

Bay Area WTP

Monthly Operations Report



May, 2019

Water Systems Serial Number: 0465


Ryan Goebel

Interim Water Plant Superintendent
Title

F1
Classification

Bay Area Water Treatment Plant

Monthly Operations Report

Supply Name: Bay Area Water System
 WSSN: 0465

Ryan Goebel
 Operator-in-charge

May, 2019
 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	<u>17.4</u>	Millions of Gallons per Day
Treatment Rate, Maximum	<u>7.6</u>	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	<u>22</u>	PSI
Maximum Operating Transmembrane Pressure	<u>22</u>	PSI

Chemical Data

Sodium Hypochlorite on hand:	<u>2,506</u>	Gallons	Estimated Supply:	<u>41.3</u>	days
Caustic Soda on hand:	<u>3,975</u>	Gallons	Estimated Supply:	<u>252.5</u>	days
Corrosion Inhibitor on hand:	<u>1,772</u>	Gallons	Estimated Supply:	<u>81.1</u>	days
Hydrofluosilicic Acid on hand:	<u>2,314</u>	Gallons	Estimated Supply:	<u>103.1</u>	days
Aluminum Chlorohydrate on hand:	<u>1,190</u>	Gallons	Estimated Supply:	<u>122.5</u>	days
Sulfuric Acid on hand:	<u>362</u>	Gallons	Estimated Supply:	<u>105.6</u>	days
Sodium Bisulfite on hand:	<u>614</u>	Gallons	Estimated Supply:	<u>120.8</u>	days
Citric Acid on hand:	<u>3,321</u>	Gallons	Estimated Supply:	<u>261.1</u>	days
Cost of All Chemicals per Million Gallons:	<u>73.98</u>	Dollars			
Estimated Electrical Cost per Million Gallons:	<u>110.58</u>	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	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
5/1/2019	0.00	7.34	7.34	0.28	0.00	0.05	6.75	3.29	3.18	6.47
5/2/2019	0.00	7.37	7.37	0.28	0.00	0.04	6.83	3.32	3.19	6.51
5/3/2019	0.00	7.21	7.21	0.25	0.00	0.07	6.85	3.37	3.25	6.62
5/4/2019	0.00	6.71	6.71	0.25	0.00	0.07	6.82	3.38	3.26	6.64
5/5/2019	0.00	6.77	6.77	0.25	0.00	0.07	6.85	3.46	3.24	6.70
5/6/2019	0.00	6.85	6.85	0.24	0.00	0.06	6.97	3.49	3.25	6.75
5/7/2019	0.00	6.87	6.87	0.26	0.00	0.06	6.99	3.50	3.21	6.71
5/8/2019	0.00	6.87	6.87	0.26	0.00	0.05	6.96	3.45	3.19	6.64
5/9/2019	0.00	6.96	6.96	0.26	0.00	0.04	6.98	3.45	3.18	6.63
5/10/2019	0.00	7.23	7.23	0.26	0.00	0.04	6.91	3.43	3.21	6.64
5/11/2019	0.00	7.25	7.25	0.25	0.00	0.04	6.93	3.44	3.22	6.66
5/12/2019	0.00	7.08	7.08	0.28	0.00	0.04	7.10	3.57	3.28	6.85
5/13/2019	0.00	6.57	6.57	0.28	0.00	0.04	7.12	3.61	3.34	6.95
5/14/2019	0.00	7.49	7.49	0.27	0.00	0.05	7.34	3.69	3.35	7.04
5/15/2019	0.00	8.12	8.12	0.25	0.00	0.05	7.36	3.70	3.39	7.09
5/16/2019	0.00	8.15	8.15	0.28	0.00	0.04	7.37	3.69	3.40	7.09
5/17/2019	0.00	8.01	8.01	0.28	0.00	0.05	7.18	3.63	3.32	6.95
5/18/2019	0.00	7.10	7.10	0.26	0.00	0.05	6.89	3.40	3.23	6.62
5/19/2019	0.19	6.44	6.63	0.26	0.00	0.06	6.91	3.41	3.24	6.64
5/20/2019	0.31	6.12	6.44	0.29	0.00	0.06	7.19	3.50	3.41	6.90
5/21/2019	0.32	6.16	6.47	0.30	0.00	0.02	7.21	3.51	3.42	6.93
5/22/2019	0.32	6.62	6.93	0.30	0.00	0.02	7.25	3.49	3.37	6.86
5/23/2019	0.62	6.92	7.54	0.29	0.00	0.02	7.27	3.58	3.38	6.96
5/24/2019	0.90	6.94	7.84	0.29	0.00	0.02	7.08	3.59	3.33	6.93
5/25/2019	0.96	6.15	7.11	0.30	0.00	0.02	6.65	3.27	3.12	6.39
5/26/2019	2.31	5.06	7.37	0.31	0.00	0.02	7.24	3.56	3.41	6.97
5/27/2019	3.38	4.25	7.62	0.31	0.00	0.03	7.27	3.64	3.42	7.06
5/28/2019	3.39	4.52	7.91	0.29	0.00	0.03	7.17	3.66	3.28	6.94
5/29/2019	3.24	4.53	7.78	0.29	0.00	0.06	7.55	3.75	3.40	7.15
5/30/2019	3.84	4.21	8.05	0.33	0.00	0.06	7.59	3.81	3.48	7.29
5/31/2019	3.85	4.14	7.99	0.33	0.00	0.04	7.61	3.82	3.49	7.31
Total	23.62	202.02	225.65	8.65	0.00	1.36	220.17	109.45	102.43	211.89
Avg	0.76	6.52	7.28	0.28	0.00	0.04	7.10	3.53	3.30	6.84
Min	0.00	4.14	6.44	0.24	0.00	0.02	6.65	3.27	3.12	6.39
Max	3.85	8.15	8.15	0.33	0.00	0.07	7.61	3.82	3.49	7.31



Raw Water Analysis								
Date	Temp	pH	Turbidity		F ⁻	Free Cl	Bacti	
	Average	Average	Average	Maximum	Grab	Average	Positive/Negative	
	°C		NTU		mg/L	mg/L	Total Coliform	E. coli
	TIT-1000	AIT-1000-2	AIT-1000-1		Lab	AIT-1035-2	Lab	
5/1/2019	7.39	7.93	1.06	3.51	0.10	0.33	Negative	Negative
5/2/2019	7.40	7.89	0.77	2.13	0.10	0.60	Negative	Negative
5/3/2019	7.48	7.87	2.40	9.55	0.09	0.60	Negative	Negative
5/4/2019	7.51	7.87	1.40	3.95	0.09	0.51	Negative	Negative
5/5/2019	7.63	7.97	2.12	7.05	0.10	0.23	Negative	Negative
5/6/2019	7.83	7.87	1.03	4.01	0.09	0.40	Negative	Negative
5/7/2019	7.84	7.85	0.61	4.45	0.09	0.85	Negative	Negative
5/8/2019	7.86	7.92	1.03	4.56	0.09	0.42	Negative	Negative
5/9/2019	8.23	7.97	1.64	6.35	0.10	0.20	Negative	Negative
5/10/2019	8.56	8.02	1.89	4.92	0.10	0.12	Negative	Negative
5/11/2019	8.70	7.92	1.84	9.41	0.10	0.49	Negative	Negative
5/12/2019	8.61	7.86	1.00	4.00	0.09	0.70	Negative	Negative
5/13/2019	8.65	7.90	1.00	3.93	0.09	0.46	Negative	Negative
5/14/2019	8.89	7.95	1.05	2.72	0.09	0.30	Negative	Negative
5/15/2019	8.98	7.88	0.68	1.58	0.08	0.53	Negative	Negative
5/16/2019	8.95	7.88	0.54	1.40	0.07	0.61	Negative	Negative
5/17/2019	8.91	7.87	0.52	1.84	0.08	0.72	Negative	Negative
5/18/2019	8.88	7.88	0.55	1.54	0.08	0.69	Negative	Negative
5/19/2019	9.18	7.94	0.70	2.64	0.07	0.40	Negative	Negative
5/20/2019	9.55	7.94	0.65	2.87	0.07	0.40	Negative	Negative
5/21/2019	9.63	7.91	0.42	1.60	0.07	0.40	Negative	Negative
5/22/2019	9.63	7.89	0.32	1.41	0.07	0.57	Negative	Negative
5/23/2019	9.72	7.89	0.29	0.54	0.06	0.64	Negative	Negative
5/24/2019	9.83	7.90	0.44	1.17	0.09	0.42	Negative	Negative
5/25/2019	10.08	7.91	0.38	1.22	0.09	0.50	Negative	Negative
5/26/2019	10.22	7.95	0.42	1.20	0.09	0.36	Negative	Negative
5/27/2019	10.45	7.97	0.50	0.95	0.09	0.25	Negative	Negative
5/28/2019	10.67	7.96	0.47	0.96	0.10	0.28	Negative	Negative
5/29/2019	10.44	7.96	0.82	3.56	0.09	0.20	Negative	Negative
5/30/2019	10.56	7.95	1.86	5.20	0.09	0.26	Negative	Negative
5/31/2019	10.72	7.93	0.68	2.00	0.09	0.44	Negative	Negative
Avg	9.0	7.92	0.94	3.30	0.09	0.45	NA	NA
Min	7.4	7.85	0.29	0.54	0.06	0.12	NA	NA
Max	10.7	8.02	2.40	9.55	0.10	0.85	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	Average	Average	Tap	Dist	Average	Carbonate	Bicarbonate	Grab	Grab	Grab	Grab	Grab	Index	Ratio	Index	Positive/Negative		
	°C		mg/L	mg/L		mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	uS/cm				Calculated	Lab	
	AIT-4040-1	AIT-4050-2	AIT-4040-5	Lab		AIT-4050-1	Lab		Lab	Lab	Lab	Lab	Lab					Total Coliform	E. coli
5/1/2019	7.0	7.54	3.37	0.82		1.00	0	80	10	11	82	11.4	240	-0.92	0.90	0.39	Negative	Negative	
5/2/2019	7.2	7.56	3.38	0.83		1.01	0	84	10	14	82	11.9	250	-0.88	0.71	0.42	Negative	Negative	
5/3/2019	7.3	7.54	3.38	0.75		1.03	0	84	11	13	84	11.8	233	-0.87	0.84	0.42	Negative	Negative	
5/4/2019	7.4	7.53	3.38	0.75		1.02	0	80	9	11	78	11.4	233	-0.94	0.78	0.36	Negative	Negative	
5/5/2019	7.5	7.53	3.38	0.73		0.99	0	82	10	12	82	11.3	241	-0.91	0.83	0.40	Negative	Negative	
5/6/2019	7.8	7.57	3.37	0.76	0.73	1.00	0	86	10	12	74	11.4	261	-0.88	0.81	0.37	Negative	Negative	
5/7/2019	7.9	7.56	3.37	0.72		1.01	0	82	10	13	78	11.6	243	-0.89	0.76	0.41	Negative	Negative	
5/8/2019	7.7	7.54	3.35	0.69		1.01	0	80	10	10	70	11.8	255	-0.97	1.04	0.39	Negative	Negative	
5/9/2019	7.8	7.57	3.38	0.76		1.01	0	85	11	13	78	11.6	299	-0.88	0.83	0.42	Negative	Negative	
5/10/2019	8.4	7.60	3.37	0.78		0.98	0	96	12	14	88	11.6	323	-0.73	0.82	0.39	Negative	Negative	
5/11/2019	8.7	7.64	3.37	0.78		0.97	0	95	14	15	90	11.6	326	-0.69	0.92	0.45	Negative	Negative	
5/12/2019	8.8	7.59	3.38	0.77		1.00	0	86	11	14	76	11.7	284	-0.84	0.77	0.43	Negative	Negative	
5/13/2019	8.5	7.55	3.38	0.78		1.03	0	80	10	13	72	10.9	263	-0.94	0.75	0.42	Negative	Negative	
5/14/2019	8.6	7.54	3.38	0.77		0.99	0	84	12	12	84	11.6	276	-0.86	1.00	0.43	Negative	Negative	
5/15/2019	8.9	7.55	3.37	0.77	0.78	1.01	0	85	12	8	84	10.7	260	-0.83	1.50	0.37	Negative	Negative	
5/16/2019	8.9	7.52	3.36	0.76		1.03	0	83	10	12	72	10.6	255	-0.93	0.85	0.40	Negative	Negative	
5/17/2019	8.8	7.50	3.37	0.73		1.03	0	79	11	12	70	11.1	248	-0.99	0.93	0.44	Negative	Negative	
5/18/2019	8.6	7.48	3.38	0.76		1.02	0	79	10	12	68	10.9	243	-1.02	0.80	0.40	Negative	Negative	
5/19/2019	8.4	7.49	3.37	0.74		1.01	0	79	10	11	69	10.4	244	-1.02	0.92	0.40	Negative	Negative	
5/20/2019	8.8	7.51	3.44	0.75	0.74	0.99	0	80	10	12	72	11.6	252	-0.96	0.84	0.41	Negative	Negative	
5/21/2019	9.2	7.50	3.52	0.78		1.00	0	80	11	10	72	11.4	254	-0.96	1.08	0.39	Negative	Negative	
5/22/2019	9.4	7.50	3.47	0.76		1.02	0	79	10	10	78	10.8	250	-0.93	0.97	0.37	Negative	Negative	
5/23/2019	9.4	7.48	3.45	0.78		1.04	0	77	10	10	76	11.2	244	-0.97	1.00	0.39	Negative	Negative	
5/24/2019	9.3	7.48	3.45	0.82		1.00	0	77	10	10	78	10.9	245	-0.96	0.97	0.38	Negative	Negative	
5/25/2019	9.7	7.49	3.44	0.82		1.01	0	78	12	10	78	10.5	254	-0.94	1.15	0.42	Negative	Negative	
5/26/2019	9.9	7.49	3.44	0.79		1.01	0	78	10	10	76	11.1	251	-0.95	1.01	0.39	Negative	Negative	
5/27/2019	10.0	7.50	3.43	0.82		1.00	0	79	11	11	78	11.1	249	-0.92	0.99	0.42	Negative	Negative	
5/28/2019	10.1	7.52	3.44	0.81	0.78	0.98	0	75	10	14	70	10.2	259	-0.96	0.68	0.46	Negative	Negative	
5/29/2019	10.3	7.53	3.44	0.82		1.00	0	80	10	12	82	10.4	267	-0.85	0.82	0.40	Negative	Negative	
5/30/2019	10.7	7.52	3.40	0.80		1.01	0	80	10	13	72	10.4	267	-0.91	0.75	0.42	Negative	Negative	
5/31/2019	11.1	7.50	3.38	0.79		1.03	0	78	11	13	78	10.5	261	-0.89	0.84	0.46	Negative	Negative	
Avg	8.8	7.53	3.40	0.77	0.76	1.01	0	82	10	12	77	11.1	259	-0.91	0.90	0.41	NA	NA	
Min	7.0	7.48	3.35	0.69	0.73	0.97	0	75	9	8	68	10.2	233	-1.02	0.68	0.36	NA	NA	
Max	11.1	7.64	3.52	0.83	0.78	1.04	0	96	14	15	90	11.9	326	-0.69	1.50	0.46	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
5/1/2019	1.06	3.51	1.29	1.07	0.018	0.018	96	0	0.0	0.011
5/2/2019	0.77	2.13	1.42	1.00	0.018	0.018	96	0	0.0	0.011
5/3/2019	2.40	9.55	1.08	1.33	0.018	0.018	96	0	0.0	0.011
5/4/2019	1.40	3.95	0.91	1.43	0.018	0.018	96	0	0.0	0.011
5/5/2019	2.12	7.05	1.25	1.44	0.018	0.019	96	0	0.0	0.011
5/6/2019	1.03	4.01	1.43	1.34	0.018	0.018	96	0	0.0	0.012
5/7/2019	0.61	4.45	1.37	1.00	0.018	0.018	96	0	0.0	0.011
5/8/2019	1.03	4.56	1.09	0.83	0.018	0.018	96	0	0.0	0.011
5/9/2019	1.64	6.35	2.01	1.33	0.018	0.020	96	0	0.0	0.011
5/10/2019	1.89	4.92	1.80	1.48	0.018	0.018	96	0	0.0	0.011
5/11/2019	1.84	9.41	2.25	1.76	0.018	0.018	96	0	0.0	0.011
5/12/2019	1.00	4.00	1.99	1.35	0.018	0.018	96	0	0.0	0.011
5/13/2019	1.00	3.93	1.41	1.09	0.018	0.018	96	0	0.0	0.011
5/14/2019	1.05	2.72	1.64	1.11	0.018	0.018	96	0	0.0	0.011
5/15/2019	0.68	1.58	1.71	1.00	0.018	0.018	96	0	0.0	0.011
5/16/2019	0.54	1.40	0.86	0.72	0.018	0.018	96	0	0.0	0.011
5/17/2019	0.52	1.84	0.71	0.58	0.018	0.018	96	0	0.0	0.011
5/18/2019	0.55	1.54	0.84	0.53	0.018	0.018	96	0	0.0	0.011
5/19/2019	0.70	2.64	0.90	0.62	0.018	0.018	96	0	0.0	0.012
5/20/2019	0.65	2.87	2.30	0.68	0.018	0.018	96	0	0.0	0.011
5/21/2019	0.42	1.60	0.96	0.58	0.018	0.018	96	0	0.0	0.011
5/22/2019	0.32	1.41	0.91	0.49	0.018	0.018	96	0	0.0	0.011
5/23/2019	0.29	0.54	0.58	0.37	0.018	0.018	96	0	0.0	0.011
5/24/2019	0.44	1.17	0.65	0.39	0.018	0.018	96	0	0.0	0.011
5/25/2019	0.38	1.22	0.73	0.46	0.018	0.018	96	0	0.0	0.011
5/26/2019	0.42	1.20	0.70	0.42	0.018	0.018	96	0	0.0	0.011
5/27/2019	0.50	0.95	0.84	0.44	0.018	0.018	96	0	0.0	0.011
5/28/2019	0.47	0.96	1.36	0.46	0.018	0.018	96	0	0.0	0.011
5/29/2019	0.82	3.56	1.21	0.50	0.018	0.019	96	0	0.0	0.011
5/30/2019	1.86	5.20	1.14	1.25	0.018	0.018	96	0	0.0	0.011
5/31/2019	0.68	2.00	0.92	1.01	0.018	0.018	96	0	0.0	0.011
Avg	0.94	3.30	1.23	0.91	0.018	0.018	96	0	0.0	0.011
Min	0.29	0.54	0.58	0.37	0.018	0.018	96	0	0.0	0.011
Max	2.40	9.55	2.30	1.76	0.018	0.020	96	0	0.0	0.012



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

Membrane Integrity																								
Date	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
5/1/2019	14.9	14.5	PASS	14.5	14.2	PASS	14.8	14.2	PASS	14.3	14.0	PASS	15.2	14.9	PASS	14.4	14.1	PASS	14.7	14.4	PASS	14.3	13.7	PASS
5/2/2019	14.7	14.2	PASS	14.4	14.0	PASS	15.2	15.0	PASS	14.3	13.9	PASS	14.9	14.4	PASS	14.4	14.1	PASS	14.6	14.2	PASS	14.3	13.7	PASS
5/3/2019	14.9	14.5	PASS	14.5	14.0	PASS	14.7	14.2	PASS	14.3	13.9	PASS	14.9	14.4	PASS	14.3	14.0	PASS	14.6	14.2	PASS	14.3	13.7	PASS
5/4/2019	14.9	14.4	PASS	14.5	14.1	PASS	14.8	14.4	PASS	14.3	13.9	PASS	14.6	14.1	PASS	14.4	14.0	PASS	15.1	14.8	PASS	14.3	13.8	PASS
5/5/2019	14.8	14.4	PASS	14.6	14.1	PASS	14.6	14.1	PASS	14.3	14.0	PASS	14.6	14.1	PASS	14.4	14.0	PASS	14.9	14.6	PASS	14.4	13.8	PASS
5/6/2019	14.8	14.4	PASS	14.4	14.0	PASS	14.6	14.1	PASS	14.3	13.9	PASS	15.3	15.1	PASS	14.3	14.0	PASS	14.6	14.2	PASS	14.3	13.7	PASS
5/7/2019	14.9	14.5	PASS	14.5	14.1	PASS	14.7	14.2	PASS	14.3	14.0	PASS	14.5	14.0	PASS	14.4	14.0	PASS	14.7	14.4	PASS	14.3	13.7	PASS
5/8/2019	14.8	14.3	PASS	14.5	14.1	PASS	14.7	14.2	PASS	14.3	14.0	PASS	14.7	14.2	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.3	13.7	PASS
5/9/2019	15.0	14.6	PASS	14.4	14.0	PASS	14.6	14.1	PASS	14.4	13.9	PASS	14.6	14.1	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.3	13.7	PASS
5/10/2019	14.9	14.4	PASS	14.4	14.0	PASS	14.6	14.1	PASS	14.3	14.0	PASS	14.6	14.1	PASS	14.4	14.1	PASS	14.6	14.2	PASS	14.3	13.8	PASS
5/11/2019	15.0	14.6	PASS	14.4	14.0	PASS	14.5	14.0	PASS	14.3	13.9	PASS	14.5	13.9	PASS	14.4	14.1	PASS	14.6	14.2	PASS	14.3	13.8	PASS
5/12/2019	14.9	14.5	PASS	14.4	14.0	PASS	14.5	14.0	PASS	14.3	13.9	PASS	15.1	14.8	PASS	14.4	14.0	PASS	14.6	14.2	PASS	14.3	13.7	PASS
5/13/2019	14.9	14.4	PASS	14.6	14.3	PASS	14.8	14.3	PASS	14.3	14.0	PASS	15.2	14.8	PASS	14.3	14.0	PASS	14.5	14.1	PASS	14.3	13.7	PASS
5/14/2019	14.9	14.4	PASS	14.6	14.2	PASS	14.6	14.0	PASS	14.3	13.9	PASS	14.5	13.9	PASS	14.4	14.0	PASS	14.9	14.6	PASS	14.3	13.8	PASS
5/15/2019	14.9	14.4	PASS	14.5	14.0	PASS	14.6	14.1	PASS	14.3	14.0	PASS	14.6	14.1	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.3	13.7	PASS
5/16/2019	14.8	14.3	PASS	14.5	14.1	PASS	14.8	14.3	PASS	14.3	14.0	PASS	14.5	14.0	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.3	13.8	PASS
5/17/2019	15.1	14.8	PASS	14.4	14.0	PASS	15.1	14.7	PASS	14.3	14.0	PASS	14.5	14.0	PASS	14.4	14.0	PASS	14.7	14.4	PASS	14.3	13.7	PASS
5/18/2019	14.9	14.5	PASS	14.4	14.0	PASS	14.5	14.0	PASS	14.3	14.0	PASS	14.5	14.0	PASS	14.3	14.0	PASS	14.6	14.3	PASS	14.3	13.8	PASS
5/19/2019	14.9	14.5	PASS	14.4	14.0	PASS	14.6	14.0	PASS	14.3	14.0	PASS	14.5	13.9	PASS	14.3	13.9	PASS	14.7	14.4	PASS	14.3	13.8	PASS
5/20/2019	15.0	14.6	PASS	14.4	14.0	PASS	14.6	14.1	PASS	14.3	14.0	PASS	14.5	13.9	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.3	13.7	PASS
5/21/2019	14.9	14.4	PASS	14.4	14.0	PASS	14.6	14.1	PASS	14.3	14.0	PASS	14.6	14.1	PASS	14.3	14.0	PASS	14.8	14.5	PASS	14.4	13.9	PASS
5/22/2019	14.9	14.5	PASS	14.4	13.9	PASS	14.6	14.1	PASS	14.4	14.1	PASS	15.2	14.9	PASS	14.3	14.0	PASS	14.5	14.1	PASS	14.3	13.7	PASS
5/23/2019	15.0	14.6	PASS	14.4	14.0	PASS	15.2	14.9	PASS	14.3	14.0	PASS	15.2	14.9	PASS	14.4	14.0	PASS	15.0	14.6	PASS	14.3	13.7	PASS
5/24/2019	14.8	14.3	PASS	14.4	14.0	PASS	15.0	14.5	PASS	14.3	13.9	PASS	14.5	13.9	PASS	14.3	14.0	PASS	14.6	14.3	PASS	14.3	13.7	PASS
5/25/2019	14.9	14.5	PASS	14.4	14.0	PASS	14.5	14.0	PASS	14.3	13.9	PASS	14.6	14.1	PASS	14.3	14.0	PASS	15.2	15.0	PASS	14.3	13.7	PASS
5/26/2019	14.7	14.3	PASS	14.4	13.9	PASS	14.4	13.9	PASS	14.3	14.0	PASS	14.4	13.9	PASS	14.4	14.0	PASS	15.1	14.8	PASS	14.3	13.7	PASS
5/27/2019	14.9	14.4	PASS	14.4	14.0	PASS	14.4	13.8	PASS	14.3	14.0	PASS	14.6	14.1	PASS	14.4	14.0	PASS	14.5	14.2	PASS	14.3	13.8	PASS
5/28/2019	15.0	14.5	PASS	14.4	14.0	PASS	14.4	13.8	PASS	14.3	14.0	PASS	14.6	14.1	PASS	14.4	14.1	PASS	14.6	14.2	PASS	14.4	13.9	PASS
5/29/2019	15.0	14.5	PASS	14.6	14.3	PASS	14.5	13.9	PASS	14.3	14.0	PASS	14.6	14.1	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.3	13.8	PASS
5/30/2019	14.7	14.2	PASS	14.6	14.2	PASS	14.5	14.0	PASS	14.4	14.0	PASS	14.6	14.0	PASS	14.3	14.0	PASS	14.5	14.1	PASS	14.3	13.9	PASS
5/31/2019	14.8	14.3	PASS	14.4	13.9	PASS	15.2	14.9	PASS	14.4	14.1	PASS	14.5	14.0	PASS	14.4	14.0	PASS	14.5	14.1	PASS	14.4	13.9	PASS

Integrity test performed every 24-hours



Treatment Chemical Dosages										
Date	Treated Water	Sodium Hypochlorite				Phosphoric Acid			Hydrofluorosilicic Acid	
		Raw Water	Membrane Feed Water	Added pre-FW Tanks	Treated Water	Post FW Tanks	Dose pre-FW Tanks	Post FW Tanks	Dose pre-FW Tanks	Post FW Tanks
	Volume	Free Cl ₂	Free Cl ₂	OCL	Free Cl ₂	Free Cl ₂	PO ₄	PO ₄	F	
	MG	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	FIT-4000-1	AIT-1035-2	AIT-1035-4	Added	AIT-4030-1	AIT-4050-1	Added	AIT-4040-5		
5/1/2019	6.8	0.33	0.40	0.76	1.10	1.00	3.62	3.37	0.63	0.82
5/2/2019	6.8	0.60	0.38	0.70	1.12	1.01	3.62	3.38	0.62	0.83
5/3/2019	6.8	0.60	0.46	0.66	1.14	1.03	3.62	3.38	0.62	0.75
5/4/2019	6.8	0.51	0.45	0.68	1.11	1.02	3.62	3.38	0.62	0.75
5/5/2019	6.9	0.23	0.31	0.92	1.10	0.99	3.62	3.38	0.62	0.73
5/6/2019	7.0	0.40	0.23	0.94	1.15	1.00	3.62	3.37	0.62	0.76
5/7/2019	7.0	0.85	0.41	0.62	1.12	1.01	3.52	3.37	0.62	0.72
5/8/2019	7.0	0.42	0.49	0.72	1.10	1.01	3.52	3.35	0.70	0.69
5/9/2019	7.0	0.20	0.24	0.98	1.12	1.01	3.53	3.38	0.73	0.76
5/10/2019	6.9	0.12	0.12	1.10	1.15	0.98	3.53	3.37	0.73	0.78
5/11/2019	6.9	0.49	0.14	0.98	1.17	0.97	3.53	3.37	0.72	0.78
5/12/2019	7.1	0.70	0.35	0.78	1.16	1.00	3.54	3.38	0.72	0.77
5/13/2019	7.1	0.46	0.41	0.78	1.14	1.03	3.56	3.38	0.72	0.78
5/14/2019	7.3	0.30	0.28	0.87	1.11	0.99	3.56	3.38	0.72	0.77
5/15/2019	7.4	0.53	0.31	0.85	1.16	1.01	3.56	3.37	0.72	0.77
5/16/2019	7.4	0.61	0.42	0.70	1.14	1.03	3.56	3.36	0.74	0.76
5/17/2019	7.2	0.72	0.51	0.61	1.14	1.03	3.58	3.37	0.75	0.73
5/18/2019	6.9	0.69	0.55	0.58	1.11	1.02	3.58	3.38	0.75	0.76
5/19/2019	6.9	0.40	0.49	0.68	1.10	1.01	3.57	3.37	0.75	0.74
5/20/2019	7.2	0.40	0.36	0.80	1.10	0.99	3.56	3.44	0.75	0.75
5/21/2019	7.2	0.40	0.31	0.85	1.12	1.00	3.45	3.52	0.75	0.78
5/22/2019	7.3	0.57	0.36	0.77	1.13	1.02	3.43	3.47	0.75	0.76
5/23/2019	7.3	0.64	0.45	0.67	1.13	1.04	3.42	3.45	0.75	0.78
5/24/2019	7.1	0.42	0.43	0.80	1.08	1.00	3.42	3.45	0.75	0.82
5/25/2019	6.6	0.50	0.39	0.80	1.13	1.01	3.42	3.44	0.75	0.82
5/26/2019	7.2	0.36	0.35	0.87	1.10	1.01	3.42	3.44	0.75	0.79
5/27/2019	7.3	0.25	0.27	0.92	1.09	1.00	3.42	3.43	0.73	0.82
5/28/2019	7.2	0.28	0.22	0.98	1.10	0.98	3.42	3.44	0.73	0.81
5/29/2019	7.6	0.20	0.19	1.05	1.11	1.00	3.40	3.44	0.73	0.82
5/30/2019	7.6	0.26	0.15	1.08	1.14	1.01	3.39	3.40	0.73	0.80
5/31/2019	7.6	0.44	0.23	0.96	1.15	1.03	3.39	3.38	0.73	0.79
Avg	7.1	0.45	0.34	0.82	1.12	1.01	3.52	3.40	0.71	0.77
Min	6.6	0.12	0.12	0.58	1.08	0.97	3.39	3.35	0.62	0.69
Max	7.6	0.85	0.55	1.10	1.17	1.04	3.62	3.52	0.75	0.83



Disinfection CT														
Date	Pipeline CT				FW Tank CT						Compliance			
	Whitestone	Travel Time	Residual	CT	FW Tank 1	FW Tank 2	Plant	Contact Time	Free Cl ₂	CT	Total CT	Temp	CT	CT
	Flow	Min	RW	Achieved	Min Level	Min Level	Flow	Min	Min	Achieved	Achieved	Avg	Required	Met
	MGD	Minutes	mg/L	mg-min/L	ft	ft	MGD	Minutes	mg/L	mg-min/L	mg-min/L	°C	mg-min/L	Y/N
Entry	Calculated	AIT-1035-2	Calculated	LIT-4005-1	LIT-4005-2	Calculated	Calculated	Calculated	Calculated	Calculated	TIT-1000	Calculated	Calculated	
5/1/2019	54.9	2,278	0.33	755	28.8	24.2	6.5	561	0.97	546.87	1,301.64	7.4	8.00	Y
5/2/2019	55.1	2,270	0.60	1365	28.8	24.2	6.5	558	1.00	559.71	1,924.41	7.4	8.00	Y
5/3/2019	43.5	2,873	0.60	1732	28.8	24.4	6.6	551	1.00	552.54	2,285.02	7.5	8.00	Y
5/4/2019	55.8	2,240	0.51	1133	28.8	23.7	6.6	542	1.01	546.71	1,679.33	7.5	8.00	Y
5/5/2019	56.1	2,229	0.23	504	28.8	23.8	6.7	538	0.97	520.71	1,024.44	7.6	8.00	Y
5/6/2019	54.5	2,296	0.40	926	28.8	23.0	6.7	526	0.99	520.19	1,446.33	7.8	8.00	Y
5/7/2019	47.7	2,623	0.85	2226	28.7	22.8	6.7	525	0.98	515.61	2,741.96	7.8	8.00	Y
5/8/2019	43.0	2,906	0.42	1222	28.8	23.2	6.6	536	0.98	526.55	1,748.15	7.9	8.00	Y
5/9/2019	42.9	2,916	0.20	588	28.2	15.4	6.6	450	0.97	439.05	1,026.68	8.2	8.00	Y
5/10/2019	45.0	2,779	0.12	326	28.8	24.0	6.6	544	0.96	523.16	849.16	8.6	8.00	Y
5/11/2019	54.1	2,314	0.49	1132	28.8	23.1	6.7	533	0.95	508.60	1,640.44	8.7	8.00	Y
5/12/2019	54.3	2,302	0.70	1608	28.8	23.8	6.8	527	0.98	517.34	2,125.01	8.6	8.00	Y
5/13/2019	50.8	2,464	0.46	1136	28.8	23.0	6.9	511	1.02	519.42	1,655.48	8.6	8.00	Y
5/14/2019	42.8	2,922	0.30	869	28.8	22.8	7.0	501	0.96	481.92	1,350.76	8.9	8.00	Y
5/15/2019	41.4	3,019	0.53	1592	28.8	22.6	7.1	497	0.96	477.55	2,069.47	9.0	8.00	Y
5/16/2019	43.0	2,912	0.61	1776	28.6	23.2	7.1	502	1.02	509.83	2,285.63	8.9	8.00	Y
5/17/2019	46.7	2,681	0.72	1941	28.8	23.9	7.0	519	1.01	524.22	2,465.14	8.9	8.00	Y
5/18/2019	55.7	2,244	0.69	1544	28.8	23.9	6.6	545	1.00	546.25	2,089.83	8.9	8.00	Y
5/19/2019	55.9	2,237	0.40	890	28.7	23.9	6.6	542	1.00	540.05	1,430.10	9.2	8.00	Y
5/20/2019	56.1	2,232	0.40	897	28.8	23.5	6.9	519	0.97	506.32	1,403.75	9.5	8.00	Y
5/21/2019	47.1	2,654	0.40	1064	28.8	23.0	6.9	513	0.97	500.43	1,564.77	9.6	8.00	Y
5/22/2019	41.4	3,024	0.57	1714	28.8	22.5	6.9	513	1.00	514.06	2,228.03	9.6	8.00	Y
5/23/2019	46.3	2,703	0.64	1719	28.8	24.1	7.0	521	1.01	525.55	2,244.51	9.7	8.00	Y
5/24/2019	46.4	2,698	0.42	1129	28.8	22.2	6.9	505	0.97	492.14	1,621.10	9.8	8.00	Y
5/25/2019	52.6	2,379	0.50	1192	28.7	23.5	6.4	561	1.00	558.13	1,749.74	10.1	6.00	Y
5/26/2019	52.7	2,374	0.36	858	28.7	23.2	7.0	510	0.99	504.62	1,362.58	10.2	6.00	Y
5/27/2019	50.2	2,493	0.25	635	28.8	22.7	7.1	499	0.99	493.61	1,128.19	10.5	6.00	Y
5/28/2019	41.9	2,982	0.28	847	28.7	18.6	6.9	468	0.96	449.56	1,296.23	10.7	6.00	Y
5/29/2019	42.1	2,973	0.20	605	28.8	12.4	7.1	395	0.98	387.93	992.97	10.4	6.00	Y
5/30/2019	42.8	2,926	0.26	767	28.8	19.9	7.3	458	1.00	458.77	1,225.61	10.6	6.00	Y
5/31/2019	46.0	2,722	0.44	1,188	28.8	24.2	7.3	496	1.02	504.55	1,692.15	10.7	6.00	Y
Avg	48.7	2,602	0.45	1,157	28.8	22.5	6.8	515	0.99	508.77	1,666.08	9.0	7.55	NA
Min	41.4	2,229	0.12	326	28.2	12.4	6.4	395	0.95	387.93	849.16	7.4	6.00	NA
Max	56.1	3,024	0.85	2,226	28.8	24.4	7.3	561	1.02	559.71	2,741.96	10.7	8.00	NA



Notes:

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

Distribution System Monitoring

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

WSSN: Date	0072 Akron		0390 Bangor Twp.			0400 Bangor Monitor Dist.			0470 Bay City							0485 Bay County					0517 Beaver Rd	0518 Beaver Twp		2180 Essexville
	1	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18	19	20	22	24	26	29	30	32
	5/1/2019									0.65	0.42	0.58	0.75	0.30	0.76	0.76	0.82	0.78	0.52	0.63	0.68			
5/2/2019	0.31	0.76	0.96	0.56	0.90																	0.39		
5/3/2019																								
5/4/2019																								
5/5/2019																								
5/6/2019									0.60	0.28	0.58	0.68	0.45	0.77	0.72									
5/7/2019																								
5/8/2019																								
5/9/2019						0.68	0.60		0.81	0.25	0.51	0.62	0.13	0.89	0.65									0.84
5/10/2019																								
5/11/2019																								
5/12/2019																								
5/13/2019																								0.84
5/14/2019				0.52	0.95											0.69	0.62	0.54	0.66	0.63			0.45	
5/15/2019																								
5/16/2019								0.92													0.82			
5/17/2019																								
5/18/2019																								
5/19/2019																								
5/20/2019																								0.95
5/21/2019		0.53	0.39	0.45	0.90																			
5/22/2019																								
5/23/2019																								
5/24/2019																								
5/25/2019																								
5/26/2019																								
5/27/2019																								
5/28/2019																								
5/29/2019																								
5/30/2019																								0.86
5/31/2019																								
Average	0.31			0.69				0.73					0.55					0.66			0.82		0.42	0.87
Min	0.31			0.39				0.60					0.13					0.52			0.82		0.39	0.84
Max	0.31			0.96				0.92					0.89					0.82			0.82		0.45	0.95



MONITORING STATION ADDRESSES

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

Distribution System Monitoring																								
Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl ₂)																								
WSSN:	2465		2960			3565			3570		4280		4440			5330		5335		5540	7125			7134
Date	Fraser Twp.		Hampton Twp.			Kawkawlin Twp.			Kawkawlin Met.		Merritt Twp.		Monitor Twp.			City Pinconning		Pinconning Twp.		Portsmouth	Williams Twp.			Wisner
	34	35	37	38	39	40	41	42	43	45	46	48	49	52	55	58	59	61	63	65	68	69	70	72
5/1/2019																								
5/2/2019											0.35									0.48	0.69	0.72	0.48	0.38
5/3/2019																								
5/4/2019																								
5/5/2019																								
5/6/2019			0.67	0.69	0.53																			
5/7/2019																								
5/8/2019																								
5/9/2019	0.68	0.75				0.92	0.71		0.41				0.85	0.55	0.62	0.56		0.72	0.63					
5/10/2019																								
5/11/2019																								
5/12/2019																								
5/13/2019			0.41	0.54	0.37																			
5/14/2019											0.42										0.52	0.61	0.45	
5/15/2019																								
5/16/2019								0.76	0.50				0.85	0.71	0.52		0.67							
5/17/2019																								
5/18/2019																								
5/19/2019																								
5/20/2019			0.63	0.60	0.47																			
5/21/2019																								
5/22/2019																								
5/23/2019																								
5/24/2019																								
5/25/2019																								
5/26/2019																								
5/27/2019																								
5/28/2019			0.55																					
5/29/2019																								
5/30/2019																								
5/31/2019																								
Average		0.72		0.55			0.80		0.46		0.39			0.68		0.62		0.68		0.48		0.58		0.38
Min		0.68		0.37			0.71		0.41		0.35			0.52		0.56		0.63		0.48		0.45		0.38
Max		0.75		0.69			0.92		0.50		0.42			0.85		0.67		0.72		0.48		0.72		0.38



MONITORING STATION ADDRESSES

- 34. Fraser Elevated Tank, 2949 1/2 N. Huron Rd
- 35. Lloyd's Cabinet, 1947 N Huron Rd
- 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, 1770 E. Parish Rd
- 42. Linwood Tile, 205 S Huron Rd

- 43. Kawkawlin Party Store, 105 Grove St
- 45. Kawkawlin Restaurant, 103 S Huron Rd
- 46. John's Bar, 1476 S Tuscola Rd
- 48. Tool Shed Bar, 12 W Munger Rd
- 49. Wilder Rd Party Store, 2951 E Wilder Rd
- 52. Monitor Twp. Elevated Tank, 1611 E. Midland Rd
- 55. Auburn Fertilizer, 4640 S 7 Mile Rd
- 58. Pinconning City Hall, 208 S Manitou St

- 59. Marathon Gas Station, 511 S Mabel St
- 61. Pinconning Meter Pit, 3005 N Huron Rd
- 63. Master Meter Pit, 2865 Pinconning Rd
- 65. Ike's Welding, 50 N Finn Rd
- 68. Williams Township Hall, 1080 W Midland Rd
- 69. Pump Station, 490 W. Salzburg & 9 Mile Rd
- 70. 11 Mile Elevated Tank, 5003 S. 11 Mile Rd
- 72. Lindy's Sales, 9051 M-25

Distribution System Bacteriological							
Water Supplier Bacteriological Analysis Report							
MICHIGAN DEPARTMENT OF PUBLIC HEALTH Bureau of Environmental Health Water Supplier Bacteriological Analysis Report				Name of Water Supply Bay Area Water Treatment Plant			
				May, 2019			
COUNTY	COMMUNITY	WSSN NUMBER	DISTRIBUTION SYSTEM SAMPLES				
			avg free cl2 mg/L	NUMBER REQUIRED	NUMBER COLLECTED	NUMBER POSITIVE	NUMBER REPEAT SAMPLES
Tuscola	Akron	0072	0.31	1	1	0	0
BAY	Bangor Township	0390	0.69	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	0.73	3	3	0	0
BAY	Bay City	0470	0.55	40	49	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.66	10	10	0	0
BAY	Beaver Road Area	0517	0.82	1	1	0	0
BAY	Beaver Township	0518	0.42	2	2	0	0
BAY	Essexville	2180	0.87	4	4	0	0
BAY	Fraser Township	2465	0.72	2	2	0	0
BAY	Hampton Township	2960	0.55	10	10	0	0
BAY	Kawkawlin Township	3565	0.80	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.46	2	2	0	0
BAY	Merritt Township	4280	0.39	2	2	0	0
BAY	Monitor Township	4440	0.68	6	6	0	0
BAY	City of Pinconning	5330	0.62	2	2	0	0
BAY	Pinconning Township	5335	0.68	2	2	0	0
BAY	Portsmouth Township	5540	0.48	1	1	0	0
BAY	Williams Township	7125	0.58	6	6	0	0
Tuscola	Wisner	7134	0.38	1	1	0	0
Average Free Cl2 Residual of All Distribution Sites			0.60	mg/L			
1. Total distribution samples			117				
2. Total distribution samples with detectable free cl2 residual			117				
3. Total distribution samples with no detectable free cl2 residual			0				
4. Total distribution samples with no detectable free cl2 residual and HPC was <500			NA				
5. Total distribution samples with no detectable free cl2 residual and HPC was >500			NA				
6. Percent of distribution samples with no detectable free cl2 residual			0.00%				
7. Percent shown line #6 in previous monthly report			0.00%				

