

Bay Area WTP

Monthly Operations Report



August, 2018

Water Systems Serial Number:

0465


Ryan Goebel

Operations Supervisor

F1

Title

Classification


Mark Moers

Water Superintendent

F1

Title

Classification

Bay Area Water Treatment Plant

Monthly Operations Report

Supply Name: Bay Area Water System
 WSSN: 0465

Mark Moers
 Operator-in-charge

August, 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	10.6	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	22	PSI
Maximum Operating Transmembrane Pressure	22	PSI

Chemical Data

Sodium Hypochlorite on hand:	4,077	Gallons	Estimated Supply:	38.6	days
Caustic Soda on hand:	3,717	Gallons	Estimated Supply:	349.9	days
Corrosion Inhibitor on hand:	903	Gallons	Estimated Supply:	33.1	days
Hydrofluosilicic Acid on hand:	415	Gallons	Estimated Supply:	15.4	days
Aluminum Chlorohydrate on hand:	1,159	Gallons	Estimated Supply:	68.2	days
Sulfuric Acid on hand:	404	Gallons	Estimated Supply:	103.4	days
Sodium Bisulfite on hand:	423	Gallons	Estimated Supply:	87.2	days
Citric Acid on hand:	2,563	Gallons	Estimated Supply:	228.2	days
Cost of All Chemicals per Million Gallons:	74.45	Dollars			
Estimated Electrical Cost per Million Gallons:	100.58	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)					Wasted (MG)					Treated (MG)					Finished Water Pumped (MG)											
	North		South			Total		Total		FIT-5520-1			FIT-5520-2			Total		FIT-4000-1			Total		FIT-4040-1			Total	
	FIT-1000-1		FIT-1000-2	Calculated	Total	FIT-5520-1	Total	FIT-5520-2	Total	FIT-5180	Total	FIT-4000-1	Total	N. Euclid	Lauria Road	Calculated	FIT-4040-1	Total	FIT-4040-2	Calculated							
8/1/2018	4.99		5.64	10.63	0.35	0.00	0.05	0.00	0.05	9.88	4.79	4.60	9.38				4.79	4.60	9.38								
8/2/2018	4.31		5.59	9.90	0.37	0.00	0.06	0.00	0.06	9.96	4.73	4.54	9.26				4.73	4.54	9.26								
8/3/2018	4.22		5.35	9.57	0.31	0.00	0.06	0.00	0.06	9.05	4.50	4.32	8.82				4.50	4.32	8.82								
8/4/2018	3.66		4.63	8.29	0.28	0.00	0.06	0.00	0.06	8.52	4.30	4.09	8.40				4.30	4.09	8.40								
8/5/2018	3.79		4.78	8.56	0.36	0.00	0.05	0.00	0.05	9.48	4.69	4.50	9.19				4.69	4.50	9.19								
8/6/2018	4.83		4.64	9.47	0.32	0.00	0.05	0.00	0.05	9.18	4.66	4.45	9.11				4.66	4.45	9.11								
8/7/2018	5.32		4.36	9.68	0.34	0.00	0.03	0.00	0.03	9.20	4.58	4.36	8.94				4.58	4.36	8.94								
8/8/2018	5.16		3.74	8.89	0.31	0.00	0.05	0.00	0.05	8.53	4.28	4.04	8.32				4.28	4.04	8.32								
8/9/2018	5.18		2.84	8.02	0.34	0.00	0.06	0.00	0.06	8.55	4.28	4.03	8.32				4.28	4.03	8.32								
8/10/2018	4.38		3.11	7.50	0.33	0.00	0.05	0.00	0.05	8.94	4.54	4.31	8.85				4.54	4.31	8.85								
8/11/2018	4.84		4.45	9.29	0.34	0.00	0.06	0.00	0.06	9.12	4.51	4.28	8.79				4.51	4.28	8.79								
8/12/2018	4.84		4.44	9.28	0.30	0.00	0.07	0.00	0.07	9.15	4.62	4.41	9.02				4.62	4.41	9.02								
8/13/2018	4.55		5.00	9.54	0.38	0.00	0.05	0.00	0.05	10.58	5.30	5.10	10.40				5.30	5.10	10.40								
8/14/2018	5.22		5.21	10.43	0.35	0.00	0.05	0.00	0.05	10.54	5.25	5.04	10.28				5.25	5.04	10.28								
8/15/2018	5.27		6.06	11.33	0.29	0.00	0.14	0.00	0.14	10.29	5.21	5.01	10.21				5.21	5.01	10.21								
8/16/2018	5.81		5.91	11.72	0.33	0.00	0.07	0.00	0.07	10.26	5.13	4.90	10.03				5.13	4.90	10.03								
8/17/2018	5.23		5.14	10.37	0.25	0.00	0.09	0.00	0.09	9.25	4.64	4.44	9.09				4.64	4.44	9.09								
8/18/2018	4.28		3.23	7.51	0.33	0.00	0.07	0.00	0.07	8.00	4.04	3.82	7.86				4.04	3.82	7.86								
8/19/2018	3.96		3.09	7.05	0.32	0.00	0.05	0.00	0.05	8.66	4.32	4.12	8.44				4.32	4.12	8.44								
8/20/2018	4.16		4.65	8.81	0.36	0.00	0.06	0.00	0.06	10.20	5.13	4.93	10.06				5.13	4.93	10.06								
8/21/2018	3.99		5.67	9.66	0.34	0.00	0.05	0.00	0.05	9.37	4.69	4.46	9.15				4.69	4.46	9.15								
8/22/2018	4.64		5.44	10.09	0.30	0.00	0.07	0.00	0.07	9.02	4.57	4.33	8.90				4.57	4.33	8.90								
8/23/2018	4.95		5.20	10.14	0.32	0.00	0.07	0.00	0.07	9.08	4.53	4.31	8.84				4.53	4.31	8.84								
8/24/2018	4.80		5.38	10.18	0.29	0.00	0.09	0.00	0.09	8.73	4.44	4.21	8.65				4.44	4.21	8.65								
8/25/2018	3.15		4.50	7.65	0.28	0.00	0.08	0.00	0.08	7.67	3.80	3.55	7.35				3.80	3.55	7.35								
8/26/2018	2.82		4.45	7.26	0.28	0.00	0.08	0.00	0.08	8.05	4.02	3.78	7.80				4.02	3.78	7.80								
8/27/2018	3.58		4.50	8.08	0.30	0.00	0.10	0.00	0.10	8.30	4.24	4.01	8.26				4.24	4.01	8.26								
8/28/2018	3.83		4.08	7.91	0.31	0.00	0.08	0.00	0.08	9.00	4.46	4.22	8.67				4.46	4.22	8.67								
8/29/2018	4.43		4.70	9.13	0.32	0.00	0.07	0.00	0.07	8.43	4.24	4.02	8.25				4.24	4.02	8.25								
8/30/2018	4.47		4.88	9.35	0.29	0.00	0.09	0.00	0.09	8.48	4.26	4.02	8.28				4.26	4.02	8.28								
8/31/2018	3.96		4.67	8.63	0.29	0.00	0.08	0.00	0.08	8.43	4.18	4.00	8.18				4.18	4.00	8.18								
Total	138.62		145.33	283.94	9.87	0.00	2.10	0.00	2.10	281.90	140.92	134.18	275.10				140.92	134.18	275.10								
Avg	4.47		4.69	9.16	0.32	0.00	0.07	0.00	0.07	9.09	4.55	4.33	8.87				4.55	4.33	8.87								
Min	2.82		2.84	7.05	0.25	0.00	0.03	0.00	0.03	7.67	3.80	3.55	7.35				3.80	3.55	7.35								
Max	5.81		6.06	11.72	0.38	0.00	0.14	0.00	0.14	10.58	5.30	5.10	10.40				5.30	5.10	10.40								



Raw Water Analysis

Date	Temp		pH		Turbidity		F ⁻		Free Cl (Mem. Feed)		Bacti	
	Average	°C	Average	AIT-1000-2	Average	NTU	Grab	mg/L	Average	mg/L	Positive/Negative	E. coli
	TIT-1000					AIT-1000-1	Lab		AIT-1035-2		Total Coliform	Lab
8/1/2018	18.51		7.94		0.56	1.15	0.09		0.39		Negative	Negative
8/2/2018	19.15		7.98		0.67	1.57	0.09		0.39		Negative	Negative
8/3/2018	19.11		7.96		0.75	1.08	0.10		0.33		Negative	Negative
8/4/2018	18.65		8.00		0.96	3.19	0.09		0.29		Negative	Negative
8/5/2018	18.26		8.00		0.70	1.41	0.09		0.30		Negative	Negative
8/6/2018	17.87		8.02		0.70	1.46	0.10		0.31		Negative	Negative
8/7/2018	17.50		7.99		0.64	0.81	0.09		0.32		Negative	Negative
8/8/2018	16.99		7.93		0.59	0.72	0.09		0.32		Negative	Negative
8/9/2018	16.90		8.00		0.64	1.42	0.08		0.29		Negative	Negative
8/10/2018	17.30		7.99		0.78	2.56	0.07		0.25		Negative	Negative
8/11/2018	17.53		8.04		1.42	1.96	0.07		0.26		Negative	Negative
8/12/2018	18.21		8.02		1.19	3.22	0.08		0.22		Negative	Negative
8/13/2018	18.24		8.03		0.95	4.53	0.07		0.25		Negative	Negative
8/14/2018	18.87		8.15		1.09	1.84	0.08		0.18		Negative	Negative
8/15/2018	19.50		8.16		1.17	1.71	0.07		0.11		Negative	Negative
8/16/2018	19.36		8.09		1.18	2.12	0.07		0.17		Negative	Negative
8/17/2018	19.93		8.11		1.00	20.59	0.07		0.18		Negative	Negative
8/18/2018	20.53		8.26		1.03	2.34	0.07		0.13		Negative	Negative
8/19/2018	20.98		8.30		1.14	2.53	0.07		0.10		Negative	Negative
8/20/2018	21.01		8.29		0.96	4.02	0.07		0.09		Negative	Negative
8/21/2018	21.03		8.26		0.96	1.35	0.08		0.11		Negative	Negative
8/22/2018	21.10		8.27		1.41	3.29	0.07		0.10		Negative	Negative
8/23/2018	21.09		8.27		1.51	1.97	0.10		0.07		Negative	Negative
8/24/2018	20.99		8.25		1.20	4.30	0.10		0.06		Negative	Negative
8/25/2018	20.92		8.22		1.51	2.24	0.10		0.06		Negative	Negative
8/26/2018	20.86		8.13		1.67	3.31	0.10		0.05		Negative	Negative
8/27/2018	20.75		8.06		1.21	2.19	0.10		0.07		Negative	Negative
8/28/2018	20.65		8.01		0.92	31.29	0.09		0.20		Negative	Negative
8/29/2018	20.06		7.93		1.09	1.77	0.09		0.32		Negative	Negative
8/30/2018	18.79		7.90		0.90	1.58	0.09		0.37		Negative	Negative
8/31/2018	18.20		7.99		1.00	1.71	0.07		0.36		Negative	Negative
Avg	19.3		8.08		1.02	3.72	0.08		0.21		NA	NA
Min	16.9		7.90		0.56	0.72	0.07		0.05		NA	NA
Max	21.1		8.30		1.67	31.29	0.10		0.39		NA	NA



Finished Water Analysis

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	Bacteri	
			Average	Dist		Carbonate	Bicarbonate				Grab	Grab					Grab	Grab
Average	Average	Average	Tap	mg/L	Average	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	uS/cm		Calculated		Total	E. coli
°C	AIT-4050-2	AIT-4040-5	Lab	mg/L	AIT-4050-1	Lab	Lab	Lab	Lab	Lab	Lab	Lab	Lab		Calculated		Coliform	Lab
8/1/2018	7.59	3.17	0.76		1.06	0	76	10	13	66	7.6	223	-0.69	0.77	0.45	Negative	Negative	
8/2/2018	7.58	3.17	0.77		1.04	0	76	10	15	66	7.7	222	-0.68	0.67	0.48	Negative	Negative	
8/3/2018	7.59	3.17	0.82		1.04	0	76	10	16	64	7.6	225	-0.67	0.63	0.50	Negative	Negative	
8/4/2018	7.59	3.18	0.76		1.04	0	76	10	15	66	8.2	235	-0.66	0.67	0.48	Negative	Negative	
8/5/2018	7.61	3.17	0.77		1.04	0	78	10	14	64	7.9	232	-0.66	0.71	0.45	Negative	Negative	
8/6/2018	7.60	3.17	0.79	0.78	1.02	0	77	10	16	64	8.5	229	-0.69	0.63	0.49	Negative	Negative	
8/7/2018	7.61	3.16	0.76		1.04	0	78	10	12	66	8.9	227	-0.67	0.83	0.42	Negative	Negative	
8/8/2018	7.59	3.16	0.78		1.04	0	78	10	12	66	9.1	226	-0.70	0.83	0.42	Negative	Negative	
8/9/2018	7.59	3.17	0.75		1.04	0	79	10	12	70	9.1	226	-0.69	0.83	0.41	Negative	Negative	
8/10/2018	7.61	3.18	0.75		1.02	0	77	10	12	68	8.2	228	-0.69	0.83	0.42	Negative	Negative	
8/11/2018	7.60	3.18	0.78		1.03	0	79	10	12	68	8.4	229	-0.68	0.83	0.41	Negative	Negative	
8/12/2018	7.62	3.18	0.79		1.02	0	78	10	12	68	9.3	228	-0.65	0.83	0.42	Negative	Negative	
8/13/2018	7.60	3.25	0.74	0.69	1.02	0	77	10	13	70	8.1	231	-0.65	0.77	0.44	Negative	Negative	
8/14/2018	7.62	3.23	0.76		1.00	0	76	12	12	72	7.7	237	-0.62	1.00	0.48	Negative	Negative	
8/15/2018	7.66	3.21	0.74		1.02	0	79	12	13	70	7.2	246	-0.55	0.92	0.47	Negative	Negative	
8/16/2018	7.64	3.20	0.77		1.03	0	78	12	12	68	7.4	238	-0.58	1.00	0.46	Negative	Negative	
8/17/2018	7.59	3.19	0.77		1.02	0	78	12	12	70	7.7	239	-0.62	1.00	0.46	Negative	Negative	
8/18/2018	7.63	3.17	0.76		1.01	0	79	13	13	70	7.9	241	-0.59	0.92	0.48	Negative	Negative	
8/19/2018	7.63	3.16	0.77		1.02	0	79	14	12	70	7.5	246	-0.57	1.00	0.50	Negative	Negative	
8/20/2018	7.64	3.18	0.78	0.80	1.02	0	79	14	12	70	7.0	248	-0.55	1.17	0.50	Negative	Negative	
8/21/2018	7.65	3.19	0.80		1.02	0	82	13	15	78	7.0	248	-0.47	0.87	0.51	Negative	Negative	
8/22/2018	7.63	3.18	0.78		1.05	0	84	10	14	82	7.0	250	-0.46	0.71	0.42	Negative	Negative	
8/23/2018	7.63	3.17	0.78		1.03	0	84	10	15	78	6.9	253	-0.47	0.67	0.43	Negative	Negative	
8/24/2018	7.62	3.16	0.80		1.03	0	82	12	14	82	6.7	252	-0.48	0.86	0.47	Negative	Negative	
8/25/2018	7.60	3.16	0.79		1.03	0	84	10	12	82	7.1	251	-0.49	0.83	0.39	Negative	Negative	
8/26/2018	7.59	3.17	0.78		1.02	0	84	10	13	78	6.7	251	-0.52	0.77	0.40	Negative	Negative	
8/27/2018	7.56	3.16	0.78	0.78	1.04	0	87	13	16	84	6.9	252	-0.51	0.81	0.49	Negative	Negative	
8/28/2018	7.53	3.17	0.78		1.07	0	79	10	14	68	7.3	241	-0.67	0.71	0.45	Negative	Negative	
8/29/2018	7.49	3.16	0.77		1.05	0	78	10	14	66	7.8	240	-0.74	0.71	0.45	Negative	Negative	
8/30/2018	7.47	3.17	0.78		1.04	0	76	10	13	64	8.3	236	-0.81	0.77	0.45	Negative	Negative	
8/31/2018	7.46	3.17	0.78		1.05	0	77	9	13	66	7.7	242	-0.83	0.69	0.42	Negative	Negative	
Avg	7.59	3.18	0.77	0.76	1.03	0	79	11	13	70	7.8	238	-0.62	0.81	0.45	NA	NA	
Min	7.46	3.16	0.74	0.69	1.00	0	76	9	12	64	6.7	222	-0.83	0.63	0.39	NA	NA	
Max	7.66	3.25	0.82	0.80	1.07	0	87	14	16	84	9.3	253	-0.46	1.17	0.51	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											Calculated	
AIT-1000-1			AIT-5030-1	AIT-1035-3	AIT-4000-1					Calculated		
8/1/2018	0.56	1.15	1.31	0.61	0.015	0.015	96	0	0.0	0.013		
8/2/2018	0.67	1.57	1.09	0.54	0.015	0.015	96	0	0.0	0.012		
8/3/2018	0.75	1.08	1.17	0.63	0.015	0.016	96	0	0.0	0.012		
8/4/2018	0.96	3.19	1.16	0.72	0.015	0.015	96	0	0.0	0.012		
8/5/2018	0.70	1.41	1.04	0.78	0.015	0.016	96	0	0.0	0.012		
8/6/2018	0.70	1.46	1.07	0.67	0.015	0.015	96	0	0.0	0.012		
8/7/2018	0.64	0.81	1.00	0.62	0.015	0.015	96	0	0.0	0.012		
8/8/2018	0.59	0.72	0.99	0.58	0.015	0.015	96	0	0.0	0.012		
8/9/2018	0.64	1.42	1.04	0.59	0.015	0.017	96	0	0.0	0.012		
8/10/2018	0.78	2.56	1.31	0.66	0.015	0.015	96	0	0.0	0.012		
8/11/2018	1.42	1.96	1.06	0.89	0.015	0.015	96	0	0.0	0.012		
8/12/2018	1.19	3.22	1.62	1.16	0.015	0.016	96	0	0.0	0.012		
8/13/2018	0.95	4.53	1.22	1.01	0.016	0.016	96	0	0.0	0.012		
8/14/2018	1.09	1.84	2.16	1.02	0.016	0.016	96	0	0.0	0.012		
8/15/2018	1.17	1.71	2.51	1.13	0.016	0.016	96	0	0.0	0.012		
8/16/2018	1.18	2.12	1.16	1.16	0.016	0.017	96	0	0.0	0.012		
8/17/2018	1.00	20.59	2.02	1.04	0.014	0.016	96	0	0.0	0.012		
8/18/2018	1.03	2.34	1.66	0.98	0.013	0.014	96	0	0.0	0.013		
8/19/2018	1.14	2.53	1.68	1.00	0.014	0.016	96	0	0.0	0.012		
8/20/2018	0.96	4.02	1.65	1.09	0.014	0.019	96	0	0.0	0.013		
8/21/2018	0.96	1.35	1.87	0.95	0.015	0.017	96	0	0.0	0.012		
8/22/2018	1.41	3.29	1.84	1.15	0.015	0.016	96	0	0.0	0.012		
8/23/2018	1.51	1.97	1.13	1.32	0.015	0.018	96	0	0.0	0.012		
8/24/2018	1.20	4.30	1.63	1.30	0.015	0.022	96	0	0.0	0.012		
8/25/2018	1.51	2.24	1.56	1.15	0.014	0.022	96	0	0.0	0.012		
8/26/2018	1.67	3.31	1.46	1.29	0.014	0.016	96	0	0.0	0.012		
8/27/2018	1.21	2.19	1.27	1.25	0.014	0.015	96	0	0.0	0.012		
8/28/2018	0.92	31.29	1.32	0.95	0.013	0.020	96	0	0.0	0.012		
8/29/2018	1.09	1.77	1.32	1.02	0.013	0.013	96	0	0.0	0.012		
8/30/2018	0.90	1.58	1.25	1.01	0.013	0.013	96	0	0.0	0.012		
8/31/2018	1.00	1.71	2.35	0.98	0.013	0.013	96	0	0.0	0.012		
Avg	1.02	3.72	1.45	0.94	0.015	0.016	96	0	0.0	0.012		
Min	0.56	0.72	0.99	0.54	0.013	0.013	96	0	0.0	0.012		
Max	1.67	31.29	2.51	1.32	0.016	0.022	96	0	0.0	0.013		

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
8/1/2018	14.6	14.3	PASS	14.3	13.8	PASS	14.5	14.1	PASS	15.3	15.0	PASS	14.6	14.3	PASS	14.3	14.0	PASS	14.4	14.4	PASS	14.4	14.1	PASS
8/2/2018	15.3	15.0	PASS	14.5	14.1	PASS	15.1	14.6	PASS	14.6	14.3	PASS	14.6	14.3	PASS	14.4	14.0	PASS	14.4	14.3	PASS	14.3	13.8	PASS
8/3/2018	14.8	14.4	PASS	14.3	13.8	PASS	15.0	14.6	PASS	15.6	15.4	PASS	14.4	14.1	PASS	14.8	14.5	PASS	14.4	14.0	PASS	14.7	14.5	PASS
8/4/2018	14.8	14.5	PASS	14.3	13.8	PASS	14.6	14.2	PASS	14.3	13.9	PASS	14.4	14.0	PASS	14.7	14.4	PASS	14.4	14.0	PASS	14.3	13.8	PASS
8/5/2018	15.0	14.5	PASS	14.3	13.9	PASS	15.2	14.8	PASS	14.5	14.0	PASS	14.6	14.3	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.6	14.1	PASS
8/6/2018	14.9	14.5	PASS	14.3	13.8	PASS	14.9	14.5	PASS	14.7	14.2	PASS	14.6	14.3	PASS	14.6	14.3	PASS	14.5	14.2	PASS	14.5	14.1	PASS
8/7/2018	15.2	14.8	PASS	14.3	13.8	PASS	15.5	15.3	PASS	14.6	14.2	PASS	14.5	14.3	PASS	14.5	14.2	PASS	14.9	14.6	PASS	14.8	14.5	PASS
8/8/2018	14.9	14.5	PASS	14.3	13.8	PASS	14.8	14.4	PASS	14.7	14.2	PASS	14.6	14.4	PASS	14.5	14.1	PASS	14.5	14.1	PASS	14.3	13.9	PASS
8/9/2018	15.2	14.8	PASS	14.3	13.8	PASS	14.6	14.2	PASS	14.5	14.3	PASS	14.7	14.3	PASS	14.5	14.2	PASS	15.0	14.6	PASS	14.3	13.8	PASS
8/10/2018	14.8	14.4	PASS	14.6	14.2	PASS	14.7	14.2	PASS	14.4	14.0	PASS	14.7	14.2	PASS	14.2	14.0	PASS	14.5	14.3	PASS	14.3	13.9	PASS
8/11/2018	15.4	15.1	PASS	14.3	13.8	PASS	14.6	14.1	PASS	14.6	14.1	PASS	14.4	14.0	PASS	14.5	14.2	PASS	14.4	14.1	PASS	14.5	14.2	PASS
8/12/2018	14.7	14.4	PASS	14.5	14.2	PASS	14.8	14.3	PASS	14.4	14.0	PASS	14.4	14.0	PASS	14.5	14.5	PASS	14.6	14.3	PASS	14.6	14.4	PASS
8/13/2018	15.2	14.9	PASS	14.3	13.8	PASS	14.4	13.9	PASS	14.4	13.9	PASS	14.6	14.4	PASS	14.4	13.9	PASS	14.5	14.3	PASS	14.7	14.4	PASS
8/14/2018	14.8	14.4	PASS	14.6	14.2	PASS	14.6	14.1	PASS	14.6	14.4	PASS	14.4	14.0	PASS	14.4	14.0	PASS	14.4	14.0	PASS	14.4	14.0	PASS
8/15/2018	14.7	14.3	PASS	14.3	13.7	PASS	14.8	14.3	PASS	14.3	13.9	PASS	14.6	14.4	PASS	14.3	13.9	PASS	14.5	14.2	PASS	14.5	14.1	PASS
8/16/2018	14.6	14.2	PASS	14.3	13.8	PASS	14.2	13.7	PASS	14.4	14.0	PASS	14.4	14.0	PASS	14.3	13.9	PASS	14.6	14.3	PASS	14.5	14.1	PASS
8/17/2018	14.8	14.4	PASS	14.2	13.7	PASS	14.5	14.0	PASS	14.4	13.8	PASS	14.6	14.4	PASS	14.4	13.8	PASS	14.4	14.0	PASS	14.4	14.0	PASS
8/18/2018	14.7	14.4	PASS	14.3	13.8	PASS	14.1	13.6	PASS	14.4	14.0	PASS	14.4	14.0	PASS	14.5	14.2	PASS	14.4	14.1	PASS	14.4	14.0	PASS
8/19/2018	14.6	14.3	PASS	14.3	13.7	PASS	14.3	13.8	PASS	14.3	13.8	PASS	14.4	14.0	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.3	13.8	PASS
8/20/2018	14.7	14.3	PASS	14.5	14.1	PASS	14.4	13.9	PASS	14.6	14.4	PASS	14.4	14.0	PASS	14.5	14.2	PASS	14.6	14.3	PASS	14.6	14.4	PASS
8/21/2018	14.5	14.1	PASS	14.3	13.8	PASS	14.6	14.1	PASS	14.5	14.2	PASS	14.4	14.0	PASS	14.5	14.2	PASS	14.4	14.1	PASS	14.4	14.0	PASS
8/22/2018	14.7	14.4	PASS	14.3	13.8	PASS	14.1	13.6	PASS	14.0	13.4	PASS	14.6	14.3	PASS	14.6	14.2	PASS	14.6	14.2	PASS	14.8	14.7	PASS
8/23/2018	14.7	14.3	PASS	14.2	13.7	PASS	15.1	14.7	PASS	14.2	13.7	PASS	14.6	14.4	PASS	14.2	13.7	PASS	14.6	14.3	PASS	14.6	14.3	PASS
8/24/2018	14.7	14.3	PASS	14.5	14.0	PASS	14.4	13.9	PASS	14.4	13.9	PASS	14.5	14.2	PASS	15.2	14.8	PASS	14.6	14.3	PASS	14.7	14.4	PASS
8/25/2018	15.3	14.9	PASS	14.2	13.7	PASS	14.4	13.9	PASS	14.4	13.9	PASS	14.5	14.2	PASS	14.4	13.9	PASS	14.6	14.3	PASS	14.5	14.1	PASS
8/26/2018	14.6	14.2	PASS	14.2	13.7	PASS	14.4	13.9	PASS	14.6	14.4	PASS	14.3	13.9	PASS	14.3	13.9	PASS	14.5	14.2	PASS	14.5	14.1	PASS
8/27/2018	14.4	14.0	PASS	14.3	13.8	PASS	14.1	13.6	PASS	14.6	14.4	PASS	14.0	13.6	PASS	14.5	14.0	PASS	14.5	14.3	PASS	14.5	14.2	PASS
8/28/2018	14.6	14.2	PASS	14.3	13.9	PASS	14.6	14.3	PASS	14.6	14.4	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.6	14.3	PASS
8/29/2018	14.5	14.2	PASS	14.3	13.9	PASS	14.6	14.3	PASS	14.6	14.4	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.7	14.4	PASS
8/30/2018	14.6	14.3	PASS	14.6	14.2	PASS	15.0	14.5	PASS	14.8	14.3	PASS	14.5	14.3	PASS	14.8	14.3	PASS	14.6	14.3	PASS	14.7	14.4	PASS
8/31/2018	14.6	14.3	PASS	14.6	14.2	PASS	15.0	14.5	PASS	14.8	14.3	PASS	14.6	14.3	PASS	14.8	14.3	PASS	14.6	14.3	PASS	14.7	14.4	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	OCL mg/L	Average Added	Free Cl ₂ mg/L	Average AIT-1035-2	OCL mg/L	Average Added	Free Cl ₂ mg/L	Average AIT-4030-1	Free Cl ₂ mg/L	Average AIT-4050-1	OCL mg/L	Average Added								
															RW Tank		Membrane Feed Water		Treated Water		Post FW Tanks	
															Free Cl ₂ mg/L	Average AIT-1035-2	OCL mg/L	Average Added	Free Cl ₂ mg/L	Average AIT-4030-1	Free Cl ₂ mg/L	Average AIT-4050-1
8/1/2018	9.9		0.00	0.84	0.39	0.84	1.17	1.06	0.00	0.00	0.00	0.00	0.00									
8/2/2018	10.0		0.00	0.87	0.39	0.87	1.15	1.04	0.00	0.00	0.00	0.00	0.00									
8/3/2018	9.1		0.00	0.99	0.33	0.99	1.18	1.04	0.00	0.00	0.00	0.00	0.00									
8/4/2018	8.5		0.00	1.00	0.29	1.00	1.17	1.04	0.00	0.00	0.00	0.00	0.00									
8/5/2018	9.5		0.00	0.96	0.30	0.96	1.17	1.04	0.00	0.00	0.00	0.00	0.00									
8/6/2018	9.2		0.00	0.98	0.31	0.98	1.14	1.02	0.00	0.00	0.00	0.00	0.00									
8/7/2018	9.2		0.00	0.98	0.32	0.98	1.17	1.04	0.00	0.00	0.00	0.00	0.00									
8/8/2018	8.5		0.00	0.98	0.32	0.98	1.16	1.04	0.00	0.00	0.00	0.00	0.00									
8/9/2018	8.6		0.00	1.03	0.29	1.03	1.15	1.04	0.00	0.00	0.00	0.00	0.00									
8/10/2018	8.9		0.00	1.05	0.25	1.05	1.14	1.02	0.00	0.00	0.00	0.00	0.00									
8/11/2018	9.1		0.00	1.10	0.26	1.10	1.14	1.03	0.00	0.00	0.00	0.00	0.00									
8/12/2018	9.2		0.00	1.11	0.22	1.11	1.16	1.02	0.00	0.00	0.00	0.00	0.00									
8/13/2018	10.6		0.00	1.19	0.25	1.19	1.15	1.02	0.00	0.00	0.00	0.00	0.00									
8/14/2018	10.5		0.00	1.30	0.18	1.30	1.15	1.00	0.00	0.00	0.00	0.00	0.00									
8/15/2018	10.3		0.00	1.10	0.11	1.10	1.23	1.02	0.00	0.00	0.00	0.00	0.00									
8/16/2018	10.3		0.00	0.95	0.17	0.95	1.21	1.03	0.00	0.00	0.00	0.00	0.00									
8/17/2018	9.2		0.00	1.00	0.18	1.00	1.20	1.02	0.00	0.00	0.00	0.00	0.00									
8/18/2018	8.0		0.00	1.08	0.13	1.08	1.20	1.01	0.00	0.00	0.00	0.00	0.00									
8/19/2018	8.7		0.00	1.08	0.10	1.08	1.22	1.02	0.00	0.00	0.00	0.00	0.00									
8/20/2018	10.2		0.00	1.08	0.09	1.08	1.21	1.02	0.00	0.00	0.00	0.00	0.00									
8/21/2018	9.4		0.00	1.10	0.11	1.10	1.22	1.02	0.00	0.00	0.00	0.00	0.00									
8/22/2018	9.0		0.00	1.01	0.10	1.01	1.21	1.05	0.00	0.00	0.00	0.00	0.00									
8/23/2018	9.1		0.00	1.06	0.07	1.06	1.20	1.03	0.00	0.00	0.00	0.00	0.00									
8/24/2018	8.7		0.00	1.08	0.06	1.08	1.22	1.03	0.00	0.00	0.00	0.00	0.00									
8/25/2018	7.7		0.00	1.08	0.06	1.08	1.23	1.03	0.00	0.00	0.00	0.00	0.00									
8/26/2018	8.0		0.00	1.10	0.05	1.10	1.20	1.02	0.00	0.00	0.00	0.00	0.00									
8/27/2018	8.3		0.00	1.05	0.07	1.05	1.22	1.04	0.00	0.00	0.00	0.00	0.00									
8/28/2018	9.0		0.00	0.86	0.20	0.86	1.21	1.07	0.00	0.00	0.00	0.00	0.00									
8/29/2018	8.4		0.00	0.74	0.32	0.74	1.19	1.05	0.00	0.00	0.00	0.00	0.00									
8/30/2018	8.5		0.00	0.72	0.37	0.72	1.17	1.04	0.00	0.00	0.00	0.00	0.00									
8/31/2018	8.4		0.00	0.72	0.39	0.72	1.21	1.03	0.00	0.00	0.00	0.00	0.00									
Avg	9.1		0.00	1.01	0.22	1.01	1.18	1.03	0.00	0.00	0.00	0.00	0.00									
Min	7.7		0.00	0.72	0.05	0.72	1.14	1.00	0.00	0.00	0.00	0.00	0.00									
Max	10.6		0.00	1.30	0.39	1.30	1.23	1.07	0.00	0.00	0.00	0.00	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 Achieved mg-min/L	Total CT Achieved mg-min/L	Temp Avg °C	CT Required mg-min/L	CT Calculated	Met Y/N
8/1/2018	64.1	1,950	0.39	756	28.5	9.4	9.4	277	1.02	283.48	1,039.01	18.5	4.00	4.00	Y
8/2/2018	64.4	1,943	0.39	749	28.6	13.0	9.3	307	1.00	308.40	1,056.93	19.2	4.00	4.00	Y
8/3/2018	62.3	2,007	0.33	653	28.8	24.0	8.8	410	0.97	397.47	1,050.75	19.1	4.00	4.00	Y
8/4/2018	68.8	1,818	0.29	535	28.8	22.7	8.4	420	0.93	389.73	925.05	18.7	4.00	4.00	Y
8/5/2018	69.1	1,810	0.30	544	28.9	23.6	9.2	391	0.96	373.73	917.54	18.3	4.00	4.00	Y
8/6/2018	68.3	1,832	0.31	561	28.8	25.3	9.1	407	1.00	405.76	966.97	17.9	4.00	4.00	Y
8/7/2018	64.8	1,929	0.32	612	28.9	25.5	8.9	405	0.98	395.22	1,007.51	17.5	4.00	4.00	Y
8/8/2018	58.9	2,123	0.32	676	28.8	25.5	8.3	447	1.00	445.28	1,120.93	17.0	4.00	4.00	Y
8/9/2018	56.4	2,219	0.29	638	28.9	26.0	8.3	452	1.02	459.67	1,097.56	16.9	4.00	4.00	Y
8/10/2018	55.7	2,247	0.25	556	28.8	24.1	8.9	410	1.00	410.89	966.42	17.3	4.00	4.00	Y
8/11/2018	70.6	1,772	0.26	452	28.9	23.1	8.8	405	0.98	395.64	848.04	17.5	4.00	4.00	Y
8/12/2018	70.9	1,764	0.22	387	28.8	23.4	9.0	397	0.96	381.89	768.40	18.2	4.00	4.00	Y
8/13/2018	71.0	1,761	0.25	445	28.9	23.4	10.4	345	0.96	332.06	776.64	18.2	4.00	4.00	Y
8/14/2018	66.6	1,878	0.18	340	28.8	23.9	10.3	351	0.93	328.15	668.64	18.9	4.00	4.00	Y
8/15/2018	64.8	1,929	0.11	214	28.9	25.3	10.2	363	0.87	314.48	528.15	19.5	4.00	4.00	Y
8/16/2018	65.6	1,906	0.17	330	29.0	20.1	10.0	336	1.02	341.37	671.72	19.4	4.00	4.00	Y
8/17/2018	65.8	1,900	0.18	334	28.7	23.9	9.1	397	0.98	387.54	721.59	19.9	4.00	4.00	Y
8/18/2018	70.0	1,788	0.13	229	28.7	25.1	7.9	469	0.99	464.26	693.39	20.5	2.00	2.00	Y
8/19/2018	70.2	1,781	0.10	179	28.8	24.8	8.4	435	0.96	415.64	595.11	21.0	2.00	2.00	Y
8/20/2018	64.9	1,929	0.09	172	28.9	24.5	10.1	364	0.99	360.14	532.50	21.0	2.00	2.00	Y
8/21/2018	58.2	2,148	0.11	235	28.9	24.2	9.1	398	0.98	391.45	626.51	21.0	2.00	2.00	Y
8/22/2018	58.5	2,139	0.10	216	28.7	24.5	8.9	409	0.91	373.88	590.17	21.1	2.00	2.00	Y
8/23/2018	57.3	2,184	0.07	158	28.7	24.1	8.8	409	1.01	413.55	571.21	21.1	2.00	2.00	Y
8/24/2018	55.5	2,253	0.06	139	28.7	23.5	8.6	414	1.02	422.25	561.21	21.0	2.00	2.00	Y
8/25/2018	68.2	1,833	0.06	118	28.7	23.2	7.3	484	1.01	488.96	607.18	20.9	2.00	2.00	Y
8/26/2018	68.5	1,825	0.05	96	28.7	21.2	7.8	438	1.02	447.10	543.42	20.9	2.00	2.00	Y
8/27/2018	65.8	1,902	0.07	140	28.6	23.9	8.3	436	1.02	443.19	583.62	20.8	2.00	2.00	Y
8/28/2018	59.6	2,098	0.20	428	29.0	22.7	8.7	408	1.03	421.04	849.27	20.6	2.00	2.00	Y
8/29/2018	54.5	2,296	0.32	741	28.8	23.6	8.3	435	1.03	448.48	1,189.72	20.1	2.00	2.00	Y
8/30/2018	54.7	2,288	0.37	843	28.9	25.1	8.2	447	1.02	457.29	1,300.45	18.8	4.00	4.00	Y
8/31/2018	51.1	2,449	0.36	893	28.8	26.7	8.2	465	1.03	479.93	1,373.40	18.2	4.00	4.00	Y
Avg	63.4	1,990	0.21	431	28.8	23.2	8.9	404	0.99	399.29	830.61	19.3	3.23	3.23	NA
Min	51.1	1,761	0.05	96	28.5	9.4	7.3	277	0.87	283.48	528.15	16.9	2.00	2.00	NA
Max	71.0	2,449	0.39	893	29.0	26.7	10.4	484	1.03	488.96	1,373.40	21.1	4.00	4.00	NA



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

Distribution System Monitoring

WSSN:		Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl ₂)																							
0072 Akron		0390 Bangor Twp.			0400 Bangor Monitor Dist.			0470 Bay City					0485 Bay County					0517 Beaver Rd		0518 Beaver Twp			2180 Essexville		
Date	1	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18	19	20	22	24	26	29	30	32	
8/1/2018									0.46		0.22	0.44		0.73	0.32										
8/2/2018																									
8/3/2018																									
8/4/2018																									
8/5/2018																									
8/6/2018																									
8/7/2018		0.25	0.24	0.47	1.00				0.67		0.20	0.56	0.11	0.92	0.38	0.72	0.73	0.63	0.75	0.59				0.81	
8/8/2018																									
8/9/2018																									
8/10/2018																									
8/11/2018																									
8/12/2018																									
8/13/2018																									
8/14/2018																									
8/15/2018																									
8/16/2018	0.28	0.93	0.30					1.00	0.71	0.11	0.25	0.43	0.25	0.88	0.44									0.80	
8/17/2018																									
8/18/2018																									
8/19/2018																									
8/20/2018																									
8/21/2018																									
8/22/2018																									
8/23/2018																									
8/24/2018																									
8/25/2018																									
8/26/2018																									
8/27/2018																									
8/28/2018																									
8/29/2018																									
8/30/2018																									
8/31/2018																									
Average	0.28			0.53			0.95					0.40									0.67		0.23	0.78	
Min	0.28			0.22			0.92					0.10									0.47		0.21	0.71	
Max	0.28			1.00			1.00					0.92									0.76		0.25	0.81	



MONITORING STATION ADDRESSES

- 1. Sample station at corner of 5758 M-25 & F
- 3. Bangor Fire Station, 3921 Wheeler
- 4. BCDWS Admin. Bldg. 3933 Patterson Rd.
- 5. 7-11, 3543 S. Old Kawkawlin Rd.
- 6. Admiral Petroleum, 314 S Euclid Ave.
- 7. Sequin Lumber, 3881 Euclid Ave
- 9. B's Boutique, 2981 Midland Rd
- 10. Little Caesars, 3475 E North Union Rd
- 11. Number 1 Fire Station, 1401 Center Ave
- 12. Number 2 Fire Station, 1000 Fremont Ave
- 13. Skizak's Sport Shop, 807 Saizburg Ave
- 14. Number 4 Fire Station, 212 S. Dean St
- 15. Number 5 Fire Station, 1209 Smith St
- 16. Bay City Hall, 301 Washington Ave
- 17. Skipper Buds Marina, 1809 S Water St
- 18. Bay Valley Animal Hospital 6015 WS Saginaw Rd
- 19. Dore's M-84 Party Store, 6183 WS Saginaw Rd
- 20. Pump Station #13, 6000 WS Saginaw Rd
- 22. Duce's Char House, 432 N. Tuscola Rd
- 24. Little Learners Daycare, 1694 Cass Ave.
- 26. Wieland Contracting, 2443 S Mackinaw Rd
- 29. Sample Station, 2515 S. 11 Mile Rd
- 30. Sample Station, 340 W. Beaver Rd
- 32. Essexville City Hall, 1107 Woodside Ave

Distribution System Monitoring

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

WSSN:	2465 Fraser Twp.			2960 Hampton Twp.			3565 Kawkawlin Twp.			3570 Kawkawlin Met.			4280 Merritt Twp.			4440 Monitor Twp.			5330 City Pinconning			5335 Pinconning Twp.			5540 Portsmouth			7125 Williams Twp.			7134 Wisner							
	34	35	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
8/1/2018	0.77	0.73					0.92	0.67	0.20										0.95	0.60	0.53				0.39		0.67	0.32										
8/2/2018																																						
8/3/2018																																						
8/4/2018																																						
8/5/2018																																						
8/6/2018				0.32	0.26	0.24																																
8/7/2018																																						
8/8/2018																																						
8/9/2018																																						
8/10/2018																																						
8/11/2018																																						
8/12/2018																																						
8/13/2018				0.60	0.20	0.39																																
8/14/2018																																						
8/15/2018																																						
8/16/2018																																						
8/17/2018																																						
8/18/2018																																						
8/19/2018																																						
8/20/2018				0.54	0.21	0.28																																
8/21/2018																																						
8/22/2018																																						
8/23/2018																																						
8/24/2018																																						
8/25/2018																																						
8/26/2018																																						
8/27/2018																																						
8/28/2018																																						
8/29/2018																																						
8/30/2018				0.20																																		
8/31/2018																																						
Average	0.75			0.32			0.80		0.27				0.47						0.71						0.46		0.50	0.52			0.48			0.52			0.34	
Min	0.73			0.20			0.67		0.20				0.27			0.67			0.53						0.39		0.32	0.52			0.24			0.32			0.34	
Max	0.77			0.60			0.92		0.34				0.67			0.92			0.95						0.52		0.67	0.52			0.62			0.52			0.34	



MONITORING STATION ADDRESSES

- | | |
|---|---|
| 34. Fraser Elevated Tank, 2949 1/2 N. Huron Rd | 59. Marathon Gas Station, 511 S Mabel St |
| 35. Lloyd's Cabinet, 1947 N Huron Rd | 61. Pinconning Meter Pit, 3005 N Huron Rd |
| 37. Hampton DPW, 950 Wagner Rd. | 63. Master Meter Pit, 2865 Pinconning Rd |
| 38. Bay County Golf Course, 584 W Hampton Rd. | 65. Ike's Welding, 50 N Finn Rd |
| 39. Sewer Lift Station, 902 Nebobish Rd. | 68. Williams Township Hall, 1080 W Midland Rd |
| 40. Bay Co. Road Commission, 2600 E Beaver Rd | 69. Pump Station, 490 W. Saizburg & 9 Mile Rd |
| 41. Parish Rd. Elevated Tank, 1770 E. Parish Rd | 70. 11 Mile Elevated Tank, 5003 S. 11 Mile Rd |
| 42. Linwood Tile, 205 S Huron Rd | 72. Lindy's Sales, 9051 M-25 |

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

August, 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	0.28	1	1	0	0	
BAY	Bangor Township	0390	0.53	10	10	0	0	
BAY	Bangor-Monitor Dist.	0400	0.95	3	3	0	0	
BAY	Bay City	0470	0.40	40	40	0	0	
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.67	10	10	0	0	
BAY	Beaver Road Area	0517	0.89	1	1	0	0	
BAY	Beaver Township	0518	0.23	2	2	0	0	
BAY	Essexville	2180	0.78	4	4	0	0	
BAY	Fraser Township	2465	0.75	2	2	0	0	
BAY	Hampton Township	2960	0.32	10	10	0	0	
BAY	Kawkawlin Township	3565	0.80	3	3	0	0	
BAY	Kawkawlin Metro Dist.	3570	0.27	2	2	0	0	
BAY	Merritt Township	4280	0.47	2	2	0	0	
BAY	Monitor Township	4440	0.71	6	6	0	0	
BAY	City of Pinconning	5330	0.46	2	2	0	0	
BAY	Pinconning Township	5335	0.50	2	2	0	0	
BAY	Portsmouth Township	5540	0.52	1	1	0	0	
BAY	Williams Township	7125	0.48	6	6	0	0	
Tuscola	Wisner	7134	0.34	1	1	0	0	

Average Free Cl2 Residual of All Distribution Sites

0.55 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

108
108
0
NA
NA
0.00%
0.00%

