

# Bay Area WTP

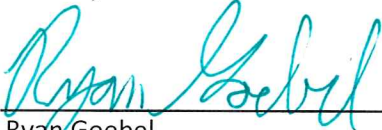
## Monthly Operations Report



June, 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

June, 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	<u>17.4</u>	Millions of Gallons per Day
Treatment Rate, Maximum	<u>11.4</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>6,223</u>	Gallons	Estimated Supply:	<u>70.6</u>	days
Caustic Soda on hand:	<u>168</u>	Gallons	Estimated Supply:	<u>35.8</u>	days
Corrosion Inhibitor on hand:	<u>251</u>	Gallons	Estimated Supply:	<u>9.0</u>	days
Hydrofluosilicic Acid on hand:	<u>550</u>	Gallons	Estimated Supply:	<u>19.3</u>	days
Aluminum Chlorohydrate on hand:	<u>1,007</u>	Gallons	Estimated Supply:	<u>131.4</u>	days
Sulfuric Acid on hand:	<u>566</u>	Gallons	Estimated Supply:	<u>217.5</u>	days
Sodium Bisulfite on hand:	<u>703</u>	Gallons	Estimated Supply:	<u>126.1</u>	days
Citric Acid on hand:	<u>3,117</u>	Gallons	Estimated Supply:	<u>377.6</u>	days
Cost of All Chemicals per Million Gallons:	<u>60.94</u>	Dollars			
Estimated Electrical Cost per Million Gallons:	<u>94.21</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. Yes\*

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

\*On 6/11/18, all online turbidimeters were calibrated; each turbidimeter was out of service for less than 15 minutes.



# Bay Area WTP Monthly Operating Report

Date	Flows																	
	Raw Water (MG)			Clarified (MG)			Wasted (MG)			Sludge (MG)			Treated (MG)			Finished Water Pumped (MG)		
	North	South	Total	Total	Total	Total	Total	Total	Total	Total	Total	N. Euclid	Lauria Road	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	FIT-4000-1	FIT-4040-1	FIT-4040-2	Calculated	FIT-4040-1	FIT-4040-2	Calculated		
6/1/2018	1.95	6.49	8.44	0.33	0.00	0.06	9.19	4.45	4.29	8.74								
6/2/2018	2.24	6.21	8.45	0.30	0.00	0.05	7.51	3.73	3.55	7.28								
6/3/2018	2.19	4.41	6.59	0.28	0.00	0.05	7.94	3.98	3.80	7.79								
6/4/2018	1.95	6.03	7.97	0.30	0.00	0.06	9.12	4.49	4.36	8.85								
6/5/2018	1.88	7.85	9.74	0.34	0.00	0.05	8.73	4.43	4.25	8.68								
6/6/2018	1.90	7.95	9.85	0.35	0.00	0.05	9.62	4.78	4.63	9.41								
6/7/2018	2.57	7.59	10.16	0.35	0.00	0.05	10.46	5.17	5.01	10.18								
6/8/2018	3.62	7.36	10.98	0.32	0.00	0.05	9.78	4.87	4.71	9.58								
6/9/2018	3.79	5.12	8.91	0.31	0.00	0.05	8.49	4.18	3.98	8.16								
6/10/2018	2.97	4.23	7.20	0.30	0.00	0.05	8.45	4.31	4.14	8.45								
6/11/2018	3.56	4.66	8.22	0.33	0.00	0.07	9.84	4.88	4.73	9.61								
6/12/2018	3.76	6.59	10.34	0.33	0.00	0.05	10.68	5.35	5.16	10.51								
6/13/2018	4.06	7.72	11.78	0.41	0.00	0.06	10.86	5.44	5.24	10.68								
6/14/2018	4.19	8.07	12.25	0.38	0.00	0.05	11.30	5.66	5.47	11.14								
6/15/2018	4.30	7.98	12.27	0.41	0.00	0.05	11.45	5.72	5.47	11.19								
6/16/2018	4.02	5.74	9.76	0.32	0.00	0.06	8.91	4.48	4.28	8.76								
6/17/2018	3.94	4.93	8.87	0.38	0.00	0.05	10.76	5.36	5.15	10.51								
6/18/2018	5.16	5.41	10.57	0.40	0.00	0.06	10.59	5.30	5.07	10.37								
6/19/2018	5.52	5.39	10.92	0.36	0.00	0.05	10.18	5.11	4.85	9.96								
6/20/2018	4.97	5.72	10.68	0.38	0.00	0.05	10.47	5.32	5.06	10.38								
6/21/2018	4.70	6.34	11.04	0.39	0.00	0.05	10.65	5.26	5.00	10.27								
6/22/2018	4.86	6.35	11.21	0.37	0.00	0.05	10.13	5.08	4.82	9.90								
6/23/2018	3.33	5.01	8.33	0.32	0.00	0.05	8.51	4.39	4.12	8.51								
6/24/2018	2.68	5.23	7.90	0.33	0.00	0.05	8.57	4.30	4.05	8.35								
6/25/2018	2.48	6.61	9.09	0.34	0.00	0.05	9.67	4.86	4.63	9.49								
6/26/2018	2.43	7.75	10.18	0.34	0.00	0.05	9.83	5.03	4.76	9.79								
6/27/2018	2.45	7.69	10.14	0.32	0.00	0.05	9.06	4.42	4.11	8.53								
6/28/2018	2.41	5.15	7.56	0.32	0.00	0.06	8.81	4.48	4.19	8.67								
6/29/2018	4.44	5.38	9.82	0.35	0.00	0.08	10.42	5.26	4.97	10.23								
6/30/2018	5.32	6.19	11.51	0.35	0.00	0.08	10.33	5.27	4.99	10.27								
<b>Total</b>	<b>103.62</b>	<b>187.13</b>	<b>290.75</b>	<b>10.30</b>	<b>0.00</b>	<b>1.60</b>	<b>290.32</b>	<b>145.33</b>	<b>138.88</b>	<b>284.21</b>								
<b>AVG</b>	<b>3.45</b>	<b>6.24</b>	<b>9.69</b>	<b>0.34</b>	<b>0.00</b>	<b>0.05</b>	<b>9.68</b>	<b>4.84</b>	<b>4.63</b>	<b>9.47</b>								
<b>Min</b>	<b>1.88</b>	<b>4.23</b>	<b>6.59</b>	<b>0.28</b>	<b>0.00</b>	<b>0.05</b>	<b>7.51</b>	<b>3.73</b>	<b>3.55</b>	<b>7.28</b>								
<b>Max</b>	<b>5.52</b>	<b>8.07</b>	<b>12.27</b>	<b>0.41</b>	<b>0.00</b>	<b>0.08</b>	<b>11.45</b>	<b>5.72</b>	<b>5.47</b>	<b>11.19</b>								



**Raw Water Analysis**

Date	Temp		pH		Turbidity		F <sup>-</sup>		Free Cl (Mem. Feed)		Bacti	
	Average		Average		Average		Grab		Average		Positive/Negative	
	°C		NTU		mg/L		mg/L		mg/L		Total Coliform	
	TIT-1000		AIT-1000-2		AIT-1000-1		Lab		AIT-1035-2		Lab	
6/1/2018	12.43	8.05	1.15	7.74	0.10	0.07	Negative	Negative				
6/2/2018	12.23	7.96	1.54	3.43	0.09	0.16	Negative	Negative				
6/3/2018	12.89	7.99	3.30	7.63	0.10	0.15	Negative	Negative				
6/4/2018	13.35	7.97	2.03	3.21	0.10	0.12	Negative	Negative				
6/5/2018	13.22	7.92	1.26	3.26	0.09	0.22	Negative	Negative				
6/6/2018	12.79	7.89	1.00	2.11	0.09	0.38	Negative	Negative				
6/7/2018	12.66	7.91	1.09	5.66	0.07	0.40	Negative	Negative				
6/8/2018	12.60	7.92	1.05	1.83	0.08	0.40	Negative	Negative				
6/9/2018	12.75	7.95	1.50	9.29	0.08	0.39	Negative	Negative				
6/10/2018	13.34	7.98	0.86	1.83	0.08	0.30	Negative	Negative				
6/11/2018	13.64	7.98	0.74	3.04	0.07	0.27	Negative	Negative				
6/12/2018	14.13	8.04	1.09	1.66	0.08	0.16	Negative	Negative				
6/13/2018	14.43	8.00	0.93	2.44	0.08	0.16	Negative	Negative				
6/14/2018	14.28	7.99	1.51	11.78	0.07	0.22	Negative	Negative				
6/15/2018	14.26	7.95	0.76	1.15	0.07	0.36	Negative	Negative				
6/16/2018	14.36	7.95	1.03	1.72	0.07	0.40	Negative	Negative				
6/17/2018	14.58	7.98	0.74	2.99	0.07	0.36	Negative	Negative				
6/18/2018	14.36	7.96	0.59	0.77	0.07	0.38	Negative	Negative				
6/19/2018	14.02	7.96	0.48	0.67	0.07	0.38	Negative	Negative				
6/20/2018	14.32	7.98	0.53	0.95	0.07	0.36	Negative	Negative				
6/21/2018	15.26	8.05	0.51	0.72	0.07	0.23	Negative	Negative				
6/22/2018	15.58	8.07	1.13	2.98	0.07	0.15	Negative	Negative				
6/23/2018	15.95	8.06	1.79	2.83	0.07	0.12	Negative	Negative				
6/24/2018	16.22	8.06	0.91	8.44	0.08	0.12	Negative	Negative				
6/25/2018	16.39	8.06	1.04	1.22	0.08	0.10	Negative	Negative				
6/26/2018	16.47	8.08	2.47	73.15	0.08	0.08	Negative	Negative				
6/27/2018	16.67	8.08	1.03	1.83	0.08	0.08	Negative	Negative				
6/28/2018	16.93	8.13	1.35	4.87	0.11	0.05	Negative	Negative				
6/29/2018	17.13	8.13	1.48	10.58	0.11	0.03	Negative	Negative				
6/30/2018	17.22	8.05	1.33	1.82	0.11	0.08	Negative	Negative				
Avg	14.5	8.00	1.21	6.05	0.08	0.22	NA	NA				
Min	12.2	7.89	0.48	0.67	0.07	0.03	NA	NA				
Max	17.2	8.13	3.30	73.15	0.11	0.40	NA	NA				



Finished Water Analysis																				
Date	Temp Average °C	pH Average	Phosphate Average mg/L	Fluoride		Free Cl <sub>2</sub> Average mg/L	Alkalinity (as CaCO <sub>3</sub> )		Chloride mg/L	Sulfate mg/L	Calcium (as CaCO <sub>3</sub> )		Dissolved Oxygen		Conductivity Grab uS/cm	Langelier Saturation Index	Chloride: Sulfate Mass Ratio	Larson- Skold Index	Bacti	
				Tap	Dist		Carbonate	Bicarbonate			Grab	Lab	Grab	Lab					Grab	Lab
6/1/2018	12.3	7.64	AIT-4040-5 3.16	Lab 0.82	AIT-4050-1 0.98	0	Lab 84	10	20	Lab 74	Lab 9.5	Lab 246	-0.71	Calculated 0.50	0.51	Negative	Lab Negative			
6/2/2018	13.0	7.66	3.16	0.80	1.00	0	85	11	16	76	9.2	244	-0.66	0.69	0.46	Negative	Negative			
6/3/2018	13.2	7.63	3.19	0.79	1.01	0	84	8	17	74	9.2	240	-0.70	0.47	0.42	Negative	Negative			
6/4/2018	13.9	7.65	3.24	0.79	1.00	0	86	11	14	74	8.6	249	-0.65	0.79	0.43	Negative	Negative			
6/5/2018	14.4	7.63	3.23	0.80	1.03	0	81	10	16	70	9.0	238	-0.71	0.63	0.47	Negative	Negative			
6/6/2018	14.0	7.59	3.21	0.79	1.02	0	79	10	16	68	9.8	227	-0.78	0.63	0.48	Negative	Negative			
6/7/2018	13.5	7.56	3.21	0.78	1.00	0	78	9	15	64	9.5	218	-0.85	0.60	0.45	Negative	Negative			
6/8/2018	13.3	7.57	3.20	0.77	1.00	0	78	9	15	68	10.3	217	-0.82	0.60	0.45	Negative	Negative			
6/9/2018	13.1	7.57	3.18	0.79	0.99	0	77	9	15	68	9.4	220	-0.83	0.60	0.45	Negative	Negative			
6/10/2018	13.4	7.58	3.17	0.80	0.99	0	80	10	15	68	9.4	221	-0.79	0.67	0.46	Negative	Negative			
6/11/2018	14.2	7.59	3.17	0.78	1.00	0	77	10	17	68	8.9	221	-0.78	0.59	0.51	Negative	Negative			
6/12/2018	15.2	7.62	3.18	0.82	0.99	0	82	10	15	74	10.2	238	-0.67	0.67	0.45	Negative	Negative			
6/13/2018	15.8	7.62	3.27	0.81	1.00	0	83	10	16	74	8.8	241	-0.65	0.63	0.45	Negative	Negative			
6/14/2018	16.0	7.62	3.20	0.77	0.98	0	82	10	15	70	8.5	228	-0.67	0.67	0.45	Negative	Negative			
6/15/2018	16.0	7.60	3.18	0.78	1.01	0	82	10	14	66	8.5	218	-0.72	0.71	0.43	Negative	Negative			
6/16/2018	15.9	7.57	3.17	0.77	0.99	0	77	9	13	68	8.9	216	-0.76	0.69	0.42	Negative	Negative			
6/17/2018	16.1	7.58	3.17	0.76	1.02	0	76	9	14	68	8.9	215	-0.75	0.64	0.44	Negative	Negative			
6/18/2018	16.2	7.59	3.18	0.77	1.01	0	76	10	14	68	9.3	214	-0.74	0.71	0.46	Negative	Negative			
6/19/2018	15.1	7.59	3.19	0.77	1.02	0	75	10	12	68	9.4	216	-0.77	0.83	0.44	Negative	Negative			
6/20/2018	15.7	7.60	3.22	0.76	1.00	0	78	11	12	68	8.8	229	-0.73	0.92	0.44	Negative	Negative			
6/21/2018	16.6	7.64	3.20	0.79	1.01	0	80	11	17	64	7.4	234	-0.69	0.65	0.51	Negative	Negative			
6/22/2018	17.1	7.65	3.19	0.78	1.00	0	81	12	12	64	8.3	239	-0.67	1.00	0.45	Negative	Negative			
6/23/2018	17.5	7.65	3.19	0.80	1.01	0	82	12	13	66	8.1	241	-0.63	0.92	0.46	Negative	Negative			
6/24/2018	17.9	7.66	3.19	0.78	1.01	0	83	13	12	74	7.9	248	-0.56	1.08	0.46	Negative	Negative			
6/25/2018	18.2	7.68	3.19	0.78	1.00	0	81	12	12	78	7.6	250	-0.53	1.00	0.45	Negative	Negative			
6/26/2018	18.3	7.66	3.19	0.78	0.99	0	80	13	14	76	8.1	253	-0.56	0.93	0.51	Negative	Negative			
6/27/2018	18.3	7.66	3.18	0.79	0.99	0	94	16	16	76	8.0	266	-0.48	1.00	0.51	Negative	Negative			
6/28/2018	18.7	7.67	3.18	0.81	1.00	0	94	16	18	88	7.8	278	-0.37	0.89	0.54	Negative	Negative			
6/29/2018	19.1	7.70	3.19	0.81	1.00	0	94	16	18	88	7.8	278	-0.37	0.89	0.54	Negative	Negative			
6/30/2018	19.5	7.68	3.24	0.82	1.02	0	94	16	18	86	8.2	270	-0.39	0.89	0.54	Negative	Negative			
Avg	15.6	7.62	3.19	0.79	1.00	0	81	11	15	71	8.8	235	-0.68	0.74	0.46	NA	NA			
Min	12.3	7.56	3.16	0.76	0.98	0	74	8	12	64	7.4	214	-0.85	0.47	0.42	NA	NA			
Max	19.5	7.70	3.27	0.82	1.03	0	94	16	20	88	10.3	278	-0.37	1.08	0.54	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											
6/1/2018	1.15	7.74	1.90	1.07	0.015	0.015	96	0	0.0	0.010	
6/2/2018	1.54	3.43	1.59	1.36	0.015	0.015	96	0	0.0	0.010	
6/3/2018	3.30	7.63	2.06	1.99	0.015	0.015	96	0	0.0	0.010	
6/4/2018	2.03	3.21	1.87	2.53	0.015	0.015	96	0	0.0	0.010	
6/5/2018	1.26	3.26	1.32	1.84	0.015	0.015	96	0	0.0	0.010	
6/6/2018	1.00	2.11	1.25	1.46	0.014	0.015	96	0	0.0	0.010	
6/7/2018	1.09	5.66	1.35	1.29	0.014	0.015	96	0	0.0	0.010	
6/8/2018	1.05	1.83	1.11	1.19	0.014	0.015	96	0	0.0	0.010	
6/9/2018	1.50	9.29	0.84	1.26	0.014	0.015	96	0	0.0	0.010	
6/10/2018	0.86	1.83	1.12	1.31	0.015	0.015	96	0	0.0	0.010	
6/11/2018	0.74	3.04	1.29	0.94	0.015	0.027	96	0	0.0	0.011	
6/12/2018	1.09	1.66	2.12	1.06	0.012	0.028	96	0	0.0	0.011	
6/13/2018	0.93	2.44	1.78	1.05	0.011	0.011	96	0	0.0	0.011	
6/14/2018	1.51	11.78	1.40	1.30	0.011	0.011	96	0	0.0	0.011	
6/15/2018	0.76	1.15	0.95	0.95	0.011	0.011	96	0	0.0	0.011	
6/16/2018	1.03	1.72	1.06	0.86	0.011	0.011	96	0	0.0	0.011	
6/17/2018	0.74	2.99	1.11	0.84	0.011	0.011	96	0	0.0	0.011	
6/18/2018	0.59	0.77	1.01	0.66	0.011	0.011	96	0	0.0	0.011	
6/19/2018	0.48	0.67	1.10	0.55	0.011	0.011	96	0	0.0	0.011	
6/20/2018	0.53	0.95	1.58	0.51	0.011	0.011	96	0	0.0	0.011	
6/21/2018	0.51	0.72	1.45	0.53	0.011	0.011	96	0	0.0	0.011	
6/22/2018	1.13	2.98	1.78	0.65	0.011	0.011	96	0	0.0	0.011	
6/23/2018	1.79	2.83	2.06	1.40	0.011	0.011	96	0	0.0	0.011	
6/24/2018	0.91	8.44	1.70	1.19	0.011	0.011	96	0	0.0	0.011	
6/25/2018	1.04	1.22	1.58	1.04	0.011	0.012	96	0	0.0	0.011	
6/26/2018	2.47	73.15	2.78	1.34	0.011	0.013	90	0	0.0	0.011	
6/27/2018	1.03	1.83	1.81	1.56	0.011	0.011	96	0	0.0	0.011	
6/28/2018	1.35	4.87	2.22	1.25	0.011	0.011	96	0	0.0	0.011	
6/29/2018	1.48	10.58	3.04	1.35	0.011	0.011	96	0	0.0	0.011	
6/30/2018	1.33	1.82	2.71	1.20	0.011	0.011	96	0	0.0	0.011	
Avg	1.21	6.05	1.63	1.18	0.012	0.014	96	0	0.0	0.011	
Min	0.48	0.67	0.84	0.51	0.011	0.011	90	0	0.0	0.010	
Max	3.30	73.15	3.04	2.53	0.015	0.028	96	0	0.0	0.011	

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



Date	Membrane Integrity																										
	Membrane 1			Membrane 2			Membrane 3			Membrane 4			Membrane 5			Membrane 6			Membrane 7			Membrane 8					
Air Hold 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				
6/1/2018	15.1	14.7	PASS	14.3	13.8	PASS	14.8	14.4	PASS	14.4	14.1	PASS	15.3	15.0	PASS	14.5	14.3	PASS	14.5	14.4	PASS	15.0	14.6	PASS	14.4	13.9	PASS
6/2/2018	14.9	14.5	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.5	14.2	PASS	15.5	15.2	PASS	14.4	14.1	PASS	14.4	14.3	PASS	14.9	14.6	PASS	14.4	13.9	PASS
6/3/2018	14.9	14.4	PASS	14.4	14.0	PASS	15.5	15.3	PASS	14.5	14.3	PASS	15.3	15.0	PASS	14.5	14.3	PASS	14.5	14.3	PASS	14.6	14.3	PASS	14.4	13.9	PASS
6/4/2018	15.0	14.6	PASS	14.3	13.9	PASS	15.0	14.6	PASS	14.4	14.2	PASS	15.6	15.4	PASS	14.4	14.2	PASS	14.5	14.2	PASS	14.6	14.3	PASS	14.6	14.3	PASS
6/5/2018	15.0	14.5	PASS	14.6	14.2	PASS	14.8	14.4	PASS	14.4	14.1	PASS	15.1	14.6	PASS	14.4	14.1	PASS	14.4	14.1	PASS	15.2	14.9	PASS	14.3	14.0	PASS
6/6/2018	15.2	14.9	PASS	14.3	13.9	PASS	15.5	15.3	PASS	14.5	14.3	PASS	14.9	14.5	PASS	14.5	14.2	PASS	14.5	14.2	PASS	15.3	15.1	PASS	14.8	14.5	PASS
6/7/2018	15.0	14.6	PASS	14.4	14.0	PASS	15.4	15.2	PASS	14.4	14.2	PASS	14.9	14.4	PASS	14.5	14.3	PASS	14.5	14.3	PASS	14.7	14.3	PASS	14.4	14.1	PASS
6/8/2018	15.1	14.6	PASS	14.4	13.9	PASS	15.4	15.3	PASS	14.8	14.5	PASS	15.4	15.2	PASS	14.5	14.3	PASS	14.5	14.3	PASS	14.5	14.2	PASS	14.4	14.1	PASS
6/9/2018	14.9	14.4	PASS	14.5	14.1	PASS	15.5	15.3	PASS	14.5	14.3	PASS	15.4	15.1	PASS	14.5	14.3	PASS	14.5	14.3	PASS	15.3	15.1	PASS	14.6	14.3	PASS
6/10/2018	14.9	14.4	PASS	14.4	14.0	PASS	15.3	15.0	PASS	14.5	14.1	PASS	15.5	15.2	PASS	14.5	14.3	PASS	14.5	14.3	PASS	14.8	14.5	PASS	14.4	14.0	PASS
6/11/2018	14.9	14.4	PASS	14.4	13.9	PASS	15.2	14.9	PASS	14.5	14.1	PASS	15.4	15.1	PASS	14.5	14.3	PASS	14.5	14.3	PASS	14.5	14.2	PASS	14.6	14.2	PASS
6/12/2018	15.1	14.7	PASS	14.4	14.0	PASS	15.2	14.9	PASS	14.4	14.0	PASS	15.7	15.5	PASS	14.4	14.0	PASS	14.5	14.3	PASS	14.5	14.2	PASS	14.6	14.2	PASS
6/13/2018	15.0	14.6	PASS	14.7	14.4	PASS	15.2	14.8	PASS	14.4	14.1	PASS	15.6	15.4	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.6	14.3	PASS	14.3	13.8	PASS
6/14/2018	15.6	15.4	PASS	14.5	14.0	PASS	14.5	14.0	PASS	14.5	14.1	PASS	15.1	14.7	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.6	14.3	PASS	14.4	14.1	PASS
6/15/2018	15.0	14.7	PASS	14.4	14.0	PASS	15.5	15.3	PASS	14.4	14.0	PASS	15.4	15.1	PASS	14.4	14.0	PASS	14.5	14.2	PASS	15.5	15.4	PASS	14.8	14.5	PASS
6/16/2018	15.1	14.7	PASS	14.4	14.0	PASS	15.2	14.8	PASS	14.4	14.0	PASS	14.8	14.4	PASS	14.4	14.0	PASS	14.5	14.2	PASS	14.8	14.5	PASS	14.7	14.4	PASS
6/17/2018	15.2	14.8	PASS	14.3	13.9	PASS	14.7	14.3	PASS	14.4	14.0	PASS	15.4	15.2	PASS	14.4	14.0	PASS	14.5	14.2	PASS	14.8	14.5	PASS	14.4	13.9	PASS
6/18/2018	15.2	14.9	PASS	15.0	14.8	PASS	15.6	15.4	PASS	14.6	14.3	PASS	15.6	15.4	PASS	14.5	14.2	PASS	14.5	14.3	PASS	15.2	14.9	PASS	14.4	13.9	PASS
6/19/2018	15.5	15.4	PASS	14.4	14.0	PASS	14.9	14.5	PASS	14.4	14.1	PASS	15.6	15.5	PASS	14.5	14.2	PASS	14.5	14.2	PASS	15.0	14.7	PASS	14.9	14.8	PASS
6/20/2018	15.0	14.6	PASS	14.4	14.0	PASS	15.2	14.8	PASS	14.4	14.0	PASS	15.1	14.6	PASS	14.5	14.2	PASS	14.5	14.2	PASS	15.3	15.2	PASS	14.4	13.9	PASS
6/21/2018	15.0	14.6	PASS	14.4	14.0	PASS	15.1	14.7	PASS	14.4	14.0	PASS	14.8	14.3	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.8	14.5	PASS	14.4	13.8	PASS
6/22/2018	15.4	15.2	PASS	14.3	13.9	PASS	14.7	14.2	PASS	14.5	14.1	PASS	15.6	15.4	PASS	14.5	14.2	PASS	14.5	14.3	PASS	15.2	14.9	PASS	14.3	13.8	PASS
6/23/2018	15.1	14.7	PASS	14.3	13.9	PASS	15.3	14.9	PASS	14.4	14.1	PASS	14.8	14.3	PASS	14.5	14.2	PASS	14.5	14.2	PASS	14.4	14.1	PASS	14.6	14.2	PASS
6/24/2018	15.0	14.6	PASS	14.3	13.9	PASS	14.9	14.4	PASS	14.4	14.1	PASS	15.5	15.3	PASS	14.5	14.3	PASS	14.5	14.2	PASS	14.8	14.4	PASS	14.4	14.0	PASS
6/25/2018	15.2	14.8	PASS	14.4	13.9	PASS	15.2	14.9	PASS	14.6	14.3	PASS	15.6	15.5	PASS	14.5	14.3	PASS	14.5	14.2	PASS	14.8	14.4	PASS	14.4	14.0	PASS
6/26/2018	15.3	15.0	PASS	14.3	13.9	PASS	15.5	15.3	PASS	14.6	14.2	PASS	14.5	14.1	PASS	14.4	14.1	PASS	14.5	14.2	PASS	14.5	14.1	PASS	14.7	14.4	PASS
6/27/2018	15.0	14.6	PASS	14.3	13.9	PASS	15.5	15.3	PASS	14.4	14.1	PASS	14.7	14.2	PASS	14.6	14.3	PASS	14.6	14.3	PASS	15.1	14.7	PASS	14.4	13.9	PASS
6/28/2018	14.7	14.4	PASS	14.3	13.9	PASS	15.4	15.1	PASS	14.4	14.2	PASS	14.7	14.2	PASS	14.5	14.3	PASS	14.5	14.3	PASS	14.4	14.1	PASS	14.8	14.6	PASS
6/29/2018	14.7	14.4	PASS	14.6	14.3	PASS	15.3	15.0	PASS	14.5	14.3	PASS	14.8	14.4	PASS	14.6	14.3	PASS	14.6	14.3	PASS	14.4	14.1	PASS	14.8	14.6	PASS
6/30/2018	15.5	15.2	PASS	14.3	13.8	PASS	15.3	15.0	PASS	14.4	14.1	PASS	14.5	14.0	PASS	14.5	14.2	PASS	14.5	14.2	PASS	15.3	15.0	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	mg/L	OCL mg/L	Average Added	Free Cl <sub>2</sub> mg/L	Average AIT-1035-2	OCL mg/L	Average Added	Free Cl <sub>2</sub> mg/L	Average AIT-4030-1	Free Cl <sub>2</sub> mg/L	Average AIT-4050-1	OCL mg/L	Average Added						
															Average		Average		Average	
															AIT-4000-1		AIT-4030-1		AIT-4050-1	
6/1/2018	9.2		0.00	0.07	1.08	1.15	0.98	0.00												
6/2/2018	7.5		0.00	0.16	1.02	1.18	1.00	0.00												
6/3/2018	7.9		0.00	0.15	1.05	1.18	1.01	0.00												
6/4/2018	9.1		0.00	0.12	1.07	1.15	1.00	0.00												
6/5/2018	8.7		0.00	0.22	0.93	1.10	1.03	0.00												
6/6/2018	9.6		0.00	0.38	0.72	1.12	1.02	0.00												
6/7/2018	10.5		0.00	0.40	0.74	1.13	1.00	0.00												
6/8/2018	9.8		0.00	0.40	0.74	1.12	1.00	0.00												
6/9/2018	8.5		0.00	0.39	0.77	1.11	0.99	0.00												
6/10/2018	8.5		0.00	0.30	0.88	1.13	0.99	0.00												
6/11/2018	9.8		0.00	0.27	0.88	1.13	1.00	0.00												
6/12/2018	10.7		0.00	0.16	1.07	1.13	0.99	0.00												
6/13/2018	10.9		0.00	0.16	1.21	1.15	1.00	0.00												
6/14/2018	11.3		0.00	0.22	1.16	1.13	0.98	0.00												
6/15/2018	11.4		0.00	0.36	1.12	1.15	1.01	0.00												
6/16/2018	8.9		0.00	0.40	0.86	1.13	0.99	0.00												
6/17/2018	10.8		0.00	0.36	1.05	1.16	1.02	0.00												
6/18/2018	10.6		0.00	0.38	0.96	1.14	1.01	0.00												
6/19/2018	10.2		0.00	0.38	1.01	1.16	1.02	0.00												
6/20/2018	10.5		0.00	0.36	0.99	1.14	1.02	0.00												
6/21/2018	10.6		0.00	0.23	1.21	1.14	1.00	0.00												
6/22/2018	10.1		0.00	0.15	1.19	1.16	1.01	0.00												
6/23/2018	8.5		0.00	0.12	1.39	1.14	1.00	0.00												
6/24/2018	8.6		0.00	0.12	1.32	1.14	1.01	0.00												
6/25/2018	9.7		0.00	0.10	1.40	1.14	1.01	0.00												
6/26/2018	9.8		0.00	0.08	1.29	1.13	1.00	0.00												
6/27/2018	9.1		0.00	0.08	1.50	1.15	0.99	0.00												
6/28/2018	8.8		0.00	0.05	1.49	1.20	0.99	0.00												
6/29/2018	10.4		0.00	0.03	1.64	1.22	1.00	0.00												
6/30/2018	10.3		0.00	0.08	1.64	1.25	1.02	0.00												
Avg	9.7		0.00	0.22	1.11	1.15	1.00	0.00												
Min	7.5		0.00	0.03	0.72	1.10	0.98	0.00												
Max	11.4		0.00	0.40	1.64	1.25	1.03	0.00												





Date	Pipeline CT										FW Tank CT										Disinfection CT			Compliance		
	Whitestone Flow	Travel Time	Residual	CT		FW Tank 1	FW Tank 2	Plant	Contact Time		Free Cl <sub>2</sub>	CT		Total CT	Temp	Required	CT	CT	Met							
				mg-min/L	mg-min/L				Min	Min		mg/L	Min							mg-min/L	mg-min/L	Avg				
				Calculated	Achieved				Min Level	Min Level		Flow	Minutes							Calculated	Calculated	°C	Calculated			
6/1/2018	58.1	2,152	0.07	146	LIT-4005-1	22.5	22.2	8.7	350	0.80	281.28	427.46	12.4	6.00	6.00	6.00	6.00	Y								
6/2/2018	71.9	1,740	0.16	279	25.9	25.6	7.3	485	0.96	466.10	745.30	12.2	6.00	6.00	6.00	6.00	Y									
6/3/2018	72.2	1,733	0.15	261	25.7	25.4	7.8	450	0.97	435.41	696.14	12.9	6.00	6.00	6.00	6.00	Y									
6/4/2018	63.0	1,985	0.12	234	23.2	22.9	8.9	357	0.95	338.71	573.10	13.3	6.00	6.00	6.00	6.00	Y									
6/5/2018	50.3	2,489	0.22	559	24.9	24.6	8.7	391	1.00	389.42	948.53	13.2	6.00	6.00	6.00	6.00	Y									
6/6/2018	57.7	2,166	0.38	818	24.3	24.0	9.4	351	0.98	342.49	1,160.07	12.8	6.00	6.00	6.00	6.00	Y									
6/7/2018	58.0	2,158	0.40	864	24.5	24.2	10.2	328	0.97	317.38	1,181.16	12.7	6.00	6.00	6.00	6.00	Y									
6/8/2018	57.0	2,193	0.40	867	24.6	24.3	9.6	350	0.93	326.55	1,193.40	12.6	6.00	6.00	6.00	6.00	Y									
6/9/2018	71.1	1,760	0.39	685	24.5	24.2	8.2	409	0.90	368.36	1,052.90	12.8	6.00	6.00	6.00	6.00	Y									
6/10/2018	99.8	1,254	0.30	379	23.8	23.5	8.4	384	0.95	366.85	746.10	13.3	6.00	6.00	6.00	6.00	Y									
6/11/2018	100.0	1,250	0.22	344	25.1	24.8	9.6	356	0.91	322.57	666.32	13.6	6.00	6.00	6.00	6.00	Y									
6/12/2018	55.2	2,268	0.16	366	22.5	22.2	10.5	291	0.94	274.16	640.62	14.1	6.00	6.00	6.00	6.00	Y									
6/13/2018	61.1	2,048	0.16	336	20.7	20.4	10.7	264	0.92	242.63	578.22	14.4	6.00	6.00	6.00	6.00	Y									
6/14/2018	65.8	1,901	0.22	426	22.3	22.0	11.1	272	0.98	263.32	912.25	14.3	6.00	6.00	6.00	6.00	Y									
6/15/2018	68.4	1,828	0.36	649	22.2	21.9	11.2	270	0.98	263.32	912.25	14.3	6.00	6.00	6.00	6.00	Y									
6/16/2018	76.4	1,636	0.40	662	25.1	24.8	8.8	390	0.91	356.76	1,018.61	14.4	6.00	6.00	6.00	6.00	Y									
6/17/2018	76.7	1,630	0.36	580	23.5	23.2	10.5	304	0.96	290.69	871.00	14.6	6.00	6.00	6.00	6.00	Y									
6/18/2018	73.3	1,708	0.38	646	23.5	23.2	10.4	309	0.96	294.97	940.85	14.4	6.00	6.00	6.00	6.00	Y									
6/19/2018	64.2	1,950	0.38	742	25.1	24.8	10.0	343	0.89	306.19	1,047.87	14.0	6.00	6.00	6.00	6.00	Y									
6/20/2018	59.6	2,098	0.36	747	20.3	20.0	10.4	266	0.99	263.25	1,010.27	14.3	6.00	6.00	6.00	6.00	Y									
6/21/2018	58.0	2,157	0.23	486	24.1	23.8	10.3	319	0.97	309.25	795.58	15.3	4.00	4.00	4.00	4.00	Y									
6/22/2018	58.7	2,132	0.15	320	23.9	23.6	9.9	329	0.93	307.73	627.82	15.6	4.00	4.00	4.00	4.00	Y									
6/23/2018	70.5	1,773	0.12	204	25.0	24.7	8.5	400	0.95	379.56	583.82	16.0	4.00	4.00	4.00	4.00	Y									
6/24/2018	70.9	1,765	0.12	207	24.5	24.2	8.3	399	0.95	378.56	585.65	16.2	4.00	4.00	4.00	4.00	Y									
6/25/2018	63.3	1,977	0.10	201	23.6	23.4	9.5	340	0.98	331.21	531.81	16.4	4.00	4.00	4.00	4.00	Y									
6/26/2018	58.9	2,125	0.08	180	20.1	19.8	9.8	279	0.93	260.67	440.19	16.5	4.00	4.00	4.00	4.00	Y									
6/27/2018	60.2	2,077	0.08	175	23.6	23.2	8.5	376	0.95	356.23	531.68	16.7	4.00	4.00	4.00	4.00	Y									
6/28/2018	60.4	2,069	0.05	98	25.9	25.6	8.7	407	0.95	386.39	484.71	16.9	4.00	4.00	4.00	4.00	Y									
6/29/2018	62.3	2,007	0.03	58	22.4	22.1	10.2	298	0.96	284.92	342.64	17.1	4.00	4.00	4.00	4.00	Y									
6/30/2018	80.4	1,555	0.08	130	25.4	25.1	10.3	337	1.00	336.79	466.87	17.2	4.00	4.00	4.00	4.00	Y									
Avg	66.8	1,920	0.22	422	23.8	23.5	9.5	347	0.94	327.63	749.25	14.5	5.33	5.33	5.33	5.33	NA									
Min	50.3	1,250	0.03	58	20.1	19.8	7.3	264	0.80	242.63	342.64	12.2	4.00	4.00	4.00	4.00	NA									
Max	100.0	2,489	0.40	867	25.9	25.6	11.2	485	1.00	466.10	1,193.40	17.2	6.00	6.00	6.00	6.00	NA									



Notes: Pipeline volume factor in SMMWSC to RW tank: 125.090 MG-min/day

**Distribution System Monitoring**  
**Akron (0072), Bangor Township (0390), Bangor Monitor Dist. (0400), Bay City (0470), Bay County (0485)**  
 Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl<sub>2</sub>)

Date	Akron		Bangor Township			Bangor Monitor Dist.			Bay City					Bay County (Frankenlust, Monitor, Portsmouth)											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
6/1/2018																									
6/2/2018																									
6/3/2018																									
6/4/2018																									
6/5/2018			0.23	0.48	0.53	0.95					0.62	0.32	0.44	0.36	0.84	0.52									
6/6/2018																									
6/7/2018								0.90	0.95		0.62	0.31	0.45	0.65	0.26	0.81	0.59					0.72			0.66
6/8/2018																									
6/9/2018																									
6/10/2018																									
6/11/2018																									
6/12/2018	0.26									0.90															
6/13/2018											0.69	0.38	0.47	0.62	0.28	0.78	0.55								
6/14/2018			0.40	0.50	0.48	0.91																			
6/15/2018																									
6/16/2018																									
6/17/2018																									
6/18/2018											0.73	0.31	0.44	0.68	0.25	0.80	0.52								
6/19/2018						0.61	0.95																		
6/20/2018											0.66	0.42	0.42	0.78	0.27	0.82	0.67								
6/21/2018																									
6/22/2018																									
6/23/2018																									
6/24/2018																									
6/25/2018																									
6/26/2018																									
6/27/2018											0.43	0.17	0.31	0.54	0.23	0.71	0.41								
6/28/2018																									
6/29/2018																									
6/30/2018																									
Average	0.26					0.60		0.92						0.52											0.69
Min	0.26					0.23		0.90						0.17											0.55
Max	0.26					0.95		0.95						0.84											0.82



**MONITORING STATION ADDRESSES**

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>1. William Sanders, 6116 Slocum Dr</li> <li>2. TBD</li> <li>3. Bangor Twp Hall, 3921 Wheeler</li> <li>4. BCDWS Admin. Bldg. 3933 Patterson Rd.</li> <li>5. 7-11, 3543 S. Old Kawkawlin Rd.</li> <li>6. Admiral Petroleum, 314 S Euclid Ave.</li> <li>7. Sequin Lumber, 3881 Euclid Ave</li> <li>8. Euclid Auto, 823 N Euclid Ave</li> <li>9. Monitor Pharmacy, 2981 Midland Rd</li> <li>10. Little Caesars, 3475 E North Union Rd</li> </ul> | <ul style="list-style-type: none"> <li>11. Number 1 Fire Station, 1401 Center Ave</li> <li>12. Number 2 Fire Station, 1000 Fremont Ave</li> <li>13. Skizak's Sport Shop, 807 Saizburg Ave</li> <li>14. Number 4 Fire Station, 212 S. Dean St</li> <li>15. Number 5 Fire Station, 1209 Smith St</li> <li>16. Bay City Hall, 301 Washington Ave</li> <li>17. Skipper Buds Marina, 1809 S Water St</li> </ul> | <ul style="list-style-type: none"> <li>18. Bay Valley Animal Hospital 6015 WS Saginaw Rd</li> <li>19. Dore's Mobile Mart, 6183 WS Saginaw Rd</li> <li>20. Pump Station #13, 6000 WS Saginaw Rd</li> <li>21. TBD</li> <li>22. The Char House, 432 N. Tuscola Rd</li> <li>23. Krzyziak's Market, 1605 Michigan Ave</li> <li>24. Little Learners Daycare, 1694 Cass Ave.</li> <li>25. J&amp;T Tool &amp; Die, 354 S Tuscola Rd</li> </ul> |
|---|--|--|

**Distribution System Monitoring**  
**Beaver Rd. Area (0517), Beaver Twp (0518), Essexville (2180), Fraser Twp (2465), Hampton (2960), Kawkawlin Twp (3565), Kawkawlin Metro (3570), Merritt Twp (4280)**

**Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl<sub>2</sub>)**

Date	Beaver Rd. Area			Beaver Township			Essexville			Fraser Township			Hampton Township			Kawkawlin Twp.			Kawkawlin Metro			Merritt Township		
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
6/1/2018																								
6/2/2018																								
6/3/2018																								
6/4/2018																								
6/5/2018				0.43			0.79					0.51	0.42	0.45										
6/6/2018															0.57									
6/7/2018										0.63	0.78													
6/8/2018																								
6/9/2018																								
6/10/2018												0.56	0.50	0.52										
6/11/2018																								
6/12/2018																								
6/13/2018							0.70																	
6/14/2018															0.64									
6/15/2018																								
6/16/2018																								
6/17/2018																								
6/18/2018												0.67	0.45	0.59										
6/19/2018																								
6/20/2018																								
6/21/2018																								
6/22/2018																								
6/23/2018																								
6/24/2018																								
6/25/2018																								
6/26/2018																								
6/27/2018																								
6/28/2018																								
6/29/2018																								
6/30/2018																								
Average	0.82			0.45			0.74			0.71		0.51			0.66			0.36			0.39			
Min	0.82			0.43			0.65			0.63		0.42			0.57			0.20			0.28			
Max	0.82			0.47			0.82			0.78		0.67			0.76			0.52			0.50			



**MONITORING STATION ADDRESSES**

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

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

Chlorine Residual at Bacteriological Monitoring Stations (mg/L Free Cl<sub>2</sub>)

Date	Monitor Township				City of Pinconning				Pinconning Township				Portsmouth Twp				Williams Township				Wisner				
	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73
6/1/2018																									
6/2/2018																									
6/3/2018																									
6/4/2018																									
6/5/2018																									
6/6/2018																									
6/7/2018	0.95	0.85	0.84	0.60									0.64				0.66		0.58	0.18	0.65			0.53	
6/8/2018																									
6/9/2018																									
6/10/2018																									
6/11/2018																									
6/12/2018																									
6/13/2018																									
6/14/2018																									
6/15/2018					0.85				0.42		0.61														
6/16/2018																									
6/17/2018																									
6/18/2018																									
6/19/2018																									
6/20/2018																									
6/21/2018																									
6/22/2018																									
6/23/2018																									
6/24/2018																									
6/25/2018																									
6/26/2018																									
6/27/2018																									
6/28/2018																									
6/29/2018																									
6/30/2018																									
Average																									
Min																									
Max																									



MONITORING STATION ADDRESSES

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

- 57. H&H Bakery, 200 S Mable Rd
- 58. Pinconning City Hall, 208 S Manitou St
- 59. Marathon Gas Station, 511 S Mabel St
- 60. TBD
- 61. Pinconning Meter Pit, 3005 N Huron Rd
- 62. Keith Pickvett, 4732 Maloney Rd
- 63. Master Meter Pit, Pinconning @ Maloney Rd
- 64. TBD
- 65. Ike's Welding, 50 N Finn Rd
- 66. TBD
- 67. Fruitland Market, 1646 W Midland Rd
- 68. Williams Township Hall, 1080 W Midland Rd
- 69. Saizburg Rd Pump Station, 9 Mile @ Saizburg
- 70. 11 Mile Elevated Tank, 11 Mile @ US-10
- 71. Mieske's Market, 2509 W Midland Rd
- 72. Lindy's Sales, 9051 M-25
- 73. TBD

**Distribution System Bacteriological**

Water Supplier Bacteriological Analysis Report

Name of Water Supply  
**Bay Area Water Treatment Plant**

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

June, 2018

COUNTY	COMMUNITY	WSSN NUMBER	DISTRIBUTION SYSTEM SAMPLES					NUMBER REPEAT SAMPLES
			avg free cl2 mg/L	NUMBER REQUIRED	NUMBER COLLECTED	NUMBER POSITIVE	NUMBER	
Tuscola	Akron	0072	0.26	1	1	0	0	0
BAY	Bangor Township	0390	0.60	10	10	0	0	0
BAY	Bangor-Monitor Dist.	0400	0.92	3	3	0	0	0
BAY	Bay City	0470	0.52	40	41	0	0	0
BAY	Bay County (Frank./Monitor/Portsm.)	0485	0.69	10	10	0	0	0
BAY	Beaver Road Area	0517	0.82	1	1	0	0	0
BAY	Beaver Township	0518	0.45	2	2	0	0	0
BAY	Essexville	2180	0.74	4	4	0	0	0
BAY	Fraser Township	2465	0.71	2	2	0	0	0
BAY	Hampton Township	2960	0.51	10	10	0	0	0
BAY	Kawkawlin Township	3565	0.66	3	3	0	0	0
BAY	Kawkawlin Metro Dist.	3570	0.36	2	2	0	0	0
BAY	Merritt Township	4280	0.39	2	2	0	0	0
BAY	Monitor Township	4440	0.76	6	6	0	0	0
BAY	City of Pinconning	5330	0.52	2	2	0	0	0
BAY	Pinconning Township	5335	0.52	2	2	0	0	0
BAY	Portsmouth Township	5540	0.66	1	1	0	0	0
BAY	Williams Township	7125	0.50	6	6	0	0	0
Tuscola	Wisner	7134	0.53	1	1	0	0	0

Average Free Cl2 Residual of All Distribution Sites 0.58 mg/L

1. Total distribution samples 109
2. Total distribution samples with detectable free cl2 residual 109
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%

