

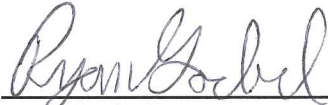
Bay Area WTP

Monthly Operations Report



July, 2019

Water Systems Serial Number: 0465



Ryan Goebel

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

July, 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	17.4	Millions of Gallons per Day
Treatment Rate, Maximum	11.8	Millions of Gallons per Day
Maximum Approved Transmembrane Pressure	22	PSI
Maximum Operating Transmembrane Pressure	22	PSI

Chemical Data

Sodium Hypochlorite on hand:	3,655	Gallons	Estimated Supply:	34.2	days
Caustic Soda on hand:	3,242	Gallons	Estimated Supply:	199.6	days
Corrosion Inhibitor on hand:	676	Gallons	Estimated Supply:	21.2	days
Hydrofluosilicic Acid on hand:	1,089	Gallons	Estimated Supply:	33.1	days
Aluminum Chlorohydrate on hand:	855	Gallons	Estimated Supply:	64.3	days
Sulfuric Acid on hand:	269	Gallons	Estimated Supply:	79.4	days
Sodium Bisulfite on hand:	413	Gallons	Estimated Supply:	58.6	days
Citric Acid on hand:	2,890	Gallons	Estimated Supply:	220.2	days
Cost of All Chemicals per Million Gallons:	72.03	Dollars			
Estimated Electrical Cost per Million Gallons:	93.78	Dollars			
Estimated Natural Gas Cost per Million Gallons:	14.05	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

-There was 1 Total Coliform positive distribution sample in WSSN 3570. Repeat samples were negative. For more info, see page 12.



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	
7/1/2019	4.17	4.62	8.79	0.29	0.00	0.08	9.03	4.65	4.17	8.82
7/2/2019	3.68	4.43	8.12	0.34	0.00	0.08	8.49	4.40	3.91	8.31
7/3/2019	3.79	4.42	8.22	0.29	0.00	0.07	8.48	4.44	3.95	8.39
7/4/2019	4.46	4.62	9.07	0.33	0.00	0.08	8.88	4.55	4.06	8.61
7/5/2019	4.61	4.96	9.57	0.29	0.00	0.08	8.66	4.47	4.05	8.52
7/6/2019	3.84	4.48	8.33	0.29	0.00	0.08	8.22	4.17	3.79	7.96
7/7/2019	3.52	4.18	7.70	0.27	0.00	0.08	8.35	4.34	3.94	8.28
7/8/2019	4.21	4.80	9.01	0.30	0.00	0.08	9.63	5.06	4.50	9.57
7/9/2019	4.59	5.44	10.03	0.33	0.00	0.08	9.86	5.12	4.54	9.66
7/10/2019	4.74	6.18	10.93	0.31	0.00	0.09	9.81	5.19	4.61	9.80
7/11/2019	4.95	6.13	11.09	0.35	0.00	0.10	10.34	5.33	4.70	10.02
7/12/2019	4.51	5.37	9.89	0.34	0.00	0.05	10.09	5.29	4.67	9.96
7/13/2019	4.97	4.74	9.71	0.28	0.00	0.10	9.99	5.21	4.65	9.86
7/14/2019	4.87	4.55	9.42	0.34	0.00	0.08	10.07	5.29	4.73	10.02
7/15/2019	5.09	5.46	10.55	0.35	0.00	0.10	10.54	5.46	4.84	10.30
7/16/2019	5.39	5.79	11.18	0.40	0.00	0.03	10.02	5.22	4.63	9.85
7/17/2019	4.38	5.35	9.73	0.37	0.00	0.03	10.98	5.73	5.08	10.80
7/18/2019	5.22	5.25	10.46	0.37	0.00	0.08	10.82	5.74	5.07	10.81
7/19/2019	6.42	5.64	12.06	0.40	0.00	0.08	11.06	5.76	5.09	10.85
7/20/2019	5.03	5.90	10.93	0.33	0.00	0.08	9.85	5.18	4.54	9.71
7/21/2019	3.99	4.34	8.33	0.32	0.00	0.08	8.88	4.67	4.16	8.84
7/22/2019	4.43	4.82	9.25	0.44	0.00	0.08	11.18	5.74	5.12	10.86
7/23/2019	5.39	6.01	11.40	0.34	0.00	0.11	9.93	5.22	4.62	9.84
7/24/2019	5.23	5.59	10.82	0.34	0.00	0.12	10.11	5.26	4.68	9.93
7/25/2019	4.58	4.26	8.85	0.37	0.00	0.08	10.75	5.63	5.01	10.64
7/26/2019	5.83	5.98	11.80	0.33	0.00	0.08	10.89	5.68	5.02	10.69
7/27/2019	6.11	6.00	12.11	0.34	0.00	0.09	10.44	5.45	4.82	10.27
7/28/2019	3.15	5.96	9.11	0.32	0.00	0.10	10.15	5.29	4.75	10.03
7/29/2019	3.61	7.47	11.07	0.31	0.00	0.09	10.20	5.35	4.76	10.11
7/30/2019	3.69	5.52	9.21	0.33	0.00	0.08	10.43	5.44	4.85	10.29
7/31/2019	3.85	6.56	10.41	0.38	0.00	0.08	11.77	6.13	5.42	11.55
Total	4.84	8.41	307.14	10.39	0.00	2.50	11.12	5.82	5.20	303.19
Avg	4.59	5.32	9.91	0.34	0.00	0.08	9.93	5.18	4.60	9.78
Min	3.15	4.18	7.70	0.27	0.00	0.03	8.22	4.17	3.79	7.96
Max	6.42	7.47	12.11	0.44	0.00	0.12	11.77	6.13	5.42	11.55



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	
7/1/2019	13.11	7.98	0.35	1.08	0.09	0.56	Negative	Negative
7/2/2019	13.65	8.02	0.31	0.64	0.08	0.46	Negative	Negative
7/3/2019	13.56	8.01	0.30	0.57	0.08	0.51	Negative	Negative
7/4/2019	13.45	8.02	0.30	0.39	0.08	0.50	Negative	Negative
7/5/2019	13.72	8.03	0.32	1.02	0.09	0.48	Negative	Negative
7/6/2019	13.96	8.06	0.37	0.44	0.09	0.49	Negative	Negative
7/7/2019	13.84	8.07	0.42	0.72	0.08	0.47	Negative	Negative
7/8/2019	15.28	8.13	0.62	0.82	0.10	0.20	Negative	Negative
7/9/2019	16.41	8.10	0.49	1.84	0.10	0.20	Negative	Negative
7/10/2019	17.32	8.14	0.35	0.41	0.09	0.19	Negative	Negative
7/11/2019	17.87	8.06	0.47	5.42	0.10	0.28	Negative	Negative
7/12/2019	17.98	7.99	0.39	0.68	0.10	0.44	Negative	Negative
7/13/2019	18.33	8.04	0.53	0.98	0.10	0.35	Negative	Negative
7/14/2019	18.22	7.95	0.46	1.10	0.09	0.61	Negative	Negative
7/15/2019	18.57	7.98	0.31	0.75	0.09	0.57	Negative	Negative
7/16/2019	18.79	7.98	0.27	0.59	0.09	0.56	Negative	Negative
7/17/2019	18.97	7.98	0.24	0.46	0.09	0.55	Negative	Negative
7/18/2019	18.80	8.01	0.29	0.44	0.09	0.64	Negative	Negative
7/19/2019	19.26	8.02	0.30	0.42	0.09	0.45	Negative	Negative
7/20/2019	19.51	7.98	0.37	0.53	0.09	0.62	Negative	Negative
7/21/2019	19.33	8.05	0.35	0.72	0.09	0.47	Negative	Negative
7/22/2019	18.99	8.03	0.33	1.71	0.09	0.62	Negative	Negative
7/23/2019	19.01	8.17	0.38	0.64	0.09	0.14	Negative	Negative
7/24/2019	19.55	8.18	0.35	0.56	0.09	0.16	Negative	Negative
7/25/2019	19.68	8.11	0.31	0.72	0.09	0.28	Negative	Negative
7/26/2019	19.79	8.13	0.39	0.55	0.08	0.24	Negative	Negative
7/27/2019	19.84	8.11	0.50	1.72	0.09	0.26	Negative	Negative
7/28/2019	19.86	8.10	0.57	2.14	0.08	0.28	Negative	Negative
7/29/2019	19.93	8.07	0.51	2.04	0.08	0.36	Negative	Negative
7/30/2019	19.85	7.99	0.38	0.91	0.08	0.41	Negative	Negative
7/31/2019	19.69	7.98	0.38	0.75	0.08	0.39	Negative	Negative
Avg	17.6	8.05	0.38	1.02	0.09	0.41	NA	NA
Min	13.1	7.95	0.24	0.39	0.08	0.14	NA	NA
Max	19.9	8.18	0.62	5.42	0.10	0.64	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				Positive/Negative	
	°C		mg/L	mg/L		mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	uS/cm				Total Coliform	E. coli
	AIT-4040-1	AIT-4050-2	AIT-4040-5	Lab		AIT-4050-1	Lab		Lab	Lab	Lab	Lab	Lab	Calculated			Lab	
7/1/2019	11.6	7.39	3.38	0.75	0.74	1.14	0	75	10	12	74	10.6	227	-1.02	0.87	0.45	Negative	Negative
7/2/2019	11.8	7.40	3.36	0.75		1.12	0	77	11	12	70	10.3	227	-1.02	0.89	0.44	Negative	Negative
7/3/2019	12.2	7.42	3.40	0.71		1.14	0	78	11	9	72	10.6	227	-0.98	1.22	0.39	Negative	Negative
7/4/2019	11.9	7.42	3.46	0.68		1.20	0	77	11	12	78	10.1	226	-0.95	0.91	0.44	Negative	Negative
7/5/2019	12.0	7.42	3.43	0.73		1.20	0	77	11	12	72	9.7	226	-0.98	0.89	0.44	Negative	Negative
7/6/2019	12.1	7.42	3.41	0.75		1.22	0	77	11	12	72	10.1	228	-0.98	0.90	0.44	Negative	Negative
7/7/2019	12.0	7.42	3.42	0.74		1.21	0	77	11	13	70	10.4	220	-0.99	0.83	0.46	Negative	Negative
7/8/2019	12.7	7.45	3.42	0.74	0.71	1.20	0	77	11	13	70	10.4	220	-0.94	0.83	0.46	Negative	Negative
7/9/2019	15.3	7.48	3.42	0.77		1.19	0	88	13	13	76	9.3	241	-0.76	1.00	0.45	Negative	Negative
7/10/2019	17.3	7.49	3.42	0.77		1.20	0	88	11	12	78	8.4	263	-0.70	0.92	0.39	Negative	Negative
7/11/2019	18.4	7.55	3.42	0.78		1.25	0	88	11	13	76	8.3	260	-0.63	0.83	0.40	Negative	Negative
7/12/2019	18.3	7.57	3.42	0.80		1.22	0	80	11	12	78	8.4	253	-0.64	0.92	0.43	Negative	Negative
7/13/2019	18.4	7.58	3.42	0.75		1.21	0	80	10	12	76	8.5	256	-0.64	0.83	0.41	Negative	Negative
7/14/2019	18.4	7.56	3.41	0.78		1.23	0	80	10	13	78	8.5	245	-0.65	0.77	0.42	Negative	Negative
7/15/2019	18.5	7.53	3.41	0.73	0.80	1.24	0	84	10	13	78	8.6	240	-0.65	0.77	0.40	Negative	Negative
7/16/2019	18.9	7.53	3.41	0.72		1.22	0	80	11	12	74	8.9	236	-0.68	0.93	0.43	Negative	Negative
7/17/2019	19.1	7.51	3.41	0.77		1.24	0	79	11	11	76	8.6	233	-0.69	1.00	0.42	Negative	Negative
7/18/2019	18.9	7.51	3.41	0.79		1.26	0	78	11	11	76	8.9	224	-0.69	1.00	0.43	Negative	Negative
7/19/2019	19.2	7.52	3.42	0.78		1.23	0	78	11	12	78	8.5	234	-0.68	0.93	0.44	Negative	Negative
7/20/2019	19.7	7.52	3.42	0.79		1.24	0	78	11	12	78	8.5	230	-0.66	0.89	0.43	Negative	Negative
7/21/2019	19.6	7.51	3.42	0.79		1.21	0	77	11	12	78	8.5	272	-0.69	0.90	0.44	Negative	Negative
7/22/2019	18.9	7.52	3.41	0.79		1.24	0	78	11	11	74	8.5	226	-0.70	1.00	0.43	Negative	Negative
7/23/2019	18.3	7.53	3.41	0.81	0.80	1.20	0	78	10	12	72	8.4	225	-0.71	0.82	0.41	Negative	Negative
7/24/2019	19.1	7.59	3.41	0.84		1.21	0	78	10	12	74	8.1	236	-0.63	0.83	0.42	Negative	Negative
7/25/2019	19.8	7.57	3.41	0.81		1.22	0	78	12	13	78	8.4	234	-0.61	0.92	0.48	Negative	Negative
7/26/2019	20.0	7.55	3.41	0.78		1.22	0	76	9	14	74	8.1	234	-0.65	0.64	0.44	Negative	Negative
7/27/2019	20.1	7.56	3.41	0.77		1.22	0	78	11	13	78	8.2	234	-0.62	0.85	0.46	Negative	Negative
7/28/2019	20.0	7.54	3.41	0.78		1.22	0	76	10	12	74	8.4	226	-0.67	0.83	0.43	Negative	Negative
7/29/2019	19.8	7.53	3.41	0.79	0.77	1.22	0	75	11	11	72	8.2	228	-0.70	1.00	0.44	Negative	Negative
7/30/2019	19.6	7.51	3.40	0.78		1.22	0	75	11	13	74	8.5	220	-0.71	0.85	0.48	Negative	Negative
7/31/2019	19.3	7.48	3.41	0.77		1.25	0	74	11	11	72	8.7	216	-0.76	0.99	0.45	Negative	Negative
Avg	17.1	7.50	3.41	0.77	0.76	1.21	0	79	11	12	75	8.9	234	-0.75	0.90	0.43	NA	NA
Min	11.6	7.39	3.36	0.68	0.71	1.12	0	74	9	9	70	8.1	216	-1.02	0.64	0.39	NA	NA
Max	20.1	7.59	3.46	0.84	0.80	1.26	0	88	13	14	78	10.6	272	-0.61	1.22	0.48	NA	NA



Turbidity										
Date	Raw Water		Clarified Water	Membrane Feed Water	Combined Membrane Filtrate					Finished Water
	Avg	Max	Avg	Avg	Avg	Max	# Samples	# > 0.3	% Exceeded	Avg
	NTU									
	AIT-1000-1		AIT-5030-1	AIT-1035-3	AIT-4000-1				Calculated	
7/1/2019	0.35	1.08	0.61	0.37	0.019	0.019	96	0	0.0	0.014
7/2/2019	0.31	0.64	0.64	0.35	0.019	0.019	96	0	0.0	0.014
7/3/2019	0.30	0.57	0.79	0.32	0.019	0.020	96	0	0.0	0.014
7/4/2019	0.30	0.39	0.67	0.31	0.019	0.019	96	0	0.0	0.014
7/5/2019	0.32	1.02	0.75	0.31	0.019	0.019	96	0	0.0	0.015
7/6/2019	0.37	0.44	0.85	0.32	0.019	0.019	96	0	0.0	0.014
7/7/2019	0.42	0.72	0.87	0.36	0.019	0.019	96	0	0.0	0.014
7/8/2019	0.62	0.82	1.45	0.53	0.019	0.019	96	0	0.0	0.014
7/9/2019	0.49	1.84	1.90	0.59	0.019	0.019	96	0	0.0	0.015
7/10/2019	0.35	0.41	2.57	0.59	0.019	0.019	96	0	0.0	0.015
7/11/2019	0.47	5.42	2.96	0.54	0.019	0.019	96	0	0.0	0.015
7/12/2019	0.39	0.68	1.74	0.54	0.019	0.019	96	0	0.0	0.015
7/13/2019	0.53	0.98	2.64	0.53	0.019	0.019	96	0	0.0	0.015
7/14/2019	0.46	1.10	2.41	0.56	0.019	0.019	96	0	0.0	0.015
7/15/2019	0.31	0.75	2.17	0.44	0.019	0.019	96	0	0.0	0.015
7/16/2019	0.27	0.59	1.52	0.34	0.019	0.019	96	0	0.0	0.014
7/17/2019	0.24	0.46	1.56	0.30	0.019	0.019	96	0	0.0	0.014
7/18/2019	0.29	0.44	1.96	0.30	0.019	0.019	96	0	0.0	0.014
7/19/2019	0.30	0.42	1.35	0.36	0.019	0.019	96	0	0.0	0.015
7/20/2019	0.37	0.53	1.30	0.36	0.019	0.019	96	0	0.0	0.015
7/21/2019	0.35	0.72	0.99	0.38	0.019	0.019	96	0	0.0	0.014
7/22/2019	0.33	1.71	1.37	0.37	0.019	0.019	96	0	0.0	0.014
7/23/2019	0.38	0.64	2.41	0.39	0.019	0.019	96	0	0.0	0.014
7/24/2019	0.35	0.56	3.27	0.42	0.019	0.019	96	0	0.0	0.015
7/25/2019	0.31	0.72	1.78	0.36	0.019	0.020	96	0	0.0	0.015
7/26/2019	0.39	0.55	1.94	0.39	0.019	0.019	96	0	0.0	0.015
7/27/2019	0.50	1.72	2.14	0.55	0.019	0.019	96	0	0.0	0.015
7/28/2019	0.57	2.14	1.66	0.51	0.019	0.020	96	0	0.0	0.015
7/29/2019	0.51	2.04	1.99	0.60	0.020	0.020	96	0	0.0	0.015
7/30/2019	0.38	0.91	1.57	0.49	0.019	0.020	96	0	0.0	0.015
7/31/2019	0.38	0.75	1.36	0.45	0.019	0.020	96	0	0.0	0.014
Avg	0.38	1.02	1.65	0.43	0.019	0.019	96	0	0.0	0.015
Min	0.24	0.39	0.61	0.30	0.019	0.019	96	0	0.0	0.014
Max	0.62	5.42	3.27	0.60	0.020	0.020	96	0	0.0	0.015



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
7/1/2019	14.7	14.2	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.4	14.1	PASS	14.7	14.2	PASS	14.4	14.0	PASS	14.8	14.5	PASS	14.3	13.8	PASS
7/2/2019	14.9	14.4	PASS	14.5	14.0	PASS	14.9	14.5	PASS	14.4	14.1	PASS	14.5	14.0	PASS	14.4	14.1	PASS	14.7	14.4	PASS	14.3	13.8	PASS
7/3/2019	14.9	14.4	PASS	14.5	14.1	PASS	14.9	14.5	PASS	14.4	14.1	PASS	15.3	14.9	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.3	13.7	PASS
7/4/2019	15.2	14.8	PASS	14.4	14.0	PASS	14.7	14.3	PASS	14.4	14.1	PASS	14.5	14.0	PASS	14.4	14.1	PASS	14.7	14.4	PASS	14.3	13.8	PASS
7/5/2019	14.8	14.3	PASS	14.4	13.9	PASS	15.4	15.2	PASS	14.4	14.0	PASS	14.5	14.0	PASS	14.4	14.1	PASS	14.7	14.4	PASS	14.4	13.9	PASS
7/6/2019	14.7	14.2	PASS	14.5	14.0	PASS	15.4	15.2	PASS	14.5	14.2	PASS	14.9	14.4	PASS	14.4	14.0	PASS	14.5	14.2	PASS	14.3	13.8	PASS
7/7/2019	14.7	14.2	PASS	14.4	13.9	PASS	14.6	14.2	PASS	14.4	14.1	PASS	14.4	13.9	PASS	14.3	14.0	PASS	14.6	14.3	PASS	14.3	13.7	PASS
7/8/2019	14.8	14.3	PASS	14.3	13.8	PASS	14.8	14.4	PASS	14.4	14.1	PASS	14.5	14.0	PASS	14.3	14.0	PASS	14.8	14.4	PASS	14.3	13.7	PASS
7/9/2019	14.7	14.1	PASS	14.3	13.8	PASS	15.1	14.7	PASS	14.5	14.2	PASS	14.3	13.6	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.3	13.7	PASS
7/10/2019	14.5	14.0	PASS	14.3	13.8	PASS	14.7	14.2	PASS	14.5	14.2	PASS	14.2	13.6	PASS	14.4	14.0	PASS	14.7	14.4	PASS	14.3	13.7	PASS
7/11/2019	14.8	14.4	PASS	14.4	13.9	PASS	14.7	14.2	PASS	14.5	14.3	PASS	14.0	13.5	PASS	14.4	14.1	PASS	14.2	13.8	PASS	14.3	13.7	PASS
7/12/2019	14.4	13.9	PASS	14.3	13.8	PASS	14.2	13.7	PASS	14.5	14.2	PASS	14.2	13.6	PASS	14.4	14.1	PASS	14.8	14.5	PASS	14.3	13.7	PASS
7/13/2019	14.5	14.0	PASS	14.3	13.9	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.3	13.7	PASS	14.4	14.1	PASS	14.7	14.3	PASS	14.3	13.7	PASS
7/14/2019	14.5	14.0	PASS	14.3	13.8	PASS	14.3	13.8	PASS	14.6	14.3	PASS	15.2	14.8	PASS	14.4	14.1	PASS	14.5	14.1	PASS	14.3	13.7	PASS
7/15/2019	14.5	14.0	PASS	14.3	13.8	PASS	15.5	15.4	PASS	14.6	14.3	PASS	14.3	13.7	PASS	14.4	14.1	PASS	14.3	13.9	PASS	14.3	13.7	PASS
7/16/2019	14.6	14.1	PASS	14.3	13.8	PASS	14.4	14.0	PASS	14.6	14.3	PASS	14.2	13.7	PASS	14.4	14.1	PASS	14.5	14.2	PASS	14.3	13.7	PASS
7/17/2019	14.8	14.3	PASS	14.3	13.8	PASS	14.6	14.2	PASS	14.5	14.2	PASS	15.2	14.9	PASS	14.5	14.1	PASS	14.4	14.0	PASS	14.3	13.7	PASS
7/18/2019	14.8	14.4	PASS	14.3	13.8	PASS	16.0	14.3	PASS	14.4	14.1	PASS	14.2	13.7	PASS	14.5	14.2	PASS	14.6	14.3	PASS	14.5	14.1	PASS
7/19/2019	14.5	14.1	PASS	14.3	13.7	PASS	14.7	14.3	PASS	14.5	14.2	PASS	14.2	13.7	PASS	14.5	14.2	PASS	14.6	14.3	PASS	14.2	13.6	PASS
7/20/2019	14.4	14.0	PASS	14.3	13.8	PASS	14.7	14.3	PASS	14.6	14.2	PASS	14.2	13.6	PASS	14.4	14.1	PASS	14.5	14.2	PASS	14.2	13.6	PASS
7/21/2019	14.7	14.3	PASS	14.3	13.8	PASS	14.2	13.8	PASS	14.6	14.3	PASS	14.2	13.7	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.4	14.0	PASS
7/22/2019	14.5	14.0	PASS	14.3	13.8	PASS	14.3	13.8	PASS	14.6	14.3	PASS	14.3	13.7	PASS	14.5	14.2	PASS	15.2	14.9	PASS	14.4	14.0	PASS
7/23/2019	14.7	14.3	PASS	14.2	13.7	PASS	14.9	14.5	PASS	14.5	14.3	PASS	14.3	13.7	PASS	14.4	14.1	PASS	14.4	14.1	PASS	14.5	14.0	PASS
7/24/2019	14.9	14.5	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.5	14.2	PASS	14.0	13.5	PASS	14.5	14.1	PASS	14.4	14.1	PASS	14.3	13.7	PASS
7/25/2019	14.5	14.1	PASS	14.4	13.9	PASS	14.1	13.6	PASS	14.5	14.1	PASS	14.0	13.5	PASS	14.5	14.2	PASS	14.3	14.0	PASS	14.6	14.3	PASS
7/26/2019	14.7	14.2	PASS	14.3	13.8	PASS	14.3	13.8	PASS	14.5	14.2	PASS	14.1	13.5	PASS	14.5	14.1	PASS	14.6	14.2	PASS	14.3	13.7	PASS
7/27/2019	14.8	14.4	PASS	14.6	14.3	PASS	14.2	13.8	PASS	14.5	14.2	PASS	14.0	13.4	PASS	14.5	14.1	PASS	14.6	14.3	PASS	14.5	14.2	PASS
7/28/2019	14.7	14.2	PASS	14.3	13.8	PASS	14.2	13.7	PASS	14.5	14.2	PASS	15.3	15.0	PASS	14.5	14.2	PASS	14.6	14.2	PASS	14.2	13.7	PASS
7/29/2019	15.2	14.8	PASS	14.3	13.7	PASS	14.5	14.1	PASS	14.5	14.2	PASS	14.1	13.5	PASS	14.5	14.2	PASS	15.0	14.7	PASS	14.4	14.0	PASS
7/30/2019	14.7	14.3	PASS	14.3	13.8	PASS	14.5	14.0	PASS	14.5	14.2	PASS	14.1	13.6	PASS	14.5	14.2	PASS	14.6	14.3	PASS	14.3	13.7	PASS
7/31/2019	14.9	14.5	PASS	14.6	14.3	PASS	14.3	13.8	PASS	14.5	14.2	PASS	14.2	13.6	PASS	14.5	14.1	PASS	14.7	14.3	PASS	14.4	14.0	PASS

Integrity test performed every 24-hours



Treatment Chemical Dosages									
Date	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
	Free Cl ₂	Free Cl ₂	OCL	Free Cl ₂	Free Cl ₂	PO ₄	PO ₄	F	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	AIT-1035-2	AIT-1035-4	Added	AIT-4030-1	AIT-4050-1	Added	AIT-4040-5		
7/1/2019	0.56	0.50	0.56	1.22	1.14	3.48	3.38	0.64	0.75
7/2/2019	0.46	0.41	0.58	1.21	1.12	3.48	3.36	0.64	0.75
7/3/2019	0.51	0.40	0.72	1.27	1.14	3.48	3.40	0.64	0.71
7/4/2019	0.50	0.42	0.72	1.29	1.20	3.45	3.46	0.66	0.68
7/5/2019	0.48	0.39	0.79	1.32	1.20	3.44	3.43	0.70	0.73
7/6/2019	0.49	0.38	0.80	1.32	1.22	3.44	3.41	0.71	0.75
7/7/2019	0.47	0.39	0.82	1.31	1.21	3.44	3.42	0.74	0.74
7/8/2019	0.20	0.25	1.10	1.32	1.20	3.44	3.42	0.74	0.74
7/9/2019	0.20	0.14	1.01	1.37	1.19	3.44	3.42	0.74	0.77
7/10/2019	0.19	0.12	1.09	1.42	1.20	3.44	3.42	0.74	0.77
7/11/2019	0.28	0.14	0.96	1.44	1.25	3.44	3.42	0.74	0.78
7/12/2019	0.44	0.23	0.87	1.39	1.22	3.44	3.42	0.74	0.80
7/13/2019	0.35	0.21	0.90	1.39	1.21	3.44	3.42	0.70	0.75
7/14/2019	0.61	0.33	0.84	1.42	1.23	3.44	3.41	0.70	0.78
7/15/2019	0.57	0.39	0.92	1.38	1.24	3.44	3.41	0.70	0.73
7/16/2019	0.56	0.41	0.94	1.37	1.22	3.44	3.41	0.71	0.72
7/17/2019	0.55	0.42	0.94	1.38	1.24	3.44	3.41	0.74	0.77
7/18/2019	0.64	0.45	0.86	1.40	1.26	3.44	3.41	0.74	0.79
7/19/2019	0.45	0.40	0.97	1.35	1.23	3.44	3.42	0.74	0.78
7/20/2019	0.62	0.43	0.87	1.39	1.24	3.44	3.42	0.74	0.79
7/21/2019	0.47	0.39	1.00	1.36	1.21	3.44	3.42	0.74	0.79
7/22/2019	0.62	0.40	0.94	1.37	1.24	3.44	3.41	0.74	0.79
7/23/2019	0.14	0.25	1.30	1.35	1.20	3.44	3.41	0.74	0.81
7/24/2019	0.16	0.10	1.38	1.41	1.21	3.44	3.41	0.74	0.84
7/25/2019	0.28	0.12	1.26	1.39	1.22	3.44	3.41	0.74	0.81
7/26/2019	0.24	0.16	1.32	1.37	1.22	3.44	3.41	0.74	0.78
7/27/2019	0.26	0.17	1.28	1.38	1.22	3.44	3.41	0.74	0.77
7/28/2019	0.28	0.15	1.25	1.40	1.22	3.44	3.41	0.74	0.78
7/29/2019	0.36	0.20	1.25	1.38	1.22	3.44	3.41	0.74	0.79
7/30/2019	0.41	0.25	1.18	1.37	1.22	3.44	3.40	0.74	0.78
7/31/2019	0.39	0.27	1.14	1.37	1.25	3.44	3.41	0.74	0.77
Avg	0.41	0.30	0.99	1.36	1.21	3.44	3.41	0.72	0.77
Min	0.14	0.10	0.56	1.21	1.12	3.44	3.36	0.64	0.68
Max	0.64	0.50	1.38	1.44	1.26	3.48	3.46	0.74	0.84



Disinfection CT														
Date	Pipeline CT				FW Tank CT						Compliance			
	Whitestone	Travel Time	Residual	CT	FW Tank 1	FW Tank 2	Plant	Contact Time	Free Cl ₂	CT	Total CT	Temp	CT	CT
	Flow	Min	RW	Achieved	Min Level	Min Level	Flow	Min	Min	Achieved	Achieved	Avg	Required	Met
	MGD	Minutes	mg/L	mg-min/L	ft	ft	MGD	Minutes	mg/L	mg-min/L	mg-min/L	°C	mg-min/L	Y/N
Entry	Calculated	AIT-1035-2	Calculated	LIT-4005-1	LIT-4005-2	Calculated	Calculated	Calculated	Calculated	Calculated	Calculated	TIT-1000	Calculated	Calculated
7/1/2019	64.3	1,947	0.56	1084	28.9	23.2	8.8	405	1.11	451.11	1,534.78	13.1	6.00	Y
7/2/2019	58.8	2,128	0.46	978	29.0	23.6	8.3	434	1.10	476.61	1,454.51	13.6	6.00	Y
7/3/2019	52.7	2,373	0.51	1210	28.3	19.5	8.4	390	1.10	428.40	1,638.39	13.6	6.00	Y
7/4/2019	52.0	2,406	0.50	1201	28.9	24.0	8.6	421	1.18	497.71	1,699.09	13.5	6.00	Y
7/5/2019	53.3	2,346	0.48	1117	28.9	23.5	8.5	422	1.09	460.90	1,577.87	13.7	6.00	Y
7/6/2019	66.1	1,894	0.49	924	28.8	24.5	8.0	459	1.20	551.32	1,475.21	14.0	6.00	Y
7/7/2019	66.3	1,888	0.47	891	28.8	24.8	8.3	444	1.19	527.15	1,418.27	13.8	6.00	Y
7/8/2019	65.9	1,898	0.20	380	28.9	23.1	9.6	372	1.18	439.72	820.16	15.3	4.00	Y
7/9/2019	59.4	2,107	0.20	430	29.1	24.1	9.7	377	1.17	443.30	872.90	16.4	4.00	Y
7/10/2019	63.3	1,976	0.19	384	29.0	22.2	9.8	358	1.18	423.37	807.46	17.3	4.00	Y
7/11/2019	65.4	1,912	0.28	536	29.0	22.7	10.0	353	1.21	427.46	963.65	17.9	4.00	Y
7/12/2019	66.7	1,876	0.44	826	29.0	24.4	10.0	367	1.20	439.39	1,265.29	18.0	4.00	Y
7/13/2019	77.0	1,624	0.35	574	28.9	21.3	9.9	349	1.19	414.76	989.17	18.3	4.00	Y
7/14/2019	77.3	1,619	0.61	985	29.0	22.4	10.0	351	1.19	417.85	1,403.17	18.2	4.00	Y
7/15/2019	74.8	1,673	0.57	956	29.0	23.1	10.3	347	1.22	421.83	1,377.62	18.6	4.00	Y
7/16/2019	68.2	1,834	0.56	1026	28.9	21.6	9.8	351	1.19	417.83	1,444.20	18.8	4.00	Y
7/17/2019	61.5	2,034	0.55	1122	29.1	23.5	10.8	334	1.23	410.98	1,533.14	19.0	4.00	Y
7/18/2019	61.9	2,020	0.64	1300	29.0	23.1	10.8	330	1.23	405.95	1,706.41	18.8	4.00	Y
7/19/2019	63.8	1,960	0.45	888	29.1	23.8	10.9	334	1.20	399.63	1,287.23	19.3	4.00	Y
7/20/2019	75.3	1,661	0.62	1028	29.0	22.3	9.7	362	1.20	432.52	1,460.67	19.5	4.00	Y
7/21/2019	75.6	1,656	0.47	777	29.0	21.1	8.8	388	1.18	459.20	1,235.87	19.3	4.00	Y
7/22/2019	70.5	1,774	0.62	1098	29.1	21.7	10.9	321	1.22	390.42	1,488.31	19.0	4.00	Y
7/23/2019	67.8	1,846	0.14	267	28.9	24.8	9.8	374	1.16	434.64	701.60	19.0	4.00	Y
7/24/2019	62.3	2,009	0.16	324	29.0	23.7	9.9	363	1.18	429.62	753.58	19.5	4.00	Y
7/25/2019	59.8	2,093	0.28	585	29.0	23.6	10.6	339	1.20	405.03	990.17	19.7	4.00	Y
7/26/2019	66.5	1,882	0.24	460	29.1	24.4	10.7	343	1.19	407.45	867.88	19.8	4.00	Y
7/27/2019	75.6	1,654	0.26	433	28.9	25.6	10.3	364	1.20	435.53	868.51	19.8	4.00	Y
7/28/2019	76.8	1,629	0.28	456	29.0	24.4	10.0	364	1.20	435.72	891.86	19.9	4.00	Y
7/29/2019	77.1	1,622	0.36	576	28.9	23.3	10.1	354	1.20	423.02	999.22	19.9	4.00	Y
7/30/2019	72.2	1,734	0.41	706	29.0	22.7	10.3	344	1.20	414.04	1,119.69	19.8	4.00	Y
7/31/2019	55.8	2,241	0.39	874	29.1	24.0	11.6	315	1.22	385.42	1,259.20	19.7	4.00	Y
Avg	66.2	1,913	0.41	787	29.0	23.2	9.8	369	1.18	435.74	1,222.74	17.6	4.45	NA
Min	52.0	1,619	0.14	267	28.3	19.5	8.0	315	1.09	385.42	701.60	13.1	4.00	NA
Max	77.3	2,406	0.64	1,300	29.1	25.6	11.6	459	1.23	551.32	1,706.41	19.9	6.00	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	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
	7/1/2019									0.68	0.13	0.31	0.61	0.09	0.84	0.55	0.85	0.82	0.57	0.58	0.58			
7/2/2019	0.20	0.53	0.27	0.61	1.00																		0.57	
7/3/2019																								
7/4/2019																								
7/5/2019									0.82	0.24	0.60	0.78	0.22	0.85	0.66									
7/6/2019																								
7/7/2019																								
7/8/2019																								1.00
7/9/2019							0.98	1.05																
7/10/2019									0.78	0.32	0.50	0.69	0.16	0.92	0.62									
7/11/2019				0.50	1.10											0.78	0.73	0.79	0.78	0.58			0.56	
7/12/2019																								
7/13/2019																								
7/14/2019																								
7/15/2019									0.67	0.14	0.39	0.86	0.12	0.97	0.62									
7/16/2019								1.06													0.97			0.98
7/17/2019																								
7/18/2019		0.52	0.25	0.72	1.15				0.78	0.13	0.23	0.68	0.18	0.93	0.53									
7/19/2019																								
7/20/2019																								
7/21/2019																								
7/22/2019																								
7/23/2019																								
7/24/2019									0.71	0.19	0.40	0.67	0.17	0.94	0.41									0.89
7/25/2019																								
7/26/2019																								
7/27/2019																								
7/28/2019																								
7/29/2019									0.74	0.11	0.34	0.60	0.16	0.97	0.47									0.9
7/30/2019																								
7/31/2019																								
Average	0.20			0.67				1.03					0.52					0.71			0.97		0.57	0.97
Min	0.20			0.25				0.98					0.09					0.57			0.97		0.56	0.89
Max	0.20			1.15				1.06					0.97					0.85			0.97		0.57	1.10



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 Cl₂)

WSSN:	2465		2960			3565			3570		4280		4440			5330		5335		5540	7125			7134
	Fraser Twp.		Hampton Twp.			Kawkawlin Twp.			Kawkawlin Met.		Merritt Twp.		Monitor Twp.			City Pinconning		Pinconning Twp.		Portsmouth	Williams Twp.			Wisner
Date	34	35	37	38	39	40	41	42	43	45	46	48	49	52	55	58	59	61	63	65	68	69	70	72
7/1/2019			0.53	0.65	0.45																			
7/2/2019											0.40									0.58	0.71	0.79	0.64	0.35
7/3/2019																								
7/4/2019																								
7/5/2019																								
7/6/2019																								
7/7/2019																								
7/8/2019			0.58	0.77	0.51																			
7/9/2019	0.82	0.81				0.86	0.58		0.64				1.00	0.88	0.77	0.44		0.61	0.63					
7/10/2019																								
7/11/2019											0.42										0.65	0.80	0.35	
7/12/2019																								
7/13/2019																								
7/14/2019																								
7/15/2019																								
7/16/2019								0.79	0.58				1.08	0.76	0.65	0.65								
7/17/2019									0.48															
7/18/2019			0.65	0.44																				
7/19/2019																								
7/20/2019																								
7/21/2019																								
7/22/2019			0.66		0.38																			
7/23/2019																								
7/24/2019																								
7/25/2019																								
7/26/2019																								
7/27/2019																								
7/28/2019																								
7/29/2019																								
7/30/2019																								
7/31/2019																								
Average	0.82		0.56			0.74			0.57		0.41		0.86			0.55		0.62		0.58		0.66		0.35
Min	0.81		0.38			0.58			0.48		0.40		0.65			0.44		0.61		0.58		0.35		0.35
Max	0.82		0.77			0.86			0.64		0.42		1.08			0.65		0.63		0.58		0.80		0.35

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 Commisison, 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

July, 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	0.20	1	1	0	0
BAY	Bangor Township	0390	0.67	10	10	0	0
BAY	Bangor-Monitor Dist.	0400	1.03	3	3	0	0
BAY	Bay City	0470	0.52	40	49	0	0
BAY	Bay County (Frankl./Monitor/Portsm.)	0485	0.71	10	10	0	0
BAY	Beaver Road Area	0517	0.97	1	1	0	0
BAY	Beaver Township	0518	0.57	2	2	0	0
BAY	Essexville	2180	0.97	4	5	0	0
BAY	Fraser Township	2465	0.82	2	2	0	0
BAY	Hampton Township	2960	0.56	10	10	0	0
BAY	Kawkawlin Township	3565	0.74	3	3	0	0
BAY	Kawkawlin Metro Dist.	3570	0.57	2	3	1	3
BAY	Merritt Township	4280	0.41	2	2	0	0
BAY	Monitor Township	4440	0.86	6	6	0	0
BAY	City of Pinconning	5330	0.55	2	2	0	0
BAY	Pinconning Township	5335	0.62	2	2	0	0
BAY	Portsmouth Township	5540	0.58	1	1	0	0
BAY	Williams Township	7125	0.66	6	6	0	0
Tuscola	Wisner	7134	0.35	1	1	0	0
Average Free Cl2 Residual of All Distribution Sites			0.65	mg/L			
1. Total distribution samples			119				
2. Total distribution samples with detectable free cl2 residual			119				
3. Total distribution samples with no detectable free cl2 residual			0				
4. Total distribution samples with no detectable free cl2 residual and HPC was <500			0				
5. Total distribution samples with no detectable free cl2 residual and HPC was >500			0				
6. Percent of distribution samples with no detectable free cl2 residual			0.00%				
7. Percent shown line #6 in previous monthly report			0.00%				
<p align="center">7/16/2019, Sample #43, 105 Grove St was Positive for Total Coliform, Negative for E. coli 7/17/2019 Sample #43, 43A and 43B Repeat Samples were Negative for Total Coliform and E. coli Free chlorine at #43A was 0.41 mg/L, free chlorine at #43B was 0.61 mg/L</p>							

