



SSWC

9199 Buckhart Rd Rochester IL 62563

Monthly Operating Report

March:2022

So. Sangamon
Water Commission
April 18th, 2022

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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 April 2022.

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 March 2022, the plant pumped 45.272 million gallons from the well field and 39.775 million gallons of finished water. This is .962 million gallons more than March of 2021.

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 March 2022, there were 31 inspections, 3 preventative and 3 corrective maintenance activity completed. There was 1 repair activity performed .

Budget. Passed at April 18th 2022 meeting.

Capital Planning.

New Berlin Meter relocation project

Chatham emergency interconnect

Onsite fuel storage tanks

Detention Tank

Filter Train #2

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 March 2022.

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 March. 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 45.272 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.	7.6	14.3	1.44	.230	-	400	316	1.920
Min.	7.2	12.7	.52	.199	-	320	280	.801
Avg.	7.39	13.6	.79	.218	-	359	299	1.460
Total	-	-	-	-	-	-	-	45.272

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 39.775 MG during the month with a daily average of 1.283 MG and a min/max 1.024/ 1.715 MG.

Table 2.3 Finished Water Quality										
	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	.27	3.20	7.8		0.01	0.117	1.0	200	310	2.30
Min.	0.06	2.08	7.3		0.01	0.008	0.48	100	270	1.72
Avg.	0.12	2.75	7.7		0.01	0.041	0.82	136	291	1.96
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2021 -22

Time Period	21-22	20-21	19-20
Apr-2021- Mar-2022	420,829,381	400,414,262	358,481,367
Increase for the same period last year		20.4 MG	41.9 MG

FINISHED WATER PUMPING HISTORY						
	21-22	20-21	19-20	18-19	17-18	16-17
Apr	33,214,211	31,542,650	28,418,249	27,110,578	29,625,797	29,292,618
May	35,932,776	34,673,848	33,045,927	33,304,196	32,120,873	33,349,391
June	37,616,256	17,414,377	33,460,303	34,040,000	39,931,402	41,541,321
July	39,001,640	44,237,066	23,742,374	41,178,722	42,164,927	35,378,396
Aug	39,953,900	39,638,063	25,018,633	35,176,238	38,760,634	35,401,490
Sept	38,935,839	38,674,095	34,234,782	34,754,000	39,896,986	36,325,215
Oct	34,918,955	34,597,739	30,769,238	30,353,482	33,506,605	4,374,8320
Nov	31,181,005	32,325,040	30,877,400	30,464,000	28,617,333	30,478,309
Dec	31,391,459	31,582,311	29,703,954	31,930,000	28,808,037	32,525,530
Jan	32,322,270	31,456,987	30,073,516	28,823,375	30,556,824	30,449,215
Feb	32,451,653	30,638,842	28,797,693	28,625,431	25,617,914	27,373,232
Mar	33,909,417	33,633,244	30,339,298	31,237,000	28,217,699	30,068,363
	-----	-----	-----	-----	-----	-----
Totals	420,829,381	400,414,262	358,481,367	386,997,022	397,825,031	405,931,400
Avg	1.15 MGD	1.10 MGD	.982 MGD	1.06 MGD	1.09 MGD	1.11 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)
Mar 3rd, 2022	.19	.883	310	.01	7.6	<4
Minimum	.19	.883	310	.01	7.6	<4
Maximum	.19	.883	310	.01	7.6	<4
Average	.19	.883	310	.01	7.6	<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 March 2022. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

There was 0 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.

3.4 CUSTOMER INQUIRIE

There were numerous customer inquiries.

OTHER WORK PERFORMED

Trouble shooting all trains
Trouble shooting of CIP skid and CIP procedure
Inspected distribution mains
Inspected booster station
Flushed air system
Trouble shooting of Ion exchange system
Repaired ion exchange valve and actuator
Serviced air compressors
Customer service
Well #3 cleaning
Replaced Backwash Tee



Train #1 backwash flange leak



Train #1 leak



Brotke at well #3



#3 well cleaning in process

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of March 2022, 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

Purged air control system

Air Compressor service

Well #3 cleaning

Repair Backwash Tee

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 March 2022.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Dan (SCADAware)
- Joe Lee
- Kevin Garmin (SCADAware)
- Petersburg Plumbing
- Brotke Well and Pump

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.

Benton and Assoc has initiated the planning phase of the Chatham Emergency interconnect. Construction permit has been approved and received. Construction has been postponed.

Train #2 upgrade has begun. Hardware has been ordered. First payment has been requested. Train install has been bid. Petersburg Plumbing was the only bidder.

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 modules have arrived on site
2. Pricing onsite fuel storage tanks to alleviate tax costs and ensure sustainability during emergencies.
3. BOP CPU upgrade has been completed
4. Meter Project progressing, meters scheduled to arrive the end of April.

South Sangamon Water Commission - IL1670080
MARCH 2022

Date	Physical and Chemical Tests										Finished										Membrane Integrity										
	Raw					Pre UF Membrane					Post UF Membrane					Post IEX					Post Filter										
	Temp deg C	Total Alk. mg/L	Total Fe mg/L	Total Mn mg/L	Turbidity NTU	Total Soluble Fe mg/L	Total Soluble Mn mg/L	Total Turbidity NTU	Total Fe mg/L	Total Mn mg/L	Total Turbidity NTU	Chloride mg/L	1	2	3	4	Turbidity NTU	Total Alk. as CaCO3 mg/L	Total Fe mg/L	Total Mn mg/L	Total Fluoride mg/L	Ortho Phosphate mg/L	Free Ammonia mg/L	Mono-Chloramine mg/L	Chlorine F mg/L	Chlorine T mg/L	Distribution F mg/L	Distribution T mg/L	Bank 1 Bank 2 Bank 3		
1	7.40	14.0	300	380	0.84	0.224	0.513	0.091	0.74	0.094	0.18					7.70	0.22	300	180	0.01	0.084	0.82	1.90	0.59	4.92	0.10	2.70	pass			
2	7.40	14.3	300	360	0.59	0.217	0.328	0.138	0.47	0.091	0.20					7.80	0.18	280	140	0.01	0.039	0.81	1.93	0.65	6.37	0.10	3.08				
3	7.40	13.5	280	380	0.53	0.209	0.403	0.119	0.52	0.101	0.17					7.70	0.29	280	140	0.01	0.043	0.88	2.02	0.53	5.14	0.27	2.14				
4	7.40	13.4	300	340	0.60	0.223	0.420	0.117	0.43	0.090	0.15					7.70	0.33	290	140	0.01	0.030	0.93	2.30	0.45	6.19	0.12	3.08				
5	7.30	13.1	292	352	0.52	0.199	0.321	0.135	0.01	0.075	0.21					7.50	0.36	300	120	0.01	0.032	0.94	2.07	0.58	5.66	0.11	2.45				
6	7.50	13.2	300	356	0.63	0.219	0.340	0.124	0.01	0.061	0.16					7.70	0.35	310	120	0.01	0.029	0.86	1.89			0.15	2.57				
7	7.40	13.4	300	400	0.69	0.204	0.638	0.109	0.65	0.092	0.15					7.80	0.18	290	110	0.01	0.019	0.68	1.95	0.68	3.24	0.10	2.98	pass			
8	7.40	13.5	300	365	0.72	0.230	1.190	0.103	1.06	0.095	0.17					7.80	0.31	290	140	0.01	0.052	0.69	1.91	0.57	5.19	0.10	2.38				
9	7.30	13.8	290	360	0.94	0.219	0.656	0.096	0.76	0.072	0.18					7.80	0.21	290	120	0.01	0.008	0.73	1.91	0.74	6.67	0.09	3.20				
10	7.40	13.2	300	340	0.67	0.218	0.466	0.094	0.67	0.049	0.24					7.50	0.31	300	120	0.01	0.029	1.00	2.15	0.48	3.46	0.18	2.30	pass			
11	7.40	13.5	300	360	0.75	0.230	0.697	0.097	0.85	0.081	0.21					7.70	0.38	300	100	0.01	0.043	0.77	1.88	0.70	5.71	0.24	2.82				
12	7.40	13.6	300	320	0.69	0.212	0.333	0.070	0.44	0.076	0.18					7.80	0.30	280	120	0.01	0.028	0.76	1.72	0.53	4.50	0.10	2.92				
13	7.30	13.8	300	345	0.70	0.209	0.387	0.088	0.39	0.083	0.15					7.80	0.22	290	100	0.01	0.034	0.86	1.89	0.67	3.33	0.09	2.50				
14	7.40	13.5	300	360	0.96	0.230	0.405	0.126	1.00	0.090	0.18					7.30	0.30	300	140	0.01	0.048	0.88	1.97	0.65	6.38	0.13	3.14				
15	7.40	13.6	300	340	0.92	0.212	0.345	0.086	0.89	0.085	0.16					7.80	0.28	300	100	0.01	0.040	0.87	1.92	0.59	5.43	0.06	2.60				
16	7.40	13.6	300	340	0.72	0.217	0.545	0.100	0.64	0.069	0.15					7.80	0.30	300	100	0.01	0.031	0.47	1.96	0.62	4.31	0.08	2.60				
17	7.40	13.8	300	360	1.29	0.225	0.553	0.116	1.31	0.090	0.19					7.80	0.30	300	100	0.01	0.023	0.84	2.13	0.68	6.09	0.09	2.90				
18	7.20	13.4	312	390	1.39	0.224	0.511	0.515	0.01	0.511	0.20					7.40	0.41	306	130	0.01	0.024	0.86	2.09	0.72	5.49	0.12	2.58				
19	7.40	13.0	310	372	0.73	0.213	0.337	0.106	0.01	0.080	0.15					7.70	0.38	300	150	0.01	0.029	0.85	1.93	0.59	5.01	0.21	2.96				
20	7.40	12.7	316	376	0.81	0.225	0.351	0.107	0.01	0.062	0.40					7.70	0.43	302	154	0.01	0.037	0.93	1.87	0.62	4.92	0.10	2.78	pass			
21	7.40	14.0	300	340	0.78	0.227	0.787	0.104	0.92	0.103	0.18					7.30	0.21	280	100	0.01	0.043	0.83	1.96	0.73	5.43	0.13	3.02				
22	7.40	14.1	280	340	1.13	0.227	0.324	0.083	0.74	0.084	0.19					7.80	0.30	280	100	0.01	0.033	0.80	2.01	0.72	5.45	0.11	2.84				
23	7.40	14.2	300	360	0.98	0.217	0.328	0.102	0.77	0.080	0.16					7.60	0.30	280	140	0.01	0.049	0.89	1.96	0.44	2.65	0.11	2.18				
24	7.60	13.2	314	384	0.61	0.206	0.454	0.067	0.01	0.072	0.17					7.70	0.97	290	200	0.01	0.032	0.78	1.96	0.58	4.12	0.14	2.45				
25	7.40	13.7	300	370	0.62	0.209	0.358	0.106	0.63	0.088	0.17					7.70	0.40	300	200	0.01	0.052	0.82	1.85	0.77	5.77	0.13	3.20	pass			
26	7.40	13.6	300	360	0.60	0.214	0.360	0.112	0.74	0.070	0.15					7.70	0.38	280	180	0.01	0.047	0.88	1.91	0.70	5.42	0.10	2.98				
27	7.40	13.8	300	365	0.54	0.223	0.347	0.089	0.38	0.090	0.18					7.70	0.35	280	180	0.01	0.040	0.79	1.89	0.68	4.88	0.10	3.12				
28	7.40	13.3	305	360	0.62	0.218	0.325	0.185	0.61	0.194	0.19					7.80	0.32	300	140	0.01	0.065	0.76	1.99	0.59	5.94	0.12	2.80				
29	7.40	13.3	280	360	0.66	0.213	0.209	0.197	0.66	0.175	0.15					7.70	0.27	280	140	0.01	0.053	0.71	1.81	0.06	5.67	0.14	2.88				
30	7.40	13.8	280	345	0.77	0.208	0.271	0.168	0.61	0.151	0.18					7.60	0.28	270	160	0.01	0.066	0.95	1.89	0.75	4.82	0.11	3.02				
31	7.30	13.6	300	356	1.44	0.230	0.248	0.191	1.41	0.179	0.21					7.70	0.30	280	140	0.01	0.117	0.71	2.05	0.46	2.66	0.11	2.08	pass			
Ave.	7.39	13.6	299	359	0.79	0.218	#DIV/0!	0.451	0.728	0.59	0.104	#####	#####	#####	#####	7.69	0.30	291	136	0.01	0.041	0.82	1.96	0.60	5.03	0.12	2.75	#DIV/0!	#DIV/0!	#DIV/0!	
Max.	7.60	14.3	316	400	1.44	0.230	0.00	0.400	1.44	0.511	0.40	0	0	0	0	7.80	0.97	310	200	0.01	0.117	1.00	2.30	0.77	6.67	0.27	3.20	0.00	0.00	0.00	
Mn	7.20	12.7	280	320	0.52	0.198	0.00	0.209	0.667	0.01	0.049	0.15	0	0	0	7.30	0.18	270	100	0.01	0.008	0.48	1.72	0.06	2.85	0.06	2.08	0.00	0.00	0.00	
Lagoon Effluent Tests	Temp °C	pH	TChlor mg/L	Mn mg/L	TSS mg/L	Fe mg/L	Chloride mg/L	TSS mg/L	Fe mg/L	Chloride mg/L	310<-4	Distribution Stability Tests														Remarks:					
Monthly	3/3/2022	7.6	13.5	0.05	0.883	0.19	310<-4					Every Two Weeks																			
Date	3/3/2022	7.7	15.1	360	270	42	58					Date	3/3/2022	7.7	15.1	360	270	42	58					Date	3/3/2022	7.7	15.1	360	270	42	58

South Sangamon Water Commission - IL 1670080
MARCH 2022

Pumping Totals										Chemicals Applied										UF Filters										Softeners									
Time Read	Raw Well	UF Filtered (Mgal)	Plant Water (Mgal)	HS Pumpage (Mgal)	Lagoon Effluent (Mgal)	Sodium Permanganate		Sodium Bisulfite BW		Sodium Hypochlorite		Ammonium Sulfate		Fluorosisic Acid		Phosphate		Sodium Bisulfite Pond		Hours since previous backwash			Wash Water		Water Softened		Water Bypassed		Regeneration										
						Amnt Used lbs.	Calc mg/as	Amnt Used lbs.	Calc mg/as	Amnt Used lbs.	Calc mg/as	Amnt Used lbs.	Calc mg/as	Amnt Used lbs.	Calc mg/as	Amnt Used lbs.	Calc mg/as	Amnt Used lbs.	Calc mg/as	Amnt Used lbs.	Calc mg/as	Bank#	1	2	3	4	Gal (Mgal)	Gal (Mgal)	Gal (Mgal)	Gal (Mgal)	1	2	3	4	Salt Used lbs.	Washed Gal.			
1	7:00	21.3	1.780	1.540	0.020	1.466	0.090	0.00	0.00	288	2.90	100	1.56	37	0.57	0	0.00	16	8.49	0.66	0.66	0.66	0.76	1.007	0.533	36.0	36.0	27.0	68.43	32550									
2	7:00	17.2	1.457	1.270	0.010	1.170	0.074	0.00	0.00	340	4.01	119	2.25	42	0.82	0	0.30	21	13.69	0.66	0.66	0.66	0.64	0.830	0.440	51.0	33.0	45.62	21700										
3	7:00	18.8	1.513	1.339	0.009	1.282	0.072	0.00	0.00	310	3.47	108	1.93	37	0.68	11	0.34	17	11.39	0.66	0.66	0.66	0.62	0.875	0.464	57.0	41.0	45.62	21700										
4	7:00	18.2	1.503	1.312	0.010	1.161	0.078	0.00	0.00	318	3.63	104	1.90	39	0.77	12	0.41	19	11.63	0.66	0.66	0.66	0.64	0.858	0.454	34.0	30.0	68.43	32550										
5	7:00	17.7	1.472	1.310	0.014	1.220	0.071	0.00	0.00	300	3.43	104	1.90	36	0.67	14	0.45	18	12.23	0.66	0.66	0.66	0.61	0.856	0.454	38.0	35.0	45.62	21700										
6	7:00	17.6	1.446	1.243	0.009	1.140	0.087	0.00	0.00	328	3.96	116	2.24	39	0.78	42	1.46	21	11.56	0.66	0.66	0.66	0.67	0.867	0.460	34.0	39.0	32.0	9124	43400									
7	7:00	20.9	1.751	1.543	0.004	1.444	0.092	0.00	0.00	294	2.86	103	1.60	36	0.57	3	0.08	17	8.83	0.66	0.66	0.66	0.78	1.008	0.535	35.0	47.0	36.0	68.43	32550									
8	7:00	16.4	1.337	1.189	0.014	1.053	0.070	0.00	0.00	308	3.88	105	2.12	38	0.82	6	0.23	17	11.72	0.66	0.66	0.66	0.60	0.777	0.412	38.0	37.0	45.62	21700										
9	7:00	18.2	1.450	1.274	0.012	1.252	0.074	0.00	0.00	300	3.53	106	2.00	36	0.66	1	0.03	22	14.19	0.66	0.66	0.66	0.60	0.833	0.441	34.0	47.0	37.0	68.43	32550									
10	7:00	17.9	1.474	1.260	0.013	1.133	0.078	0.00	0.00	300	3.57	96	1.83	38	0.76	12	0.42	15	9.16	0.66	0.66	0.66	0.64	0.824	0.436	39.0	29.0	38.0	68.43	32550									
11	7:00	16.6	1.391	1.233	0.014	1.151	0.069	0.00	0.00	362	4.64	127	2.47	46	0.91	18	0.31	18	12.59	0.66	0.66	0.66	0.64	0.806	0.427	38.0	35.0	45.62	21700										
12	7:00	16.8	1.361	1.185	0.009	1.111	0.070	0.00	0.00	268	3.39	87	1.76	32	0.66	7	0.25	19	13.10	0.66	0.66	0.66	0.60	0.775	0.410	33.0	36.0	40.0	45.62	21700									
13	7:00	18.5	1.519	1.320	0.012	1.217	0.084	0.00	0.00	310	3.52	105	1.91	39	0.73	9	0.29	15	8.95	0.66	0.66	0.66	0.66	0.863	0.457	36.0	86.0	31.0	68.43	32550									
14	7:00	21.0	1.707	1.529	0.017	1.415	0.084	0.00	0.00	292	2.86	103	1.62	36	0.56	11	0.31	21	12.05	0.66	0.66	0.66	0.74	0.999	0.530	39.0	37.0	40.0	45.62	21700									
15	7:00	17.1	1.420	1.197	0.010	1.152	0.073	0.00	0.00	286	3.71	104	2.08	38	0.75	12	0.41	21	13.88	0.66	0.66	0.66	0.63	0.782	0.415	52.0	42.0	45.62	21700										
16	7:00	17.3	1.466	1.294	0.013	1.164	0.078	0.00	0.00	314	3.64	107	1.98	38	0.74	17	0.58	21	12.98	0.66	0.66	0.66	0.66	0.846	0.448	39.0	41.0	45.62	21700										
17	7:00	17.9	1.474	1.270	0.013	1.161	0.075	0.00	0.00	304	3.59	106	2.00	37	0.73	38	1.30	20	12.86	0.66	0.66	0.66	0.65	0.830	0.440	33.0	37.0	45.62	21700										
18	7:00	17.0	1.457	1.253	0.010	1.154	0.072	0.00	0.00	362	4.33	121	2.32	44	0.87	78	2.67	15	10.05	0.66	0.66	0.66	0.62	0.819	0.434	42.0	43.0	45.62	21700										
19	7:00	15.7	1.346	1.210	0.010	1.103	0.062	0.00	0.00	232	2.87	80	1.59	29	0.60	52	1.87	18	13.97	0.66	0.66	0.66	0.67	0.791	0.419	39.0	37.0	114.0	9124	43400									
20	7:00	17.2	1.455	1.248	0.005	1.153	0.068	0.00	0.00	250	3.00	114	2.19	40	0.79	72	2.47	20	10.76	0.66	0.66	0.66	0.70	0.816	0.432	32.0	37.0	40.0	9124	43400									
21	7:00	17.9	1.567	1.386	0.021	1.230	0.076	0.00	0.00	288	3.20	97	1.67	34	0.63	12	0.39	18	11.39	0.66	0.66	0.66	0.77	0.912	0.484	42.0	52.0	40.0	68.43	32550									
22	7:00	15.1	1.295	1.147	0.014	1.040	0.063	0.00	0.00	274	3.58	81	1.69	33	0.72	6	0.23	21	16.09	0.66	0.66	0.66	0.65	0.750	0.397	32.0	41.0	44.0	45.62	21700									
23	7:00	15.3	1.336	1.190	0.013	1.064	0.078	0.00	0.00	282	3.55	91	1.83	36	0.77	8	0.30	14	8.66	0.66	0.66	0.66	0.68	0.778	0.412	44.0	44.0	44.0	45.62	21700									
24	7:00	16.1	1.331	1.066	0.010	1.079	0.069	0.00	0.00	314	4.33	104	2.30	39	0.82	9	0.33	20	13.83	0.66	0.66	0.66	0.65	0.710	0.376	39.0	45.0	40.0	68.43	32550									
25	7:00	16.4	1.430	1.211	0.014	1.139	0.082	0.00	0.00	254	3.14	80	1.58	32	0.64	7	0.24	14	10.87	0.66	0.66	0.66	0.65	0.792	0.419	30.0	37.0	72.0	45.62	21700									
26	7:00	16.2	1.377	1.024	0.005	1.119	0.066	0.00	0.00	314	4.60	105	2.46	38	0.77	19	0.67	21	15.36	0.66	0.66	0.66	0.66	0.669	0.355	37.0	42.0	40.0	68.43	32550									
27	7:00	9.4	0.801	1.344	0.012	0.587	0.029	0.00	0.00	154	1.72	48	0.86	19	0.74	4	-0.27	10	16.33	0.66	0.66	0.66	0.015	0.878	0.466	41.0	46.0	61.0	68.43	32550									
28	7:00	19.4	1.680	1.099	0.015	1.436	0.071	0.00	0.00	420	5.73	143	3.12	52	0.82	13	0.36	29	19.49	0.66	0.66	0.66	0.67	0.716	0.381	29.0	47.0	24.0	68.43	32550									
29	7:00	20.8	1.920	1.715	0.018	1.452	0.100	0.00	0.00	264	2.31	76	1.06	35	0.55	15	0.41	23	11.08	0.66	0.66	0.66	0.900	1.121	0.594	35.0	31.0	45.62	21700										
Total		594	45.272	39.775	0.376	36.475	2.286	925.028	151.9	0	8944	110.73	3165	60.02	1165	22.55	589	49.72	579	381.70	1.953	25.997	13.778	733	739	711	746	64523	79120										
Ave.		17.4	1.460	1.283	0.012	1.177	0.074	29.8	0.49	#DIV/0!	0	301	3.57	102	1.94	37.3	0.64	18.7	12.31	0.66	0.66	#DIV/0!	0.663	0.839	0.444	36.7	38.9	54.7	37.3	5397.81	25200								
Max		21.3	1.920	1.715	0.021	1.466	0.100	39.2	0.49	0	420	5.73	143	31.2034	52	0.91	83	2.67	29	19.49	0.66	0.66	0.66	0.66	0.66	0.66	46.0	114.0	61.0	9.124	43.400								
Min		9.4	0.801	1.024	0.004	0.587	0.029	16.4	0.49	0	154	1.72	48	0.86	19	0.55	4	-0.27	10	8.49	0.66	0.66	0.66	0.66	0.66	0.66	29.0	35.0	24.0	2281	10850								

CHLORINATION		FLUORIDATION	
1	20% Sodium Permanganate	Pre-erator	Identify that the information in this report is complete and accurate to the best of my knowledge.
2	40% Bisulfite Solution	Membrane Backwash	Reported by: Illinois Operator Certification # 2534 9999
3	12.5% Sodium Hypochlorite Solution	Post Softener	Date: 4/12/2022
4	20% Ammonium Sulfate Solution	Post Softener	Date Backwash Set: 3/29/2022
5	19% Fluorosisic Acid Solution	Post Cleanwell	
6	33% Phosphate Solution	Post Cleanwell	
7	40% Bisulfite Solution	Lagoon Effluent	

