave 9. Monitor Pharmacy, 2981 Midland Rd 10. Little Caesars, 3475 E North Union Rd | <ul style="list-style-type: none"> 11. Number 1 Fire Station, 1401 Center Ave 12. Number 2 Fire Station, 1000 Fremont Ave 13. Skizak's Sport Shop, 807 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 |
|--|--|



Distribution System Monitoring
Beaver Rd. Area (0517), Beaver Twp (0518), Essexville (2180), Fraser Twp (2465), Hampton (2960), Kawawlin Twp (3565), Kawawlin 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			Kawawlin Twp.			Kawawlin 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	
4/1/2018							1.53					1.15	1.13	1.26										
4/2/2018				0.68																	0.46			
4/3/2018																								
4/4/2018																								
4/5/2018									0.94	1.20					1.30	0.99	0.90							
4/6/2018																								
4/7/2018																								
4/8/2018																								
4/9/2018							1.40																	
4/10/2018				0.80																	0.79	0.86		
4/11/2018																								
4/12/2018	1.14	1.22	1.09														1.21							
4/13/2018																								
4/14/2018																								
4/15/2018																								
4/16/2018																								
4/17/2018				0.87			1.34																	
4/18/2018																								
4/19/2018																								
4/20/2018																								
4/21/2018																								
4/22/2018																								
4/23/2018																								
4/24/2018																								
4/25/2018																								
4/26/2018																								
4/27/2018																								
4/28/2018																								
4/29/2018																								
4/30/2018																								
Average							1.41		1.07			1.13				1.17				0.90				
Min							1.34		0.94			1.00				0.99				0.90				
Max							1.53		1.20			1.27				1.30				0.90				



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. Kawawlin Party Store, 105 Grove St
- 44. Days of Discovery Preschool, 3473 S Huron Rd
- 45. Kawawlin 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 Munger 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		
4/1/2018																											
4/2/2018																											
4/3/2018																											
4/4/2018																											
4/5/2018	1.23	1.14	1.09	0.92					0.76			0.98	1.00							0.97	0.76	0.91					
4/6/2018																											
4/7/2018																											
4/8/2018																											
4/9/2018																											
4/10/2018																			0.67	0.91	1.04						
4/11/2018																											
4/12/2018	1.21					1.14		1.02																			
4/13/2018																											
4/14/2018																											
4/15/2018																											
4/16/2018																											
4/17/2018																											
4/18/2018																											
4/19/2018																											
4/20/2018																											
4/21/2018																											
4/22/2018																											
4/23/2018																											
4/24/2018																											
4/25/2018																											
4/26/2018																											
4/27/2018																											
4/28/2018																											
4/29/2018																											
4/30/2018																											
Average				1.12				0.89						0.91			1.05								0.82		
Min				0.92				0.76						0.75			1.05								0.82		
Max				1.23				1.02						1.00			1.05								0.82		



MONITORING STATION ADDRESSES

- 49. Traxler's Party Store, 2951 E Wilder Rd
- 50. Monitor Township Hall, 2483 E Midland Rd
- 51. Pump Station #14, 2000 E Midland Rd
- 52. Midland Rd Elevated Tank, East of Mackinaw
- 53. Dale Ramseyer, 2186 E Wheeler Rd
- 54. Michigan Sugar, 1459 S Valley Center Dr
- 55. Auburn Fertilizer, 4640 S 7 Mile Rd
- 56. Trinity Lutheran School, 20 E Salzburg Rd

- 57. H&H Bakery, 200 S Maple Rd
- 58. Pinconning City Hall, 208 S Manitou St
- 59. Marathon Gas Station, 511 S Mabel St
- 60. TBD
- 61. Pinconning Meter Pit, 3005 N Huron Rd
- 62. Keith Pickvett, 4732 Maloney Rd
- 63. Master Meter Pit, Pinconning @ Maloney Rd
- 64. TBD
- 65. Ike's Welding, 50 N Finn Rd
- 66. TBD
- 67. Fruitland Market, 1646 W Midland Rd
- 68. Williams Township Hall, 1080 W Midland Rd
- 69. Salzburg Rd Pump Station, 9 Mile @ Salzburg
- 70. 11 Mile Elevated Tank, 11 Mile @ US-10
- 71. Mieske's Market, 2509 W Midland Rd
- 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

April, 2018

COUNTY	COMMUNITY	WSSN NUMBER	avg free c12 mg/L	DISTRIBUTION SYSTEM SAMPLES				NUMBER REPEAT SAMPLES
				NUMBER REQUIRED	NUMBER COLLECTED	NUMBER POSITIVE	NUMBER REPEAT SAMPLES	
Tuscola	Akron	0072	0.60	1	1	0	0	
BAY	Bangor Township	0390	1.08	10	10	0	0	
BAY	Bangor-Monitor Dist.	0400	1.23	3	3	0	0	
BAY	Bay City	0470	0.96	40	61	0	0	
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	1.00	10	16	0	0	
BAY	Beaver Road Area	0517	1.15	1	3	0	0	
BAY	Beaver Township	0518	0.78	2	3	0	0	
BAY	Essexville	2180	1.41	4	4	0	0	
BAY	Fraser Township	2465	1.07	2	2	0	0	
BAY	Hampton Township	2960	1.13	10	12	0	0	
BAY	Kawkawlin Township	3565	1.17	3	3	0	0	
BAY	Kawkawlin Metro Dist.	3570	0.90	2	2	0	0	
BAY	Merritt Township	4280	0.78	2	6	0	0	
BAY	Monitor Township	4440	1.12	6	6	0	0	
BAY	City of Pinconning	5330	0.89	2	2	0	0	
BAY	Pinconning Township	5335	0.91	2	3	0	0	
BAY	Portsmouth Township	5540	1.05	1	1	0	0	
BAY	Williams Township	7125	0.92	6	9	0	0	
Tuscola	Wisner	7134	0.82	1	1	0	0	

Average Free Cl2 Residual of All Distribution Sites

1.00 mg/L

- Total distribution samples
- Total distribution samples with detectable free c12 residual
- Total distribution samples with no detectable free c12 residual
- Total distribution samples with no detectable free c12 residual and HPC was <500
- Total distribution samples with no detectable free c12 residual and HPC was >500
- Percent of distribution samples with no detectable free c12 residual
- Percent shown line #6 in previous monthly report

148
148
0
NA
NA
0.00%
0.00%

