Monthly Operating Report

May:2023

SSWC

9199 Buckhart Rd Rochester IL 62563

So. Sangamon Water Commission

June 19th, 2023

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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 May 2023.

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 May 2023, the plant pumped 54.792 million gallons from the well field and 47.461 million gallons of finished water. This is 5.4 million gallons more than May 2022.

The SSWC plant has been removed from Critical Review status.

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 May 2023, there were 31 inspections, 3 preventative and multiple corrective maintenance activity completed. There was 0 repair activities performed .

Budget. Passed at April 17th 2023 meeting.

Capital Planning.

Chatham emergency interconnect

Onsite fuel storage tanks

Detention Tank

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 May 2023.

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 May. 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 54.792 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.	7.2	15.2	1.36	.253	-	360	320	2.022
Min.	7.2	13.4	.37	.192	-	300	300	1.505
Avg.	7.1	14.2	.66	.225	-	343	309	1.767
Total	-	-	-	-	-	-	-	54.792

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 47.461 MG during the month with a daily average of 1.531 MG and a min/max 1.306/ 1.754 MG.

Table 2.3 Finished Water Quality

	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	.18	3.96	8.1		0.02	0.036	1.06	160	320	3.60
Min.	0.05	2.84	7.2		0.01	0.006	0.44	100	290	1.41
Avg.	0.09	3.35	7.6		0.01	0.020	0.70	119	306	2.27
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2022-23

Time Period	22-23	21-22	20-21
June 2022- May-2023	430,581,523	421,132,861	403,344,751
Increase for the same period last year		9.45 MG	17.8 MG

FINISHED WATER PUMPING HISTORY

	2022-23	2021-22	2020-21	2019-20	2018-19	2017-18
June	38,496,145	37,616,256	17,414,377	33,460,303	34,040,000	39,931,402
July	38,861,790	39,001,640	44,237,066	23,742,374	41,178,722	42,164,927
Aug	36,977,913	39,953,900	39,638,063	25,018,633	35,176,238	38,760,634
Sept	32,355,302	38,935,839	38,674,095	34,234,782	34,754,000	39,896,986
Oct	29,576,287	34,918,955	34,597,739	30,769,238	30,353,482	33,506,605
Nov	35,563,717	31,181,005	32,325,040	30,877,400	30,464,000	28,617,333
Dec	30,450,255	31,391,459	31,582,311	29,703,954	31,930,000	28,808,037
Jan	37,721,005	32,322,270	31,456,987	30,073,516	28,823,375	30,556,824
Feb	33,481,076	32,451,653	30,638,842	28,797,693	28,625,431	25,617,914
Mar	36,781,261	33,909,417	33,633,244	30,339,298	31,237,000	28,217,699
Apr	36,832,617	31,991,050	33,214,211	31,542,650	28,418,249	27,110,578
May	43,484,155	37,459,417	35,932,776	34,673,848	33,045,927	33,304,196
	---	---	---	---	---	---
Totals	430,581,523	421,132,861	403,344,751	363,233,689	388,046,424	396,493,135
Avg	1.18 MGD	1.15 MGD	1.11 MGD	.995 MGD	1.06 MGD	1.09 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)**
May 2nd, 2023						
Minimum	.65	.053	210.7	.02	8.0	5.2
Maximum	.65	.053	210.7	.02	8.0	5.2
Average	.65	.053	210.7	.02	8.0	5.2
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 May 2023. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

There was 86 incident that impacted the operation of the plant.

Backwash low flow

Ion exchange alarm

Westech filters comm loss

Low Detention Tank Level

Power surge

Power Sag

Power Outages

Ion Exchange Brine Pump

Well comm loss Alarm

Westech production Failure

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.

3.4 CUSTOMER INQUIRIE

There were numerous customer inquiries.

OTHER WORK PERFORMED

Inspected distribution mains
Inspected booster station
Customer service
Air Compressor research
SCADA programming
New Berlin Booster station trouble shooting
Effluent Pump Install
Cell Transmitter Installation

New cell transmitter installed on Mendenhall meter

The booster station flow meter has stopped transmitting flow

The booster station flow meter control panel seems to have lost power. This could be a power issue or a flow meter problem. We have had Lee electric and scadaware out to trouble shoot. Although we have yet to determine the exact problem we are researching options and remedies to fix the problem.

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of May 2023, there were 31 inspections, 3 preventative and multiple 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

Purged air control system

Repair of train #3

Repair of train #2

Air Compressor service

Raw water line flushing

Detention tank flush

Flushing Air Lines

Maintenance of New Berlin Booster Station

Meter Transmitter Replacement

5. PROJECT MANAGEMENT & SUPPORT

5.1 STAFFING & TRAINING

- 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 May 2023.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Dan (SCADAware)
- Joe Lee Electric
- Kevin Garmin (SCADAware)

5.3 BUDGET

Table 5.3 Operating Budget

Table 5.3 Budget Table

Budget Table was removed: see clerks report

6. CAPITAL PLANNING

6.1 APPROVED CIP PROJECTS CURRENT STATUS

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

The Chatham /South Sangamon emergency interconnect is progressing. There was a preconstruction meeting in February. Petersburg Plumbing is planning on starting construction late May, weather and materials permitting.

Train #2 upgrade repair has been completed and train #2 online.

Meter Project progressing, All meter bases and registers are on site. 13 cell meters have been installed.

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.

1. Second Torray filter train has been installed
2. Onsite fuel storage tanks have arrived on site and pumps have been installed
3. BOP CPU upgrade has been completed
4. Second raw water detention tank
5. SSWC/Chatham interconnect

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES

South Sangamon Water Commission - IL1670080

May 2023

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	7.20	13.6	310	344	0.69	0.210			0.304	0.068	0.02	0.057	0.26					7.70	0.33	300	100	0.01	0.022	0.79	2.17	0.01	7.41	0.05	3.08					
2	7.20	13.6	300	350	0.67	0.221			0.377	0.067	0.02	0.054	0.30					7.70	0.34	300	110	0.02	0.028	0.74	2.49	0.01	6.94	0.08	3.25					
3	7.20	13.7	310	345	0.48	0.210			0.409	0.056	0.02	0.036	0.28					7.70	0.32	310	160	0.01	0.009	0.69	2.23	0.01	6.10	0.10	2.84					
4	7.20	13.6	310	330	0.46	0.222			0.367	0.063	0.02	0.052	0.32					7.60	0.36	300	120	0.01	0.027	0.71	2.31	0.01	7.18	0.10	3.66					
5	7.10	14.3	310	350	0.60	0.213			0.334	0.055	0.01	0.038	0.30					7.60	0.34	310	120	0.01	0.010	0.47	2.27	0.01	7.08	0.10	3.54			pass	pass	pass
6	7.20	13.4	320	356	0.74	0.218			0.310	0.074	0.01	0.048	0.29					7.70	0.32	314	110	0.01	0.011	0.74	2.34	0.01	7.29	0.06	3.19					
7	7.20	13.6	310	350	0.71	0.214			0.308	0.071	0.01	0.064	0.26					7.70	0.34	300	110	0.01	0.019	0.72	2.41	0.01	6.84	0.07	3.04					
8	7.20	13.7	310	345	0.65	0.218			0.298	0.061	0.01	0.060	0.30					7.20	0.27	300	110	0.01	0.021	0.68	2.32	0.01	6.10	0.08	3.00					
9	7.10	15.0	300	345	0.72	0.215			0.411	0.056	0.02	0.036	0.34					7.60	0.31	300	110	0.01	0.024	0.68	2.32	0.01	5.26	0.13	3.40					
10	7.10	14.2	310	330	0.69	0.201			0.383	0.057	0.02	0.038	0.29					7.60	0.30	300	120	0.01	0.030	0.72	2.18	0.01	5.36	0.09	3.12					
11	7.10	14.2	310	340	0.61	0.192			0.349	0.023	0.01	0.022	0.26					7.60	0.28	310	120	0.02	0.015	0.44	2.25	0.01	4.54	0.07	3.56					
12	7.20	15.0	320	355	0.64	0.214			0.338	0.040	0.02	0.055	0.29					7.70	0.30	320	130	0.02	0.030	0.67	2.31	0.01	3.75	0.08	3.44					
13	7.20	14.7	310	340	0.60	0.211			0.303	0.038	0.02	0.050	0.28					7.70	0.32	310	110	0.01	0.032	0.70	2.38	0.01	3.89	0.09	3.46					
14	7.10	14.9	310	345	0.53	0.219			0.310	0.032	0.01	0.048	0.32					7.60	0.36	310	140	0.01	0.028	0.68	2.32	0.01	3.54	0.08	3.12					
15	7.10	14.2	320	340	0.70	0.223			0.323	0.029	0.01	0.032	0.30					7.60	0.29	320	120	0.01	0.006	0.95	2.05	0.01	3.29	0.08	3.36					
16	7.20	14.0	300	350	0.67	0.233			0.390	0.038	0.01	0.053	0.35					7.60	0.34	300	100	0.01	0.018	0.73	2.27	0.01	3.66	0.08	3.30					
17	7.10	14.2	310	345	0.72	0.239			0.462	0.058	0.02	0.048	0.32					7.60	0.36	310	140	0.02	0.018	0.57	2.11	0.01	3.31	0.18	3.52			pass	pass	pass
18	7.10	14.4	310	360	0.49	0.224			0.346	0.041	0.02	0.055	0.32					8.10	0.38	300	110	0.02	0.010	1.06	3.60	0.01	3.15	0.09	3.62					
19	7.10	15.0	320	360	0.37	0.213			0.347	0.023	0.02	0.046	0.28					7.60	0.34	320	110	0.01	0.014	0.54	1.93	0.01	3.25	0.08	3.48					
20	7.10	13.9	310	352	0.66	0.241			0.381	0.050	0.01	0.061	0.29					7.60	0.31	310	110	0.01	0.012	0.79	1.84	0.01	3.32	0.06	3.29					
21	7.10	14.0	310	350	0.71	0.228			0.357	0.041	0.01	0.052	0.28					7.60	0.33	310	120	0.01	0.010	0.83	1.99	0.01	3.22	0.05	3.38					
22	7.10	14.2	300	320	0.65	0.231			0.431	0.039	0.02	0.053	0.45					7.60	0.40	300	120	0.01	0.017	0.80	2.35	0.01	6.95	0.11	3.60					
23	7.10	14.3	310	335	0.78	0.242			0.395	0.045	0.02	0.067	0.40					7.60	0.38	300	120	0.01	0.018	0.63	2.57	0.01	3.88	0.09	3.18					
24	7.20	14.5	300	330	1.36	0.246			0.341	0.036	0.02	0.049	0.38					7.60	0.38	300	100	0.01	0.008	0.81	1.98	0.01	3.43	0.10	3.54					
25	7.10	14.1	320	340	0.59	0.253			0.373	0.059	0.02	0.065	0.42					7.60	0.38	310	120	0.02	0.033	0.65	1.41	0.01	2.34	0.08	2.94					
26	7.20	14.1	300	300	0.67	0.245			0.378	0.063	0.02	0.066	0.39					7.60	0.40	310	130	0.01	0.033	0.52	2.54	0.01	2.10	0.08	3.22					
27	7.20	14.3	300	330	0.56	0.250			0.369	0.052	0.01	0.061	0.38					7.60	0.42	300	120	0.01	0.030	0.49	2.32	0.01	3.70	0.08	3.55					
28	7.10	14.2	310	340	0.52	0.236			0.326	0.045	0.01	0.048	0.39					7.60	0.46	300	140	0.01	0.036	0.68	2.39	0.01	3.45	0.08	3.30					
29	7.10	14.2	310	345	0.68	0.231			0.386	0.050	0.02	0.046	0.38					7.60	0.36	300	120	0.01	0.028	0.79	2.42	0.01	3.50	0.09	3.22					
30	7.20	14.6	310	360	0.55	0.232			0.535	0.038	0.01	0.048	0.32					7.70	0.34	290	140	0.01	0.009	0.57	2.13	0.01	2.79	0.10	3.96					
31	7.20	15.2	310	360	0.98	0.236			0.368	0.048	0.02	0.066	0.33					7.70	0.34	310	100	0.01	0.022	0.71	2.19	0.01	3.09	0.11	3.64					
Ave.	7.15	14.2	309	343	0.66	0.225	#DIV/0!	#DIV/0!	0.365	0.049	0.02	0.051	0.32	#####	#####	#####	#####	7.63	0.35	306	119	0.01	0.020	0.70	2.27	0.01	4.51	0.09	3.35	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Max	7.20	15.2	320	360	1.36	0.253	0.00	0.00	0.535	0.074	0.02	0.067	0.45	0	0	0	0	8.10	0.46	320	160	0.02	0.036	1.06	3.60	0.01	7.41	0.18	3.96	0.00	0.00	0.00	0.00	0.00
Min	7.10	13.4	300	300	0.37	0.192	0.00	0.00	0.298	0.023	0.01	0.022	0.26	0	0	0	0	7.20	0.27	290	100	0.01	0.006	0.44	1.41	0.01	2.10	0.05	2.84	0.00	0.00	0.00	0.00	0.00

Lagoon Effluent Tests	pH	Temp	TChlor	Mn	Fe	Chloiride	TSS
Monthly		°C	mg/l	mg/l	mg/l	mg/L	mg/L
Date 5/2/2023	8	14.8	0.02	0.053	0.65	210.7	5.2

Distribution Stability Tests	pH	Temp	TDS	Alkalinity	Calcium	Chloiride	Sulfate
Every Two Weeks		°C	mg/L	mg/L as CaCO3		mg/L	mg/L
Date 5/3/2023	7.81	15	460	290		42	58
Date							
Date							

Remarks:

South Sangamon Water Commission

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

DIVISION OF PUBLIC WATER SUPPLIES

South Sangamon Water Commission - IL 1670080

May 2023

		Pumping Totals						Chemicals Applied														UF Filters						Softeners								
			Raw					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	Lagoon	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	Effluent	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	Bank # 2	Bank # 3		(Mgal)	(Mgal)	(Mgal)	hours previous/hours following. 1	2	3	4	lbs.	Gal.		
1	7:00	18.9	1.567	1.306	0.012	1.209	0.072	16	0.24	0	0.00	352	5.14	41	0.75	33	0.62	18	0.59	17	11.30	0.66	0.66	0.66		0.053		1.306	31.0	69.0	72.0	29.0	9124	43400		
2	7:00	20.6	1.797	1.556	0.018	1.510	0.079	19	0.25	0	0.00	413	3.98	49	0.76	39	0.59	64	1.68	22	13.43	0.66	0.66	0.66		0.069		1.556		32.0		32.0	4562	21700		
3	7:00	19.7	1.645	1.404	0.009	1.374	0.076	18	0.26	0	0.00	378	4.04	44	0.75	34	0.56	3	0.09	20	12.69	0.66	0.66	0.66		0.066		1.404	39.0		47.0		4562	21700		
4	7:00	17.9	1.550	1.361	0.010	1.266	0.073	4	0.06	0	0.00	424	4.67	54	0.95	40	0.72	9	0.28	13	8.50	0.66	0.66	0.66		0.059		1.361	32.0	32.0		31.0	6843	32550		
5	7:00	21.0	1.837	1.567	0.014	1.512	0.083	23	0.30	0	0.00	470	4.50	54	0.83	42	0.63	0	0.00	9	5.23	0.66	0.66	0.66		0.073		1.567			47.0	28.0	4562	21700		
6	7:00	20.9	1.806	1.584	0.015	1.510	0.079	20	0.27	0	0.00	416	3.94	52	0.79	39	0.59	22	0.58	19	11.48	0.66	0.66	0.66		0.065		1.584	36.0	59.0		29.0	6843	32550		
7	7:00	20.8	1.834	1.566	0.013	1.512	0.083	22	0.29	0	0.00	453	4.34	56	0.86	41	0.62	14	0.37	20	11.62	0.66	0.66	0.66		0.073		1.566	35.0	30.0			4562	21700		
8	7:00	18.7	1.633	1.402	0.015	1.372	0.062	20	0.29	0	0.00	428	4.58	51	0.87	39	0.65	16	0.46	22	17.08	0.66	0.66	0.66		0.057		1.402				30.0	2281	10850		
9	7:00	20.2	1.775	1.570	0.000	1.499	0.085	21	0.28	0	0.00	434	4.14	61	0.93	40	0.61	24	0.63	3	1.69	0.66	0.66	0.66		0.071		1.570	35.0	29.0		30.0	6843	32550		
10	7:00	20.7	1.814	1.565	0.014	1.512	0.079	19	0.25	0	0.00	404	3.87	49	0.75	36	0.54	64	1.67	0	0.00	0.66	0.66	0.66		0.065		1.565	36.0	32.0		31.0	6843	32550		
11	7:00	18.0	1.583	1.343	0.014	1.336	0.079	20	0.30	0	0.00	414	4.62	61	1.09	39	0.67	5	0.15	12	7.25	0.66	0.66	0.66		0.065		1.343		27.0	149.0	28.0	6843	32550		
12	7:00	18.4	1.651	1.429	0.021	1.408	0.067	20	0.29	0	0.00	408	4.28	74	1.24	37	0.60	10	0.28	6	4.31	0.66	0.66	0.66		0.062		1.429	32.0				2281	10850		
13	7:00	19.1	1.688	1.524	0.008	1.406	0.085	14	0.20	0	0.00	404	3.97	66	1.04	46	0.75	14	0.39	6	3.37	0.66	0.66	0.66		0.071		1.524	36.0	35.0		34.0	6843	32550		
14	7:00	18.9	1.551	1.399	0.010	1.501	0.060	26	0.40	0	0.00	448	4.80	79	1.35	41	0.62	15	0.40	12	9.66	0.66	0.66	0.66		0.050		1.399		31.0		32.0	4562	21700		
15	7:00	20.3	1.797	1.551	0.010	1.507	0.084	18	0.24	0	0.00	384	3.71	65	1.00	37	0.56	16	0.42	18	10.26	0.66	0.66	0.66		0.065		1.551	33.0	29.0	93.0	30.0	9124	43400		
16	7:00	20.8	1.831	1.556	0.019	1.523	0.084	19	0.25	0	0.00	390	3.76	56	0.86	35	0.52	18	0.47	18	10.30	0.66	0.66	0.66		0.079		1.556	39.0				2281	10850		
17	7:00	17.6	1.505	1.328	0.005	1.284	0.063	25	0.40	0	0.00	400	4.51	55	0.99	41	0.73	34	1.05	31	23.46	0.66	0.66	0.66		0.049		1.328		34.0	49.0	32.0	6843	32550		
18	7:00	19.4	1.675	1.455	0.014	1.380	0.081	18	0.26	0	0.00	368	3.79	37	0.61	34	0.56	73	2.09	28	16.50	0.66	0.66	0.66		0.067		1.455	41.0	36.0		35.0	6843	32550		
19	7:00	19.2	1.682	1.409	0.015	1.390	0.077	19	0.27	0	0.00	425	4.52	67	1.14	37	0.61	5	0.14	33	20.46	0.66	0.66	0.66		0.063		1.409	31.0	33.0	45.0		6843	32550		
20	7:00	18.4	1.642	1.454	0.014	1.405	0.064	21	0.31	0	0.00	390	4.02	37	0.61	39	0.63	11	0.31	29	21.80	0.66	0.66	0.66		0.059		1.454				33.0	2281	10850		
21	7:00	18.3	1.609	1.388	0.004	1.326	0.072	18	0.27	0	0.00	395	4.27	34	0.59	37	0.64	-37	-1.10	35	23.20	0.66	0.66	0.66		0.058		1.388	32.0	30.0		38.0	6843	32550		
22	7:00	20.8	1.826	1.569	0.015	1.520	0.090	21	0.28	0	0.00	451	4.31	43	0.66	43	0.64	17	0.44	46	24.47	0.66	0.66	0.66		0.071		1.569	32.0	35.0	71.0	25.0	9124	43400		
23	7:00	20.7	1.839	1.578	0.019	1.518	0.089	21	0.27	0	0.00	435	4.13	41	0.62	40	0.60	18	0.47	26	13.95	0.66	0.66	0.66		0.075		1.578	32.0		29.0	30.0	6843	32550		
24	7:00	20.7	1.861	1.600	0.015	1.587	0.071	22	0.28	0	0.00	446	4.18	45	0.67	43	0.62	24	0.60	28	18.97	0.66	0.66	0.66		0.066		1.600		32.0			2281	10850		
25	7:00	20.9	1.884	1.682	0.005	1.599	0.091	23	0.29	0	0.00	498	4.44	45	0.64	46	0.66	52	1.29	37	19.42	0.66	0.66	0.66		0.077		1.682	31.0	34.0		28.0	6843	32550		
26	7:00	21.6	2.016	1.743	0.013	1.673	0.093	21	0.25	0	0.00	423	3.64	43	0.59	42	0.57	7	0.17	34	17.50	0.66	0.66	0.66		0.074		1.743	30.0	32.0	67.0	27.0	9124	43400		
27	7:00	21.1	1.941	1.688	0.020	1.678	0.088	25	0.31	0	0.00	615	5.46	51	0.72	51	0.69	12	0.28	11	6.02	0.66	0.66	0.66		0.078		1.688	33.0			27.0	4562	21700		
28	7:00	21.4	1.983	1.712	0.011	1.671	0.078	22	0.27	0	0.00	479	4.19	43	0.60	44	0.60	12	0.28	13	8.02	0.66	0.66	0.66		0.073		1.712		32.0			2281	10850		
29	7:00	21.1	1.963	1.707	0.008	1.671	0.092	23	0.28	0	0.00	464	4.07	47	0.66	47	0.64	15	0.36	6	3.12	0.66	0.66	0.66		0.078		1.707	33.0	32.0		56.0	6843	32550		
30	7:00	21.5	2.022	1.754	0.015	1.680	0.094	20	0.24	0	0.00	440	3.76	42	0.57	43	0.58	14	0.33	2	1.02	0.66	0.66	0.66		0.075		1.754	34.0	33.0	94.0	27.0	9124	43400		
31	7:00	21.0	1.985	1.711	0.020	1.683	0.091	22	0.27	0	0.00	482	4.22	45	0.63	46	0.62	19	0.45	0	0.00	0.66	0.66	0.66		0.086		1.711			26.0		2281	10850		
Total		618.6	54.792	47.461	0.395	46.022	2.466	620	8.42	0	0	12979	131.83	1587	25.15	1251	19.24	588	15.60	576	356.07					2.092	0.000	47.461	713	768	789	722	177918	846300		
Ave.		20.0	1.767	1.531	0.013	1.485	0.080	20.0	0.27	0	0	433	4.25	51	0.81	40.4	0.62	19.0	0.50	18.6	11.49	0.66	0.66	0.66	#DIV/0!	0.067	#DIV/0!	1.531	34.0	34.9	65.8	31.4	5739.29	27300		
Max		21.6	2.022	1.754	0.021	1.683	0.094	26.0	0.40	0	0	615	5.46	79	1.35417	51	0.75	73	2.09	46	24.47	0.66	0.66	0.66	0	0.086	0.000	1.754	41.0	69.0	149.0	56.0	9,124	43,400		
Min		17.6	1.505	1.306	0.000	1.209	0.060	4.0	0.06	0	0	368	3.64	34	0.57	33	0.52	-37	-1.10	0	0.00	0.66	0.66	0.66	0	0.049	0.000	1.306	30.0	27.0	26.0	25.0	2281	10850		

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: 6/9/2023

Date Bacterials Ser: 5/26/2023

May 2023 Monthly Operating Report