

# Monthly Operating Report

November:2020



So. Sangamon  
Water Commission  
December 21st, 2020

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 November 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](http://www.sswc.us).

During the month of November 2020, the plant pumped 43.188 million gallons from the well field and 34.277 million gallons of finished water. This is 2.345 million gallons more than November 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 November 2020, there were 30 inspections, 3 preventative and 3 corrective maintenance activity completed.

**Budget.** Passed at May 18<sup>th</sup> 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 November 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 November. 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 43.188 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)
<b>Max.</b>	8.5	15.9	2.67	.331	-	370	318	1.958
<b>Min.</b>	7.9	14.4	.49	.203	-	340	270	1.227
<b>Avg.</b>	8.2	15.0	1.03	.244	-	350	283	1.440
<b>Total</b>	-	-	-	-	-	-	-	43.188

### 2.3 EFFLUENT CONCENTRATIONS

The facility filtered 34.277 MG during the month with a daily average of 1.143 MG and a min/max .979/ 1.639 MG.

Table 2.3 Finished Water Quality

	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
<b>Max.</b>	2.20	2.37	8.7		0.03	0.069	.83	180	320	4.52
<b>Min.</b>	1.65	1.70	8.4		0.01	0.005	0.30	80	260	.16
<b>Avg.</b>	1.92	2.03	8.5		0.02	0.027	0.64	117	281	1.67
<b>MCL</b>	-	-	-	-	1.00	-	4.00	-	-	-
<b>SMCL</b>	-	-	-	-	0.30	0.050	2.00	-	-	-

## Finished Water Flow Comparison for FY 2019-20

Time Period	2019-2020	2018-2019	2017-2018
Dec 2019- Nov 2020	392,017,339	360,182,712	379,581,690
Increase for the same period last year	31.8 MG	- 19.4 MG	

FINISHED WATER PUMPING HISTORY						
	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Dec	29,703,954	31,930,000	28,808,037	32,525,530	27,788,637	28,656,869
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
	-----	-----	-----	-----	-----	-----
Totals	392,017,339	360,182,712	379,581,690	405,040,897	386,387,357	377,582,752
Avg	1.07 MGD	.987 MGD	1.04 MGD	1.11 MGD	1.06 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 <sup>2</sup> (mg/l)	pH (S.U.)	TSS (mg/l)
November 9th 2020	.39	.415	390	0.03	8.4	<4
Minimum	.39	.415	390	0.03	8.4	<4
Maximum	.39	.415	390	0.03	8.4	<4
Average	.39	.415	390	0.03	8.4	<4
<b>Monthly Avg Limit</b>	<b>2.000</b>	<b>1.000</b>				<b>15</b>
<b>Daily Limit</b>	<b>4.000</b>	<b>2.000</b>	<b>500</b>	<b>0.05</b>	<b>6.0-9.0</b>	<b>30</b>

The Chloride sample for the month, performed by the Springfield Metropolitan Sanitary District, was below 30,000 mg/l for the month of November 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 November

### 3.4 CUSTOMER INQUIRIES

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.

Installed Transfer switch

Replaced manifold on train 3

Created customer info database

Inspected booster station



During the month of November Egizzi Electric arrived at the plant with there “crane” to set the newly arrived automatic transfer switch.



Egizzi removing the manual transfer switch and replaced it with the automatic switch



Operators Kevin Canham and Katie Krall replacing an upper manifold on train #3 that was leaking



Operator Kevin Canham replacing a pressure switch on compressor #2



In November, customer John Poffenberger came to the plant to report a leak. After arriving at the sight of the leak it was discovered that, while mowing, the county had struck the cover of the air valve pit.



With the pit cover damaged this allowed the air valve to freeze and burst.



The air valve was removed and a ball valve was installed to stop the flow of water.

## **4. MAINTENANCE AND REPAIR**

### **4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE**

For the month of November 2020, there were 3 inspections, 3 preventative and 3 corrective maintenance activities 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 pressure control switch on compressor #2

## 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 November 2020.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Kevin Garman (SCADAware)
- Dan (SCADAware)
- Egizzi 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		<b>\$12,500</b>	<b>\$5,430</b>	\$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
<b>Total</b>	<b>\$80,315.26</b>	<b>\$</b>	<b>\$396,999</b>	<b>\$367,428</b>	<b>\$953,444</b>

\*as of September 21<sup>th</sup> 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.

### **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  
DIVISION OF PUBLIC WATER SUPPLIES**

## MONTHLY IRON REMOVAL AND ION EXCHANGE SOFTENING REPORT

**MONTHLY IRON REMOVAL AND ION EXCHANGE SOFTENING REPORT**  
 DIVISION OF PUBLIC WATER SUPPLIES  
**South Sangamon Water Commission - IL 1670080**

November 2020

Page 1 of 2

Pumping Totals												Chemicals Applied												UF Filters												Softeners																																																																																																			
Date	Time	Hours	Raw	Well	UF	Plant	HS	Effluent	An <sup>1</sup>	An <sup>1</sup>	Sodium	Sodium	Ammonium	Fluorosilicic	Phosphate	Sodium	Hours since previous	Wash	Water	Water	Each day indicate total number of	Regeneration																																																																																																																	
Meter	Filer	Prod	Filterd	Water	(Mgal)	(Mgal)	Pumpage	Pumpage	Used	Calc	Used	Calc	Used	Acid	Am <sup>1</sup>	Bisulfite	Pond	backwash	Water	Softened	Bypassed	hours since previous regeneration.	Salt																																																																																																																
Read																			Gal.	Gal.	Gal.	Ibs.	Used																																																																																																																
1	7:00	15.6	1.325	1.134	0.015	1.132	0.088	18	0.33	0	0.00	189	250	0	0.00	27	0.54	53	1.85	0	0.00	0.66	0.66	0.083	0.741	0.393	0.440	2281	10850																																																																																																										
2	7:00	16.4	1.422	1.301	0.004	1.094	0.098	16	0.27	0	0.00	217	250	0	0.00	29	0.60	51	1.84	0	0.00	0.66	0.66	0.084	0.850	0.451	0.440	360	32550																																																																																																										
3	7:00	15.8	1.462	1.302	0.017	1.158	0.093	17	0.28	0	0.00	217	250	0	0.00	26	0.51	46	1.57	0	0.00	0.66	0.66	0.088	0.851	0.451	0.370	2281	10850																																																																																																										
4	7:00	15.8	1.231	1.169	0.009	1.142	0.086	25	0.31	0	0.00	195	250	0	0.00	39	0.78	71	2.46	0	0.00	0.66	0.66	0.072	0.745	0.405	0.460	360	32550																																																																																																										
5	7:00	21.0	1.928	1.735	0.013	1.481	0.122	25	0.31	0	0.00	289	250	0	0.00	40	0.62	72	1.32	20	7.89	0.66	0.66	0.112	1.134	0.801	0.630	250	4582	21700																																																																																																									
6	7:00	15.5	1.476	1.232	0.015	1.028	0.097	16	0.26	0	0.00	205	249	0	0.00	26	0.58	6	0.23	22	10.84	0.66	0.66	0.083	0.805	0.427	0.340	350	350	3843	32550																																																																																																								
7	7:00	21.2	1.958	1.794	0.009	1.539	0.131	25	0.31	0	0.00	299	250	0	0.00	32	0.44	4	0.10	28	10.28	0.66	0.66	0.121	1.173	0.821	0.340	350	350	4582	21700																																																																																																								
8	7:00	16.2	1.670	1.435	0.012	1.191	0.103	21	0.30	0	0.00	239	250	0	0.00	34	0.65	7	0.23	27	12.60	0.66	0.66	0.088	0.947	0.497	0.330	2281	10850																																																																																																										
9	7:00	16.2	1.560	1.413	0.004	1.217	0.102	21	0.32	0	0.00	246	261	0	0.00	27	0.51	8	0.26	25	11.71	0.66	0.66	0.088	0.924	0.489	0.190	370	660	6843	32550																																																																																																								
10	7:00	16.9	1.513	1.386	0.013	1.242	0.103	19	0.30	0	0.00	243	261	0	0.00	28	0.51	9	0.39	26	12.06	0.66	0.66	0.089	0.912	0.484	0.250	410	330	6843	32550																																																																																																								
11	7:00	15.5	1.424	1.260	0.013	1.112	0.087	20	0.34	0	0.00	219	261	0	0.00	27	0.55	10	0.36	19	10.53	0.66	0.66	0.077	0.824	0.436	0.100	480	4582	21700																																																																																																									
12	7:00	14.0	1.408	1.250	0.011	1.124	0.086	20	0.34	0	0.00	217	260	0	0.00	26	0.53	8	0.22	22	12.33	0.66	0.66	0.076	0.817	0.433	0.470	400	4582	21700																																																																																																									
13	7:00	14.2	1.346	1.241	0.010	1.060	0.091	19	0.30	0	0.00	212	260	0	0.00	26	0.56	11	0.44	21	11.02	0.66	0.66	0.077	0.798	0.423	0.650	340	520	6843	32550																																																																																																								
14	7:00	14.6	1.387	1.240	0.014	1.081	0.075	18	0.31	0	0.00	216	261	0	0.00	28	0.59	11	0.40	20	12.83	0.66	0.66	0.070	0.810	0.430	0.430	2281	10850																																																																																																										
15	7:00	13.7	1.366	1.236	0.004	1.027	0.103	18	0.32	0	0.00	224	261	0	0.00	25	0.55	12	0.46	15	6.96	0.66	0.66	0.089	0.841	0.445	0.420	400	4582	32550																																																																																																									
16	7:00	15.8	1.480	1.220	0.017	1.311	0.073	12	0.19	0	0.00	203	250	0	0.00	29	0.50	15	0.45	12	7.93	0.66	0.66	0.073	0.797	0.423	0.460	330	4582	21700																																																																																																									
17	7:00	15.5	1.376	1.226	0.013	1.063	0.091	18	0.31	0	0.00	215	250	0	0.00	28	0.56	9	0.77	17	0.63	0.66	0.081	0.845	0.445	0.320	320	520	6843	32550																																																																																																									
18	7:00	15.5	1.441	1.271	0.008	1.096	0.096	8	0.13	0	0.00	212	250	0	0.00	28	0.58	31	1.19	13	6.47	0.66	0.66	0.082	0.831	0.440	0.510	350	350	6843	32550																																																																																																								
19	7:00	14.6	1.335	1.194	0.013	1.086	0.085	16	0.29	0	0.00	199	250	0	0.00	28	0.59	56	2.04	14	7.94	0.66	0.66	0.075	0.780	0.414	0.340	430	4582	21700																																																																																																									
20	7:00	14.5	1.401	1.332	0.010	1.058	0.086	18	0.31	0	0.00	222	250	0	0.00	28	0.60	62	2.32	8	4.48	0.66	0.66	0.076	0.871	0.461	0.460	400	4582	21700																																																																																																									
21	7:00	15.0	1.459	1.186	0.017	1.072	0.076	17	0.28	0	0.00	198	250	0	0.00	24	0.47	22	0.75	13	2.85	0.66	0.66	0.076	0.775	0.411	0.430	430	4582	21700																																																																																																									
22	7:00	15.1	1.414	1.224	0.009	1.132	0.078	17	0.29	0	0.00	220	270	0	0.00	29	0.56	9	0.38	29	17.83	0.66	0.66	0.078	0.805	0.420	0.360	340	10.20	43400	32550																																																																																																								
23	7:00	15.3	1.411	1.288	0.010	1.096	0.096	17	0.24	0	0.00	234	270	0	0.00	27	0.52	10	0.34	34	16.45	0.66	0.66	0.080	0.848	0.450	0.700	340	340	6843	32550																																																																																																								
24	7:00	15.3	1.454	1.275	0.019	1.104	0.092	17	0.28	0	0.00	230	270	0	0.00	27	0.56	10	0.36	18	9.43	0.66	0.66	0.082	0.833	0.442	0.300	400	4582	21700																																																																																																									
25	7:00	14.1	1.279	1.241	0.008	1.008	0.074	16	0.30	0	0.00	224	270	0	0.00	26	0.59	10	0.39	17	11.08	0.66	0.66	0.084	0.811	0.430	0.470	410	4582	21700																																																																																																									
26	7:00	13.8	1.271	1.243	0.010	1.121	0.074	11	0.21	0	0.00	219	270	0	0.00	29	0.65	14	0.54	16	3.91	0.66	0.66	0.084	0.793	0.403	0.660	350	4582	21700																																																																																																									
27	7:00	15.7	1.448	1.162	0.008	1.199	0.082	15	0.25	0	0.00	209	270	0	0.00	24	0.46	11	0.36	14	8.23	0.66	0.66	0.072	0.759	0.403	0.660	340	4582	21700																																																																																																									
28	7:00	13.2	1.264	1.272	0.011	1.073	0.091	17	0.32	0	0.00	228	270	0	0.00	26	0.61	15	0.61	11	5.82	0.66	0.66	0.081	0.831	0.431	0.420	440	4582	21700																																																																																																									
29	7:00	15.4	1.454	1.151	0.008	1.137	0.061	12	0.20	0	0.00	200	260	0	0.00	28	0.56	19	0.66	12	9.50	0.66	0.66	0.051	0.752	0.399	0.360	420	4582	21700																																																																																																									
30	7:00	13.0	1.227	1.111	0.002	1.022	0.069	17	0.33	0	0.00	193	260	0	0.00	26	0.58	41	1.59	10	6.99	0.66	0.66	0.059	0.726	0.385	0.770	410	4582	21700																																																																																																									
31																																																																																																																																							
<b>Total</b>		465.5	43.188	32.477	2.688	523	#DV01	663.311	#DV01	0	#DV01	846	#DV01	722	#DV01	465	#DV01	717	699	675	14584	69440																																																																																																																	
<b>Ave.</b>		155.5	1.440	1.267	0.011	1.143	0.090	174	#DV01	222	#DV01	0	#DV01	282	#DV01	241	#DV01	155	#DV01	0.079	0.841	54.6	0.431																																																																																																																
<b>Max</b>		212	1.958	1.794	0.019	1.639	0.131	250	#DV01	298	#DV01	0	#DV01	40	#DV01	72	#DV01	34	#DV01	0.66	0.821	117.3	0.821	119.0	65.0	630	102.0	43400	32550																																																																																																										
<b>Min</b>		13	1.227	1.111	0.000	0.979	0.061	80	#DV01	188	#DV01	0	#DV01	24	#DV01	4	#DV01	0	#DV01	0.66	0.851	72.6	0.726	0.000	25.0	0	0	0	0	0	0	0	0	0	0																																																																																																				
Pre-aerator												CHLORINATION												FLUORIDATION												Hydrofluosilicic Acid 15% F												Type of Chlorine Used												Hydrofluosilicic Acid 15% F												Type of Fluoride Used												Chlorine Analyzers Used: Hatch Cl17(2) & 550Sc												Fluoride Analyzers Used: Hatch 2200, SPADNS method												Date Bacteria Sample Taken												Date Bacteria Test Result												Date Bacteria Sample Taken			

## South Sangamon Water Commission Report

## November 2020 Monthly Operating



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
DIVISION OF PUBLIC WATER SUPPLIES

South Sangamon Water Commission - IL670080  
November 2020

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Date	pH	Raw			Pre UF Membrane			Post UF Membrane			Post IEX			Finished			Chlorine			Membrane Integrity												
		Total Alk.	Total Hard.	Total Fe	Total Mn	Total Chloride	Total Fe	Total Mn	Total Fe	Total Mn	Total Chloride	Total pH	Total Alk.	Total Hard.	Total Fe	Total Mn	Total Chloride	Total pH	Total Alk.	Total Hard.	Total Fe	Total Mn	Total Chloride	Total pH	Total Alk.	Total Hard.	Total Fe	Total Mn	Total Chloride			
		deg. C	mg/L	mg/L	mg/L	mg/L	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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L				
1	8.50	15.0	290	340	1.31	0.245	0.317	0.088	0.01	0.072	0.23	8.50	0.34	320	110	0.01	0.008	0.71	1.53	0.00	0.00	2.02	2.09	Bank 1	Bank 2	Bank 3						
2	8.10	15.2	282	360	1.36	0.252	0.261	0.191	1.09	0.131	0.22	8.50	0.27	260	100	0.03	0.030	0.61	1.52	0.01	0.00	1.97	2.03									
3	8.10	15.5	280	370	0.63	0.235	0.309	0.114	0.42	0.137	0.15	8.50	0.30	280	105	0.01	0.033	0.81	1.51	0.03	0.00	1.89	2.03									
4	8.10	14.9	295	362	0.56	0.206	0.320	0.051	0.52	0.072	0.16	8.50	0.32	280	100	0.01	0.005	0.45	0.6	0.01	0.00	1.79	1.97									
5	8.10	15.3	280	360	0.76	0.239	0.353	0.071	0.51	0.217	0.18	8.50	0.21	275	100	0.01	0.009	0.67	1.89	0.02	0.00	2.02	2.03									
6	8.10	14.9	282	340	1.19	0.258	0.356	0.066	0.79	0.076	0.65	8.50	0.34	280	110	0.01	0.032	0.70	0.16	0.01	0.00	1.88	1.94									
7	8.20	15.4	280	345	0.84	0.246	0.329	0.039	0.58	0.068	0.40	8.50	0.40	280	110	0.01	0.013	0.78	0.98	0.02	0.00	1.92	2.13									
8	8.10	15.6	280	340	1.20	0.248	0.369	0.082	0.62	0.111	0.70	8.40	0.52	278	120	0.02	0.033	0.56	1.66	0.01	0.00	1.81	2.01									
9	8.10	15.6	265	352	0.94	0.232	0.360	0.048	0.61	0.063	0.07	8.40	0.21	280	170	0.01	0.017	0.60	1.79	0.02	0.00	1.83	1.84									
10	8.10	15.9	270	355	1.33	0.247	0.351	0.073	0.75	0.359	0.07	8.50	0.21	265	100	0.01	0.029	0.68	4.52	0.02	0.00	1.89	1.95									
11	8.50	15.5	318	340	0.98	0.224	0.311	0.118	0.02	0.093	0.56	8.60		310	130	0.01	0.034	0.83	1.72	0.01	0.00	1.85	1.99									
12	8.10	14.9	278	340	0.98	0.234	0.334	0.066	0.59	0.082	0.49	23	8.60	275	105	0.02	0.010	0.64	1.55	0.01	0.00	1.92	2.01									
13	8.10	14.4	280	342	1.51	0.249	0.379	0.088	0.64	0.102	0.58	67	8.60	0.44	280	125	0.01	0.047	0.76	1.85	0.01	0.00	1.65	1.70								
14	8.20	14.6	300	340	1.01	0.282	0.393	0.066	0.61	0.063	0.60	8.60		294	110	0.01	0.022	0.65	1.72	0.01	0.00	2.10	2.14									
15	8.10	15.0	290	344	0.54	0.211	0.294	0.078	0.01	0.049	0.51	8.70		290	110	0.01	0.012	0.30	0.98	0.01	0.00	1.82	1.91									
16	8.10	14.7	292	350	0.98	0.215	0.295	0.122	0.02	0.078	0.45	8.60		292	110	0.01	0.027	0.80	1.69	0.00	0.00	1.87	2.05									
17	8.20	15.3	265	370	0.74	0.227	0.326	0.062	0.52	0.049	0.54	8.60		270	150	0.02	0.056	0.74	2.14	0.04	0.00	1.85	2.04									
18	8.10	14.6	285	360	0.90	0.228	0.229	0.202	0.65	0.168	0.55	8.50	0.25	285	140	0.03	0.061	0.80	1.64	0.00	0.00	1.70	1.79									
19	8.10	14.5	280	362	1.39	0.223	0.286	0.084	0.66	0.082	0.05	29	71	8.60	0.24	275	160	0.02	0.019	0.76	1.94	0.01	0.00	1.75	1.94							
20	8.10	15.1	275	360	1.08	0.233	0.310	0.068	0.76	0.049	0.05	39	8.60	0.16	270	100	0.01	0.016	0.76	2.07	0.01	0.00	1.89	2.10								
21	8.10	15.0	280	345	2.14	0.279	0.324	0.133	0.78	0.102	0.05	8.50	0.17	270	100	0.01	0.052	0.67	1.80	0.02	0.00	1.65	1.88									
22	8.10	14.8	280	352	0.49	0.242	0.252	0.062	0.56	0.062	0.07	8.60	0.25	280	120	0.01	0.015	0.38	0.91	0.01	0.00	1.98	2.16									
23	8.10	14.5	280	350	1.05	0.270	0.465	0.151	0.75	0.130	0.06	194	65	23	8.60	0.20	275	150	0.02	0.069	0.50	1.90	0.01	0.00	2.05	2.09						
24	8.20	14.5	280	362	0.84	0.262	0.333	0.032	0.61	0.079	0.06	8.60	0.18	280	100	0.02	0.016	0.53	1.81	0.01	0.00	2.09	2.25									
25	8.20	14.6	280	350	0.59	0.266	0.327	0.078	0.57	0.061	0.06	8.60	0.15	260	80	0.01	0.018	0.40	1.78	0.01	0.00	2.20	2.37									
26	8.20	14.6	280	340	1.03	0.270	0.320	0.190	0.70	0.119	0.05	8.60	0.13	275	100	0.02	0.012	0.55	2.11	0.02	0.00	1.90	2.04									
27	8.20	14.8	280	345	0.78	0.262	0.309	0.130	0.57	0.081	0.03	8.60	0.19	280	110	0.01	0.029	0.63	1.88	0.01	0.00	2.02	2.17									
28	7.90	15.1	272	350	2.67	0.203	0.286	0.073	0.02	0.060	0.07	8.60		292	110	0.03	0.009	0.59	1.89	0.01	0.00	2.16	2.16									
29	8.30	14.5	276	340	0.58	0.219	0.282	0.172	0.02	0.141	0.07	8.60		286	100	0.03	0.024	0.62	1.82	0.01	0.00	2.00	2.19									
30	8.10	14.8	280	340	0.62	0.331	0.325	0.132	0.50	0.097	0.07	8.50	0.21	280	180	0.01	0.043	0.69	1.65	0.01	0.00	1.97	2.02									
31																																
Ave	8.15	15.0	283	350	1.03	0.244	#DV01	#DV01	0.50	0.102	0.27	52.5	135.3	85.5	0.26	281	117	0.02	0.027	0.64	1.67	0.01	0.00	1.92	2.03	#DV01	#DV01	#DV01				
Max	8.50	15.9	318	370	2.67	0.331	0.00	0.465	0.202	1.09	0.359	0.70	125	194	69	39	8.70	0.52	320	180	0.03	0.069	0.33	4.52	0.04	0.00	2.20	2.37	0.00	0.00	0.00	0.00
Min	7.90	14.4	270	340	0.49	0.203	0.00	0.229	0.038	0.01	0.049	0.03	26	71	60	23	8.40	0.13	260	80	0.01	0.005	0.30	0.16	0.00	0.00	1.65	1.70	0.00	0.00	0.00	0.00
Lagoon Effluent Tests	pH	Temp	T'Chlor	Mn	Fe	Chloride	TSS																									
Monthly	Date	11/9/2020	8.4	18.6	0.03	0.415	0.39	390	14																							
Even Two Weeks	Date	11/23/2020	8.6	16.7	330	260	46	57																								

on Nov 11/16 our turbidimeter readings until we were able to get the bench top turbidimeter repaired