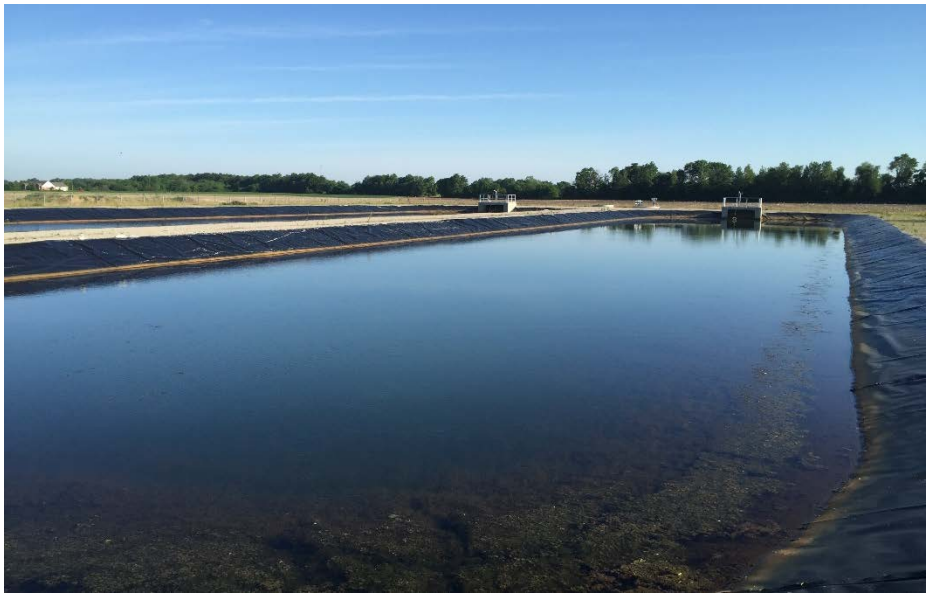

Monthly Operating Report

December:2020

So. Sangamon Water Commission

January 18th, 2021

SSWC

9199 Buckhart Rd Rochester IL 62563

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EXECUTIVE SUMMARY

Safety. Safety is the number one priority at South Sangamon. We have instituted a monthly safety meeting for operations staff at the plant. There were no lost time accidents in the month of December 2020.

Compliance. The finished water quality was within regulatory limits and all reporting and sampling requirements were met for the month. A copy of the Operations Report submitted to the Illinois Environmental Protection Agency is available at **www.sswc.us**.

During the month of December 2020, the plant pumped 42.636 million gallons from the well field and 39.766 million gallons of finished water. This is 2.345 million gallons more than December of 2019.

The SSWC plant has been placed on Critical Review status. Systems on Critical Review will be evaluated for sufficient capacity before issuance of water main extension permits. The Critical Review is currently under review.

Operations. There was 0 emergency call-outs for the month. There were numerous customer inquiry for the month.

Maintenance and Repair. For the month of December 2020, there were 31 inspections, 3 preventative and 3 corrective maintenance activity completed.

Budget. Passed at May 18th 2020 meeting.

Capital Planning.

BOP CPU replacement

Chloramines Project

New Berlin Meter relocation.

Chatham emergency interconnect

1. SAFETY

1.1 SAFETY TRAINING

At South Sangamon we strive to provide a safe working environment for all employees. This is accomplished with daily safety meetings and open communication.

1.2 LOST TIME ACCIDENTS

There were 0 lost time accidents in the month of December 2020.

1.3 SAFETY AUDIT

No safety audits to date.

1.4 MISCELLANEOUS SAFETY

No notable safety issues

2. COMPLIANCE, FLOWS AND LOADINGS

2.1 COMPLIANCE

The finished water quality was within regulatory limits and all Bacteriological testing was completed for the month of December. A copy of the Operations Report to the Illinois Environmental Protection Agency (IEPA) is available on the SSWC website.

2.2 INFLUENT FLOWS AND LOADINGS

The total gallons pumped from the well field were 42.632 MG. The influent parameters were all within the normal range.

The influent flow and loadings are summarized below in Table 2.2

Table 2.2 Influent Concentrations and Flow

	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Well Flow Gals (MGD).
Max.	8.2	15.6	3.16	.335	-	370	290	1.640
Min.	8.0	14.0	.39	.209	-	235	270	1.074
Avg.	8.15	14.7	.83	.242	-	343	282	1.375
Total	-	-	-	-	-	-	-	42.636

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 39.766 MG during the month with a daily average of 1.283 MG and a min/max 1.064/ 2.325 MG.

Table 2.3 Finished Water Quality

	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	1.99	2.05	8.7		0.02	0.106	1.27	260	292	2.47
Min.	1.37	1.43	8.5		0.01	0.016	0.38	90	260	.25
Avg.	1.71	1.79	8.6		0.01	0.047	0.77	147	279	1.84
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2019-20

Time Period	2019-2020	2018-2019	2017-2018
Jan 2020- Dec 2020	392,017,339	360,182,712	379,581,690
Increase for the same period last year		35.9 MG	- 24.7 MG

FINISHED WATER PUMPING HISTORY						
	2020	2019	2018	2017	2016	2015
Jan	30,073,516	28,823,375	30,556,824	30,449,215	28,510,121	30,346,721
Feb	28,797,693	28,625,431	25,617,914	27,373,232	26,095,228	26,336,077
Mar	30,339,298	31,237,000	28,217,699	30,068,363	27,851,811	28,729,919
Apr	31,542,650	28,418,249	27,110,578	29,625,797	29,292,618	29,270,184
May	34,673,848	33,045,927	33,304,196	32,120,873	33,349,391	33,371,016
June	17,414,377	33,460,303	34,040,000	39,931,402	41,541,321	31,092,539
July	44,237,066	23,742,374	41,178,722	42,164,927	35,378,396	33,123,375
Aug	39,638,063	25,018,633	35,176,238	38,760,634	35,401,490	38,109,133
Sept	38,674,095	34,234,782	34,754,000	39,896,986	36,325,215	36,546,171
Oct	34,597,739	30,769,238	30,353,482	33,506,605	34,374,820	34,783,455
Nov	32,325,040	30,877,400	30,464,000	28,617,333	30,478,309	27,217,293
Dec	31,582,311	29,703,954	31,930,000	28,808,037	32,525,530	27,788,637
	---	---	---	---	---	---
Totals	393,895,696	357,956,666	382,703,653	401,323,404	391,124,250	376,714,520
Avg	1.08 MGD	.981 MGD	1.05 MGD	1.10 MGD	1.07 MGD	1.03 MGD

2.4 LAGOON DISCHARGE CONCENTRATIONS

The results for the NPDES lagoon discharge permit are summarized below.

Table 2.4 Weekly Grab Sample Analysis Results

Lagoon Effluent Results						
Date	**Fe (mg/l)**	**Mn (mg/l)**	**Chloride (mg/l)**	**Cl^2 (mg/l)**	**pH (S.U.)**	**TSS (mg/l)**
December 1st 2020	.12	.186	420	0.02	8.7	<4
Minimum	.12	.186	420	0.02	8.7	<4
Maximum	.12	.186	420	0.02	8.7	<4
Average	.12	.186	420	0.02	8.7	<4
Monthly Avg Limit	***2.000***	***1.000***				***15***
Daily Limit	***4.000***	***2.000***	***500***	***0.05***	***6.0-9.0***	***30***

The Chloride sample for the month, performed by the Springfield Metropolitan Sanitary District, was below 30,000 mg/l for the month of December 2020. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

There was 1 incident that impacted the operation of the plant.

3.2 EMERGENCY & SERVICE CALLS

Service Calls:

- There was 0 emergency call out for the month.

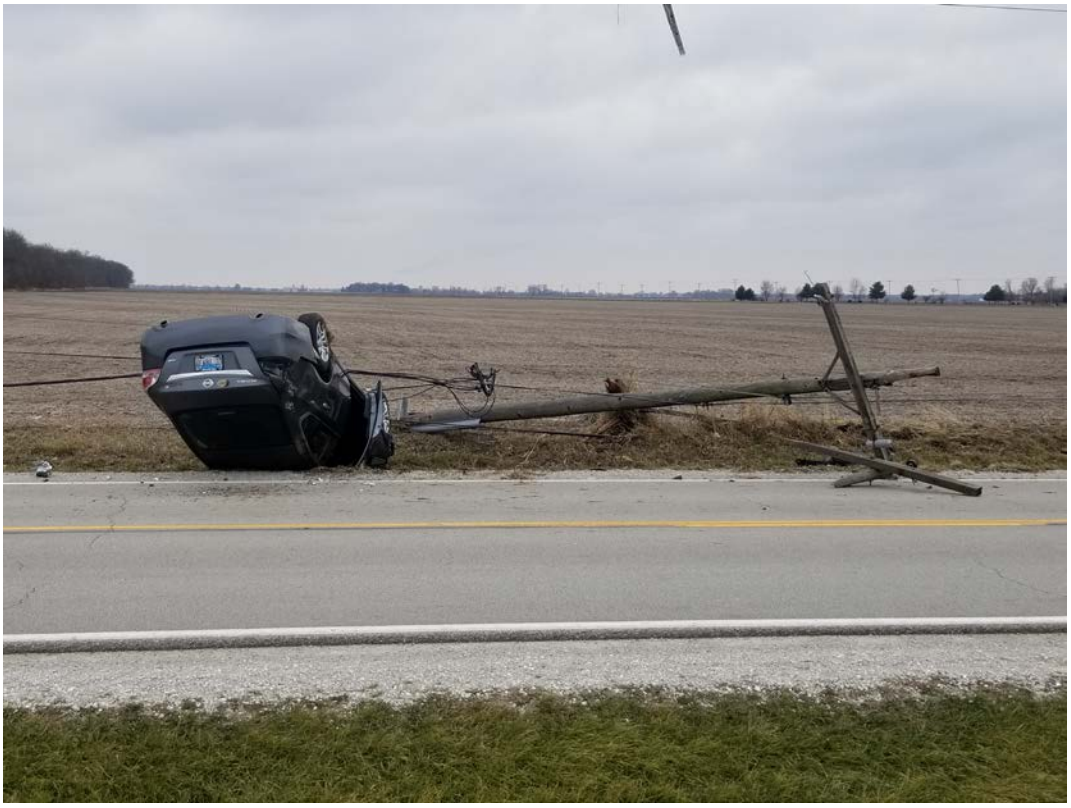
3.3 EMERGENCY CALL-OUTS

There was 0 emergency call out for the month of December

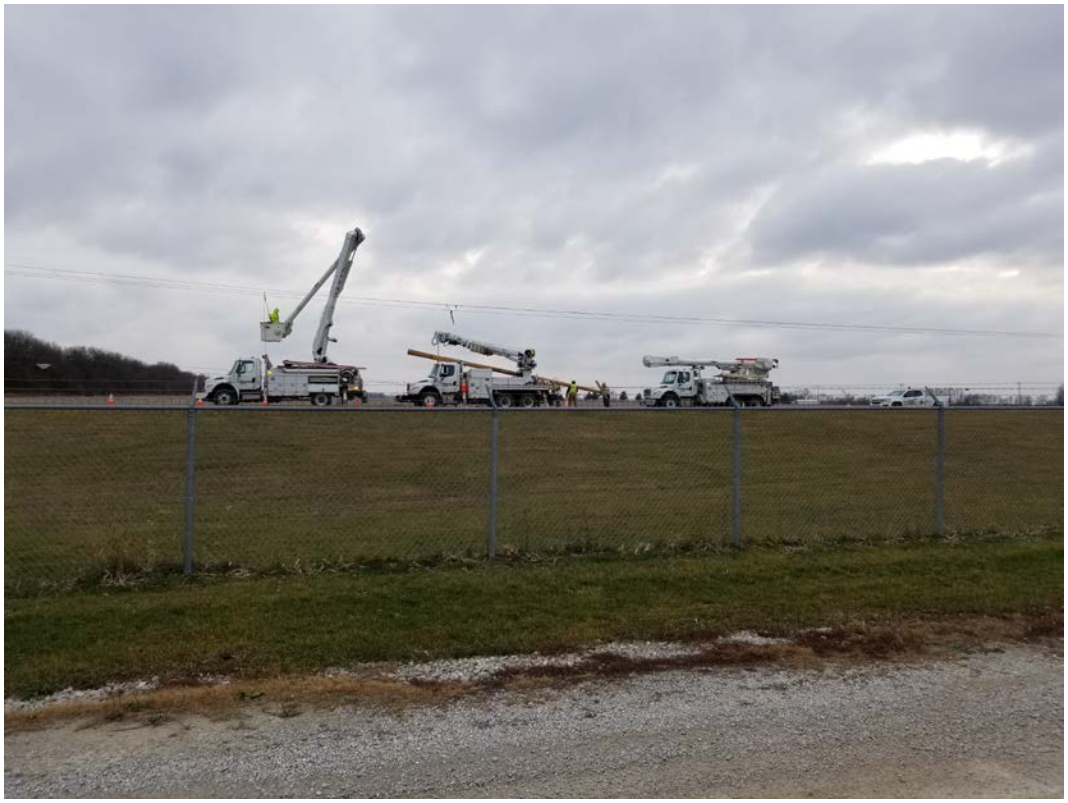
3.4 CUSTOMER INQUIRIE

There were numerous customer inquiries.

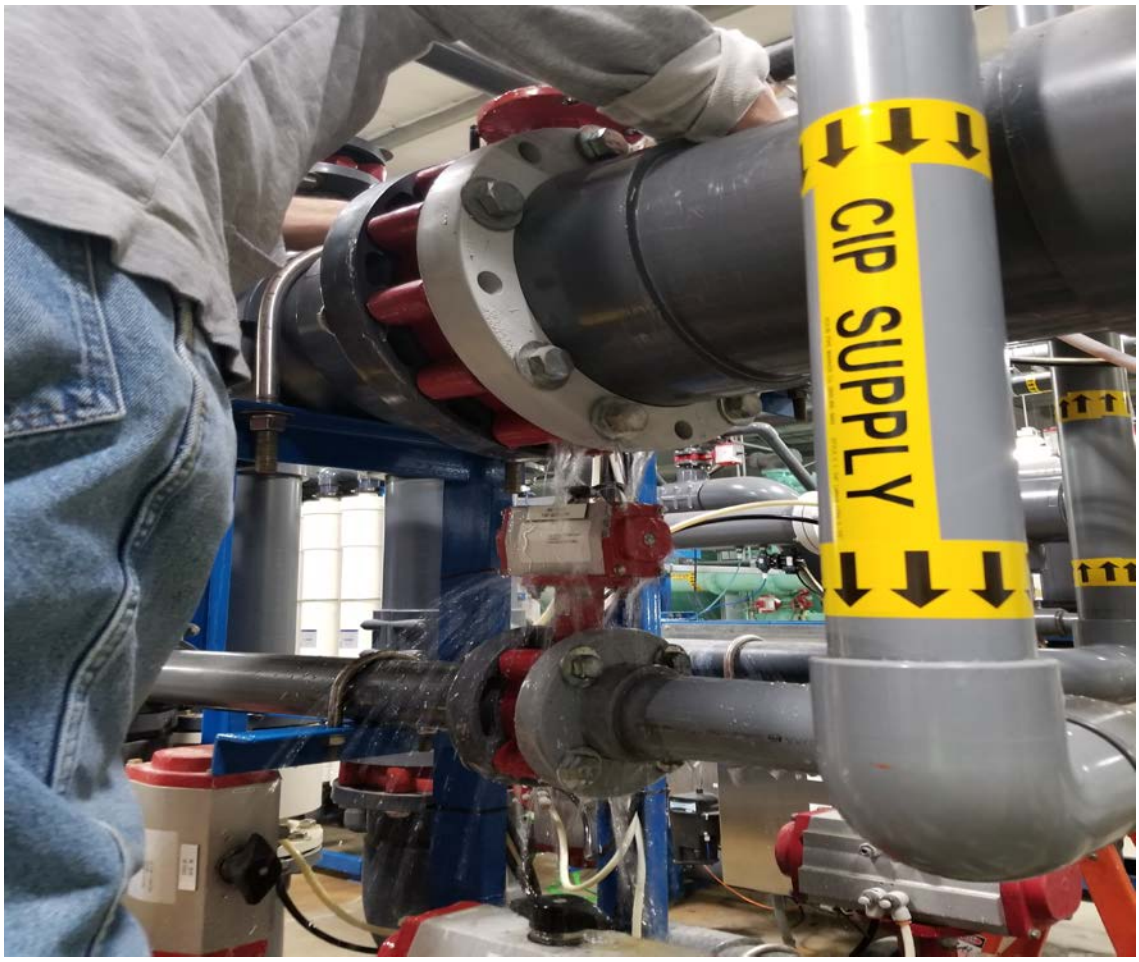
OTHER WORK PERFORMED
Trouble shooting of new train
Trouble shooting of CIP skid and CIP procedure
Inspected distribution mains
Consulted with new customers.
Repaired generator and setup transfer switch
Replaced BW valve on train #2
Created customer info database
Inspected booster station



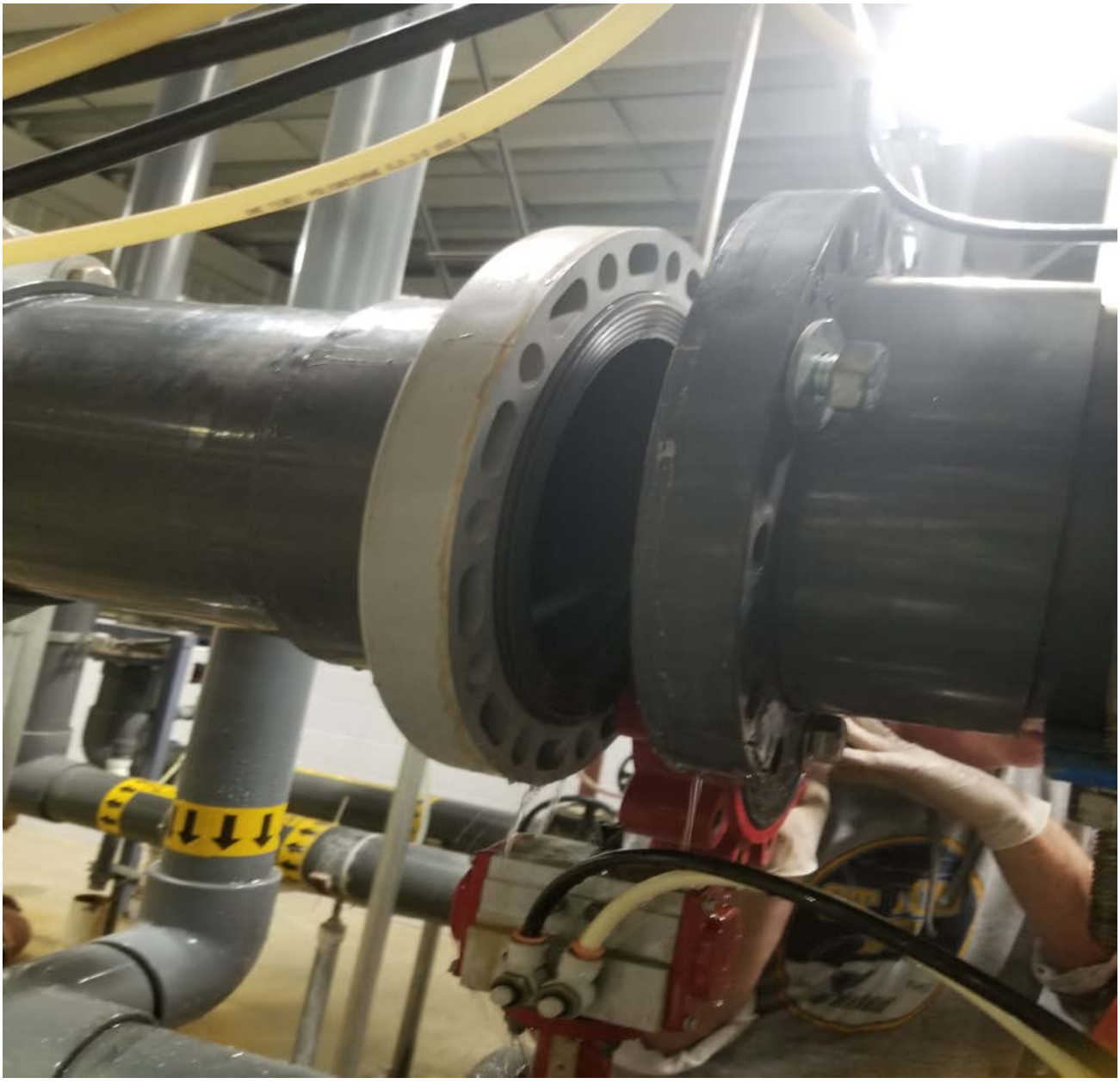
During the month of December an accident occurred causing downed power lines . These lines feed commercial power to the water plant. Although power was not lost at the time of the incident SSWC switched over to Chatham back feed for. This was done to ensure that service was not interupted while the power was repaired.



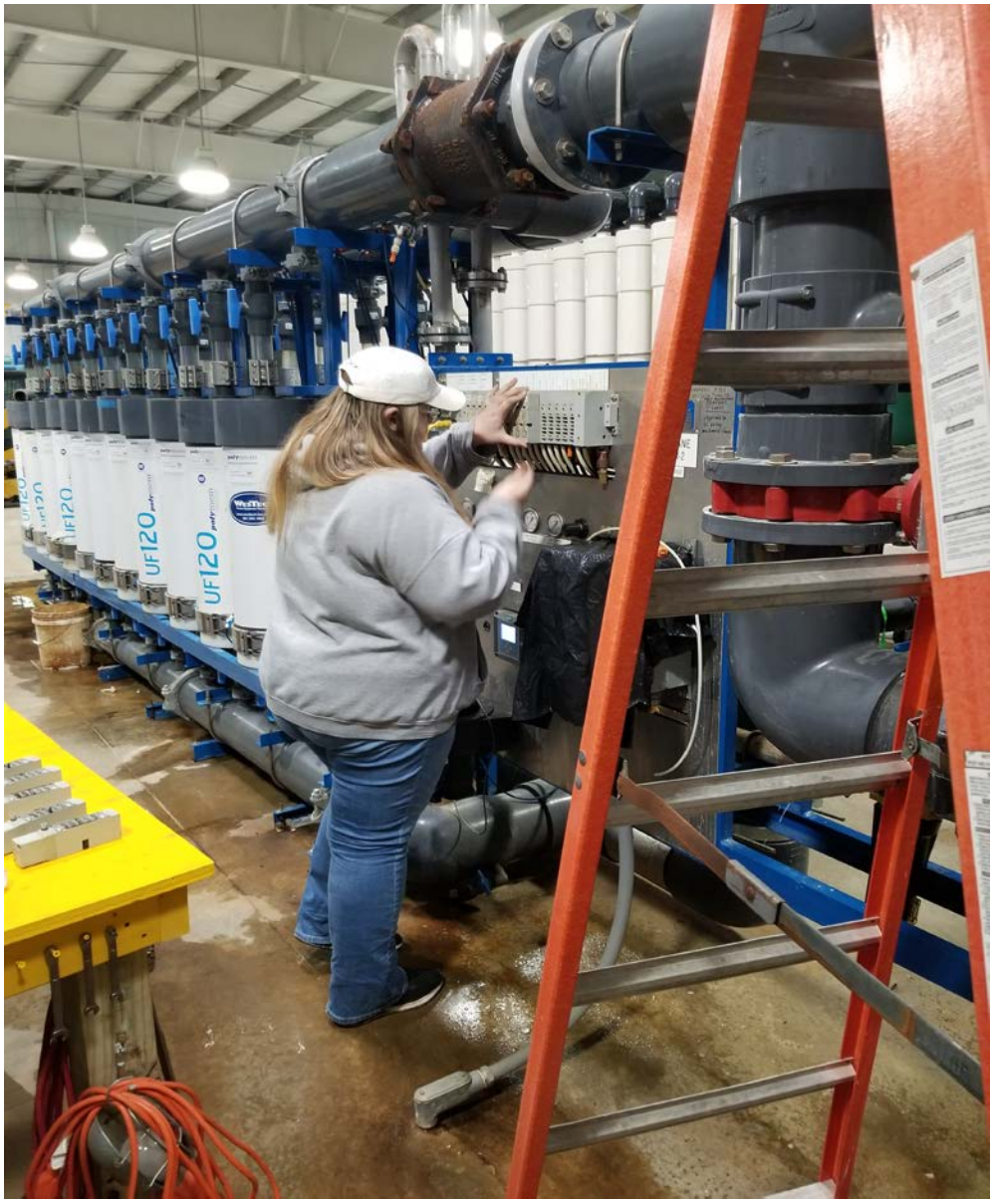
Ameren was onsite within a few hours to replace the damaged power pole. During this replacement power was disconnected for safety reasons.



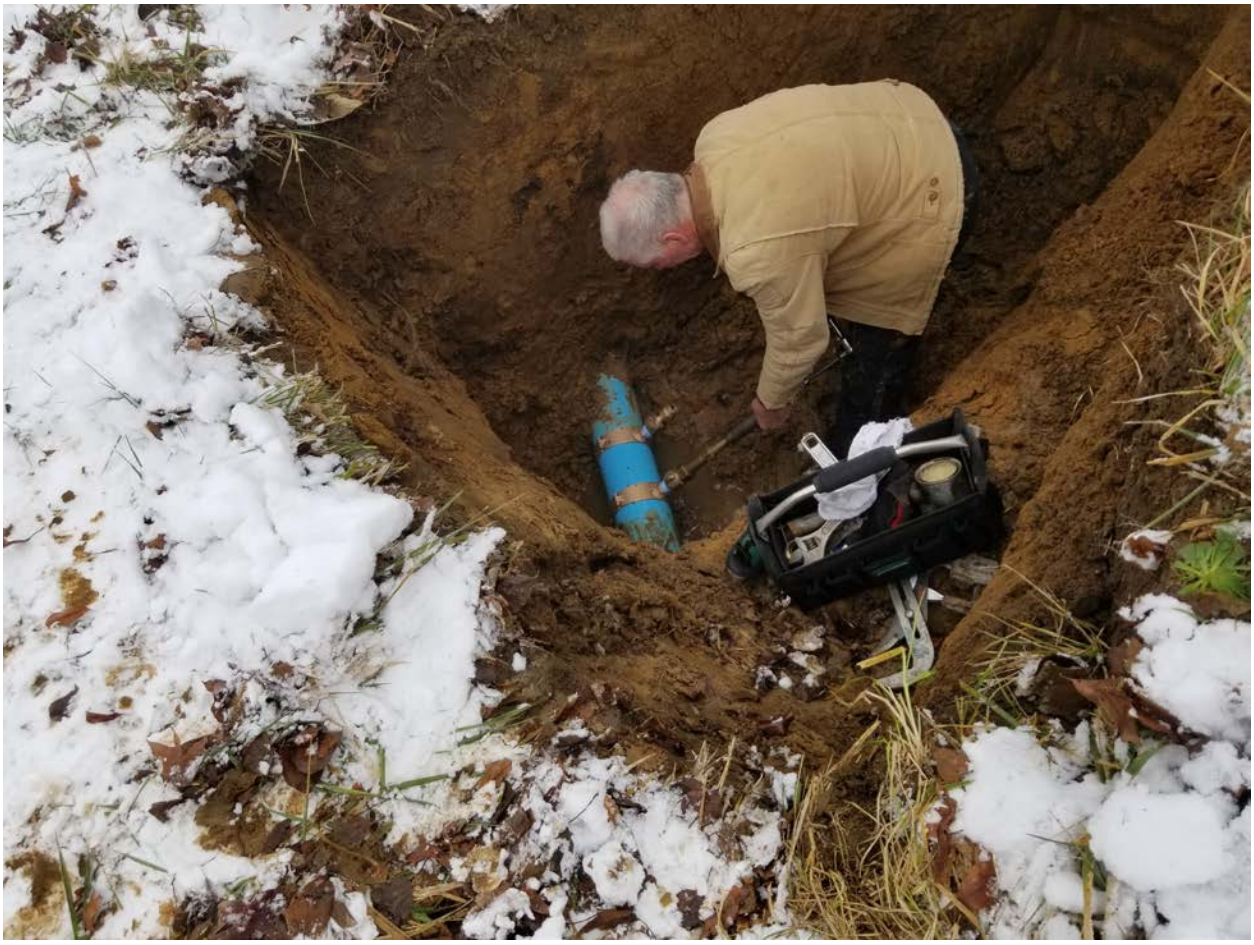
During the month of December train #2 started to fault and shut down. After many days of research and investigation it was discovered that a valve was leaking around the stem. This leak caused water to push into the valve actuator and would fill the air system with water. This would, in turn, cause the system to malfunction.



The only fix is to replace the valve and purge the air system.



Assistant Operator Katie Krall reinstalling the air valves that trigger the actuators after purging the system of water and cleaning out the manifold.



New customer Sean Robinson having the new tap installed.

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of December 2020, there were 31 inspections, 3 preventative and 3 corrective maintenance activity completed.

4.2 CORRECTIVE REPAIR

Pulling and cleaning pre filters on all 3 filter trains on weekly basis

CIP train 1,2 and 3

Replaced manifold on train #3

Worked with SCADAware in learning our system.

Replaced Backwash valve

Purged air control system

5. PROJECT MANAGEMENT & SUPPORT

5.1 STAFFING & TRAINING

- With the addition of a new staff member training has been continuous and ongoing.
- Operator and Asst. Operator have been studying for EPA licensing test.

5.2 OPERATIONAL SUPPORT

The following individuals, either on-site or remotely, provided assistance in operation and/or maintenance of the plant during the month of December 2020.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Kevin Garman (SCADAware)
- Crosspoint Cummins
- Dan (SCADAware)
- Bodine Electric

5.3 BUDGET

Table 5.3 Operating Budget

Table 5.3 Budget Table

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget
Labor (D.L. + OH)	$14,590.81	?	$81,431	$71,581	$171,795
Utilities	$8,30630		$40,750	$40,586	$97,800
Chemicals	$22,421.92		$110,000	$76,944	$264,000
Maintenance & Repair	$13,668.62		$67,146	$94,528	$160,937
Chloride	$12,979.73		$65,800	$61,400	$157,920
Lab Supplies and Equipment	$1,856.22		$9,410	$6,131	$22,584
Office Supplies	$213.04		$1,080	$264	$2,592
Miscellaneous Expenses*	$		$	?	$500
Other Operating Costs	$	?	$	$6107	$
Engineering Fees	$2,547.95		**$12,500**	**$5,430**	$30,000
Office Equipment rental	$65		$325	$596	$780
Locates	$378.00	0	$1,890	$3,730	$4536
Truck	$3,287.67	0	$6,667	$131	$40,000
Total	**$80,315.26**	**$**	**$396,999**	**$367,428**	**$953,444**

*as of September 21th 2020

6. CAPITAL PLANNING

6.1 APPROVED CIP PROJECTS CURRENT STATUS

New Berlin Meter master meter relocation project is commencing. Engineering and relocation plans have been finalized. Awaiting ground breaking.

Pigging project construction complete. Awaiting first pigging before completely releasing contractor.

BOP CPU replace is in the planning phase

Benton and Assoc has initiated the planning phase of the Chatham Emergency interconnect. Construction permit has been applied for.

6.2 DRAFT CAPITAL IMPROVEMENT PLAN

The CIP is a planning document that includes all projects anticipated to exceed $5,000 in cost over the next five years. The CIP is an ongoing process and will be refined from time to time as projects are completed and new issues are identified.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY — **MONTHLY IRON REMOVAL AND ION EXCHANGE SOFTENING REPORT**

DIVISION OF PUBLIC WATER SUPPLIES

South Sangamon Water Commission - IL 1670080

December 2020

		Pumping Totals						Chemicals Applied														UF Filters						Softeners					
			Raw				Lagoon	Sodium Permanganate		Sodium Bisulfite BW		Sodium Hypochlorite		Ammonium Sulfate		Fluorosilicic Acid		Phosphate		Sodium Bisulfite Pond		Hours since previous backwash				Wash	Water	Water	Each day indicate total number of				Regeneration	
	Time	Hours	Well	UF	Plant	HS	Effluent	Am't		Am't		Am't		Am't		Am't		Am't		Am't						Water	Softened	Bypassed	hours since previous regeneration.				Salt	Washed
Date	Meter	Filter	Prod.	Filtered	Water	Pumpage	Pumpage	Used	Calc	Used	Calc	Used	Calc	Used	Calc	Used	Calc	Used	Calc	Used	Calc					Gal.	Gal.	Gal	If regeneration at mid-day, indicate				Used	Water
	Read	Ran	(Mgal)	(Mgal)	(Mgal)	(Mgal)	(Mgal)	lbs.	mg/l as NaMnO4	lbs.	mg/l	lbs.	mg/l as Cl	lbs.	mg/l as NH3	lbs.	mg/l as F	lbs.	mg/l as PO4	lbs.	mg/l	Bank # 1	2	3		(Mgal)	(Mgal)	(Mgal)	hours previous/hours following. 1	2	3	4	lbs.	Gal.
1	7:00	15.6	1.388	1.249	0.008	1.089	0.084	15	0.26	0	0.00	208	2.50	0	0.00	26	0.54	56	2.03	10	5.68	0.66	0.66	0.66		0.070	0.816	0.433		42.0	35.0	47.0	6843	32550
2	7:00	14.3	1.287	1.116	0.017	1.052	0.073	16	0.30	0	0.00	186	2.50	0	0.00	25	0.54	58	2.18	9	5.95	0.66	0.66	0.66		0.063	0.729	0.387	45.0			25.0	4562	21700
3	7:00	14.7	1.316	1.177	0.009	1.043	0.067	17	0.31	0	0.00	196	2.50	0	0.00	27	0.59	58	2.20	17	12.25	0.66	0.66	0.66		0.057	0.769	0.408		44.0	42.0		4562	21700
4	7:00	14.7	1.301	1.154	0.012	1.025	0.080	14	0.26	0	0.00	192	2.50	0	0.00	25	0.56	4	0.15	11	6.63	0.66	0.66	0.66		0.070	0.754	0.400	51.0			48.0	4562	21700
5	7:00	13.9	1.251	1.261	0.010	0.985	0.083	17	0.33	0	0.00	210	2.50	0	0.00	26	0.60	8	0.32	12	6.97	0.66	0.66	0.66		0.073	0.824	0.437		45.0	52.0		4562	21700
6	7:00	15.8	1.371	1.102	0.012	1.180	0.065	17	0.30	0	0.00	184	2.50	0	0.00	29	0.56	10	0.34	14	10.33	0.66	0.66	0.66		0.065	0.720	0.382					0	0
7	7:00	16.8	1.475	1.268	0.005	1.130	0.104	14	0.23	0	0.00	220	2.60	0	0.00	24	0.48	9	0.32	16	7.37	0.66	0.66	0.66		0.085	0.829	0.439	67.0	36.0	43.0	70.0	9124	43400
8	7:00	15.2	1.357	1.259	0.013	1.016	0.081	15	0.27	0	0.00	219	2.61	0	0.00	26	0.58	10	0.39	14	8.25	0.66	0.66	0.66		0.067	0.823	0.436	27.0	39.0		34.0	6843	32550
9	7:00	14.5	1.288	1.109	0.009	1.028	0.077	12	0.22	0	0.00	193	2.61	0	0.00	24	0.53	10	0.38	11	6.89	0.66	0.66	0.66		0.067	0.725	0.384	24.0		42.0		4562	21700
10	7:00	15.0	1.314	1.136	0.009	1.000	0.087	16	0.29	0	0.00	198	2.61	0	0.00	26	0.59	14	0.55	13	7.15	0.66	0.66	0.66		0.068	0.742	0.394	16.0	45.0	33.0	40.0	9124	43400
11	7:00	14.7	1.327	1.271	0.017	1.034	0.084	11	0.20	0	0.00	221	2.61	0	0.00	24	0.53	19	0.73	15	8.61	0.66	0.66	0.66		0.074	0.831	0.440	24.0			34.0	4562	21700
12	7:00	14.8	1.302	1.159	0.009	1.026	0.079	16	0.29	0	0.00	202	2.61	0	0.00	25	0.56	41	1.58	18	10.99	0.66	0.66	0.66		0.069	0.758	0.401		47.0	42.0		4562	21700
13	7:00	15.0	1.329	1.064	0.012	1.113	0.073	19	0.34	0	0.00	185	2.61	0	0.00	22	0.45	63	2.24	12	7.91	0.66	0.66	0.66		0.068	0.695	0.369				39.0	2281	10850
14	7:00	15.9	1.379	1.218	0.006	1.081	0.094	15	0.26	0	0.00	203	2.50	0	0.00	27	0.57	59	2.16	15	7.64	0.66	0.66	0.66		0.075	0.796	0.422	72.0	38.0	34.0	29.0	9124	43400
15	7:00	17.3	1.588	1.373	0.020	1.228	0.089	17	0.26	0	0.00	229	2.50	0	0.00	29	0.54	63	2.03	15	8.10	0.66	0.66	0.66		0.084	0.897	0.476			33.0		2281	10850
16	7:00	11.7	1.074	1.373	0.007	0.830	0.094	22	0.49	0	0.00	229	2.50	0	0.00	25	0.69	10	0.48	10	5.13	0.66	0.66	0.66		0.084	0.897	0.476		54.0		40.0	4562	21700
17	7:00	17.6	1.629	1.896	0.008	1.271	1.127	14	0.21	0	0.00	316	2.50	0	0.00	24	0.43	5	0.16	14	0.60	0.66	0.66	0.66		1.117	1.239	0.657	73.0		52.0		4562	21700
18	7:00	13.4	1.174	1.164	0.011	0.961	0.090	14	0.29	0	0.00	186	2.40	0	0.00	26	0.62	8	0.33	12	6.37	0.66	0.66	0.66		0.076	0.761	0.403		40.0	24.0	45.0	6843	32550
19	7:00	17.6	1.640	1.200	0.014	1.278	0.069	12	0.18	0	0.00	192	2.40	0	0.00	33	0.59	10	0.31	19	13.25	0.66	0.66	0.66		0.064	0.784	0.416		40.0			2281	10850
20	7:00	14.3	1.284	1.233	0.008	1.037	0.070	18	0.34	0	0.00	197	2.40	0	0.00	29	0.64	10	0.38	15	10.31	0.66	0.66	0.66		0.065	0.806	0.427			45.0		2281	10850
21	7:00	15.6	1.492	1.233	0.005	1.105	0.084	15	0.24	0	0.00	189	2.30	0	0.00	22	0.45	8	0.29	19	10.83	0.66	0.66	0.66		0.065	0.806	0.427	102.0	41.0	30.0	75.0	9124	43400
22	7:00	17.2	1.579	1.413	0.022	1.169	0.089	14	0.21	0	0.00	217	2.30	0	0.00	27	0.53	11	0.37	10	5.40	0.66	0.66	0.66		0.084	0.924	0.489		35.0			2281	10850
23	7:00	14.5	1.284	1.413	0.004	0.965	0.089	15	0.28	0	0.00	217	2.30	0	0.00	26	0.61	14	0.57	19	10.26	0.66	0.66	0.66		0.084	0.924	0.489			39.0		2281	10850
24	7:00	15.6	1.427	2.325	0.005	1.174	0.143	12	0.20	0	0.00	355	2.29	0	0.00	29	0.56	18	0.61	6	2.01	0.66	0.66	0.66		0.124	1.520	0.805	65.0	42.0	34.0	73.0	9124	43400
25	7:00	15.1	1.362	1.187	0.037	1.128	0.047	2	0.04	0	0.00	182	2.30	0	0.00	29	0.59	41	1.44	10	10.20	0.66	0.66	0.66		0.047	0.776	0.411					0	0
26	7:00	15.8	1.449	1.353	0.000	1.058	0.088	6	0.10	0	0.00	287	3.18	0	0.00	27	0.58	59	2.21	13	7.06	0.66	0.66	0.66		0.074	0.884	0.469	48.0	40.0	39.0		6843	32550
27	7:00	15.7	1.460	1.114	0.013	1.158	0.075	14	0.23	0	0.00	170	2.29	0	0.00	29	0.57	62	2.12	15	9.55	0.66	0.66	0.66		0.061	0.728	0.386		34.0	32.0	68.0	6843	32550
28	7:00	15.1	1.399	1.229	0.013	1.134	0.074	16	0.27	0	0.00	180	2.20	0	0.00	31	0.62	66	2.30	13	8.43	0.66	0.66	0.66		0.069	0.803	0.426	52.0				2281	10850
29	7:00	16.4	1.410	1.280	0.004	1.137	0.076	14	0.24	0	0.00	147	1.72	0	0.00	26	0.52	59	2.05	12	7.57	0.66	0.66	0.66		0.066	0.837	0.443			42.0	51.0	4562	21700
30	7:00	16.3	1.427	1.214	0.009	1.052	0.087	20	0.34	0	0.00	178	2.20	0	0.00	25	0.54	54	2.03	15	8.27	0.66	0.66	0.66		0.077	0.793	0.421	45.0	60.0			4562	21700
31	7:00	13.7	1.273	1.223	0.008	1.007	0.082	24	0.45	0	0.00	180	2.21	0	0.00	29	0.66	63	2.48	10	5.85	0.66	0.66	0.66		0.068	0.799	0.424		35.0	39.0	47.0	6843	32550
Total		473.8	42.636	39.766	0.336	33.494	3.602	463	8.21	0	0	6470.87	75.73	0	0.00	822	17.42	980	35.73	414	241.78					3.280	25.991	13.775	711	757	732	765	152827	726950
Ave.		15.3	1.375	1.283	0.011	1.080	0.116	14.9	0.26	0	0	209	2.44	0	0.00	26.5	0.56	31.6	1.15	13.4	7.80	0.66	0.66	0.66	#DIV/0!	0.106	0.838	0.444	50.8	42.1	38.5	47.8	4929.9	23450
Max		17.6	1.640	2.325	0.037	1.278	1.127	24.0	0.49	0	0	355	3.18	0	0	33	0.69	66	2.48	19	13.25	0.66	0.66	0.66	0	1.117	1.520	0.805	102.0	60.0	52.0	75.0	9,124	43,400
Min		11.7	1.074	1.064	0.000	0.830	0.047	2.0	0.04	0	0	147	1.72	0	0.00	22	0.43	4	0.15	6	0.60	0.66	0.66	0.66	0	0.047	0.695	0.369	16.0	34.0	24.0	25.0	0	0

1	20	% Sodium Permanganate	Pre-aerator	**CHLORINATION**		**FLUORIDATION**	
2	40	% BisulfiteSolution	Membrane Backwash				
3	12.5	% Sodium Hypochlorite Solution	Post Softener	Type of Chlorine Used	Sodium Hypochlorite 12.5 %	Type of Fluoride Used	Hydrofluosilicic Acid 19% F
4	20	% Ammonium Sulfate Solution	Post Softener				
5	19	% Fluorosilicic Acid Solution	Post Clearwell	Chlorine Analyzers Used: Hach CL17 (2) & 5500sc		Fluoride Analyzer Used: Hach 2200, SPADNS method	
6	33	% Phosphate Solution	Post Clearwell				
7	40	% BisulfiteSolution	Lagoon Effluent				

I certify that the information in this report is complete and accurate to the best of my knowledge.

Reported by: _____ Illinois Operator Certification ID 253419999

Date: _____

Date Bacterials Ser _____

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES

South Sangamon Water Commission - IL1670080

DECEMBER 2020

Physical and Chemical Tests | **Membrane Integrity**

	Raw						Pre UF Membrane				Post UF Membrane			Post IEX				Finished														Post Filter		
			Total	Total	Total	Total	Turbidity	Total	Total	Soluble	Total	Total	Turbidity	1	2	3	4		Turbidity	Total	Total	Total	Total	Fluoride	Ortho	Free	Mono-	Chlorine						
Date	pH	Temp	Alk.	Hard.	Fe	Mn		Fe	Mn	Mn	Fe	Mn		Chloride				pH		Alk.	Hard.	Fe	Mn	F	Phosphate	Ammonia	Chloramine	F	T	Distrbution				
		deg. C	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		NTU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/l	mg/l	mg/l	mg/L	F	T	Bank 1	Bank 2	Bank 3
			as CaCO3																	as CaCO3										mg/l	mg/L	psi	psi	psi
1	8.20	14.0	270	342	1.05	0.233			0.265	0.073	0.58	0.042	0.22					8.60	0.39	270	90	0.02	0.030	0.78	1.91	0.00	0.03	1.69	1.71				pass	pass
2	8.20	14.1	280	340	0.92	0.303			0.326	0.121	0.52	0.099	0.17	40.5	76.4	44.3	42.2	8.70	0.28	280	90	0.01	0.039	0.82	1.75	0.00	0.00	1.56	1.86					
3	8.20	14.4	280	340	0.63	0.242			0.343	0.144	0.61	0.097	0.20					8.60	0.35	280	110	0.01	0.030	0.70	1.77	0.00	0.00	1.87	1.91					
4	8.20	14.7	290	350	0.57	0.227			0.301	0.168	0.49	0.101	0.25					8.60	0.32	278	200	0.01	0.049	0.72	1.79	0.01	0.00	1.68	1.87					
5	8.20	14.5	285	350	0.61	0.219			0.343	0.160	0.49	0.114	0.20					8.60	0.35	280	160	0.01	0.036	0.65	1.99	0.00	0.00	1.75	1.80					
6	8.20	14.4	280	340	0.52	0.250			0.332	0.163	0.60	0.081	0.18					8.60	0.32	280	180	0.02	0.049	0.67	1.92	0.00	0.00	1.84	1.86					
7	8.20	14.1	285	340	1.04	0.241			0.333	0.197	0.45	0.047	0.18					8.60	0.32	270	250	0.01	0.050	0.84	1.90	0.00	0.00	1.77	1.89				pass	
8	8.20	14.2	282	350	0.67	0.226			0.354	0.166	0.47	0.102	0.20	38.2	77.8	75	24.5	8.60	0.35	280	140	0.01	0.029	0.67	2.06	0.00	0.00	1.87	1.89					pass
9	8.20	14.8	285	345	0.77	0.232			0.296	0.195	0.49	0.013	0.19					8.60	0.30	275	100	0.01	0.045	0.79	2.04	0.00	0.06	1.99	2.05					
10	8.10	15.2	280	335	3.16	0.335			0.389	0.134	0.64	0.073	0.33					8.60	0.40	280	110	0.02	0.035	0.80	1.75	0.00	0.00	1.83	1.84					
11	8.10	14.9	280	342	1.36	0.256			0.390	0.175	0.88	0.099	0.28					8.60	0.60	280	100	0.02	0.048	0.79	2.12	0.00	0.00	1.83	1.86					
12	8.00	14.9	276	348	0.55	0.209			0.317	0.093	0.01	0.053	0.27					8.60	0.39	280	100	0.01	0.030	0.65	1.84	0.00	0.00	1.81	2.01					
13	8.00	15.6	285	350	0.39	0.221			0.333	0.065	0.01	0.043	0.27					8.60	0.29	286	110	0.01	0.021	0.72	2.05	0.00	0.00	1.81	1.97					
14	8.20	14.5	280	370	0.91	0.238			0.393	0.161	0.53	0.069	0.21	70.8	111.1	70.2	27.2	8.60	0.31	275	160	0.01	0.042	0.96	1.92	0.00	0.00	1.89	1.67				pass	pass
15	8.10	14.6	280	355	1.12	0.219			0.319	0.132	0.49	0.052	0.21					8.60	0.29	270	100	0.02	0.016	0.82	1.82	0.00	0.00	1.88	1.93					
16	8.10	15.2	285	345	1.17	0.246			0.309	0.119	0.37	0.100	0.24					8.60	0.41	280	120	0.01	0.028	0.38	0.25	0.01	0.00	1.70	1.76					
17	8.10	15.1	280	340	0.62	0.255			0.349	0.127	0.47	0.048	0.20					8.60	0.31	280	140	0.02	0.035	0.69	1.82	0.01	0.00	1.68	1.86					
18	8.20	14.5	280	342	0.42	0.228			0.493	0.167	0.45	0.086	0.27					8.60	0.26	280	100	0.01	0.025	0.70	1.62	0.00	0.00	1.72	1.77					
19	8.10	14.9	285	340	0.46	0.235			0.242	0.258	0.51	0.215	0.28					8.60	0.30	280	105	0.01	0.036	0.59	1.91	0.00	0.00	1.83	1.84					
20	8.20	15.3	290	330	0.53	0.224			0.367	0.138	0.53	0.103	0.25					8.60	0.35	280	110	0.01	0.041	0.73	1.73	0.00	0.00	1.75	1.85					
21	8.20	14.5	280	342	0.58	0.223			0.331	0.137	0.45	0.084	0.27					8.60	0.35	280	140	0.01	0.053	0.75	1.69	0.00	0.00	1.71	1.81					
22	8.10	14.7	275	335	0.44	0.220			0.303	0.164	0.46	0.088	0.23					8.50	0.28	280	120	0.01	0.032	0.86	1.80	0.00	0.00	1.61	1.73					
23	8.10	14.7	280	340	0.52	0.256			0.343	0.117	0.50	0.089	0.24	37.3	93.6	69.3	33.1	8.50	0.30	280	160	0.01	0.063	0.88	1.62	0.00	0.00	1.74	1.87					
24	8.20	14.4	283	345	0.58	0.261			0.262	0.180	0.60	0.105	0.28					8.60	0.35	280	200	0.01	0.049	0.58	2.21	0.00	0.00	1.56	1.59					
25	8.20	14.2	290	360	0.69	0.245			0.258	0.205	0.01	0.168	0.23					8.60	0.45	292	160	0.01	0.072	1.27	1.91	0.00	0.00	1.63	1.70					
26	8.00	14.1	288	352	1.17	0.224			0.205	0.203	0.02	0.186	0.30					8.50	0.41	286	220	0.01	0.094	0.77	1.84	0.00	0.00	1.64	1.82					
27	8.20	14.5	290	356	0.78	0.236			0.287	0.222	0.01	0.205	0.29					8.50	0.38	290	230	0.01	0.073	0.92	1.86	0.00	0.00	1.45	1.56					
28	8.20	14.8	270	235	1.50	0.264			0.246	0.217	0.65	0.198	0.16					8.60	0.30	260	140	0.01	0.070	0.80	1.85	0.01	0.00	1.39	1.71					
29	8.00	14.3	282	360	0.93	0.228			0.250	0.181	0.01	0.181	0.25	21	49.5	19.1	29.8	8.60	0.40	276	260	0.01	0.106	0.70	1.88	0.00	0.00	1.45	1.51				pass	
30	8.20	14.8	280	360	0.62	0.228			0.283	0.112	0.60	0.083	0.21					8.60	0.37	285	200	0.01	0.058	0.79	2.47	0.01	0.00	1.64	1.68					pass
31	8.10	15.4	280	360	0.44	0.267			0.355	0.094	0.32	0.083	0.27					8.50	0.31	280	140	0.01	0.076	0.94	1.88	0.01	0.00	1.37	1.43					pass	
Ave.	8.15	14.7	282	343	0.83	0.242	#DIV/0!	#DIV/0!	0.320	0.154	0.43	0.100	0.24	41.6	81.7	55.6	31.4	8.59	0.35	279	147	0.01	0.047	0.77	1.84	0.00	0.00	1.71	1.79	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Max	8.20	15.6	290	370	3.16	0.335	0.00	0.00	0.493	0.258	0.88	0.215	0.33	71	111	75	42	8.70	0.60	292	260	0.02	0.106	1.27	2.47	0.01	0.06	1.99	2.05	0.00	0.00	0.00	0.00	0.00
Min	8.00	14.0	270	235	0.39	0.209	0.00	0.00	0.205	0.065	0.01	0.013	0.16	21	50	19	25	8.50	0.26	260	90	0.01	0.016	0.38	0.25	0.00	0.00	1.37	1.43	0.00	0.00	0.00	0.00	0.00

Lagoon Effluent Tests		pH	Temp	T Chlor	Mn	Fe	Chloiride	TSS
Monthly			°C	mg/l	mg/l	mg/l	mg/L	mg/L
Date	12/1/2020	8.7	12.2	0.02	0.186	0.12	420	<4

Distribution Stability Tests		pH	Temp	TDS	Alkalinity	Calcium	Chloiride	Sulfate	Remarks:
Every Two Weeks			°C	mg/L	mg/L as CaCO3		mg/L	mg/L	
Date	12/1/2020	8.6	15.6	450	280		46	53	
Date									
Date									