

South Sangamon Water Commission - IL 1670080  
February 2019

Date	Time Meter Read	Pumping Totals						Chemicals Applied										UF Filters				Softeners															
		Hours Filter Ran	Raw Well Prod. (M gal)	UF Filtered (M gal)	Plant Water (M gal)	HS Pumpage (M gal)	Lagoon Pumpage (M gal)	Sodium Permanganate		Sodium Bisulfite BW		Sodium Hypochlorite		Ammonium Sulfate		Fluorosilicic Acid		Phosphate		Sodium Bisulfite Pond		Hours since previous backwash			Wash Water Gal. (M gal)	Water Softened Gal. (M gal)	Water Bypassed Gal. (M gal)	Each day indicate total number of hours since previous regeneration. If regeneration at mid-day, indicate hours previous/hours following.				Regeneration					
								Am't Used lbs.	Calc mg/l as NaMnO4	Am't Used lbs.	Calc mg/l	Am't Used lbs.	Calc mg/l as Cl	Am't Used lbs.	Calc mg/l as NH3	Am't Used lbs.	Calc mg/l as F	Am't Used lbs.	Calc mg/l as PO4	Am't Used lbs.	Calc mg/l	Bank #						1	2	3	4	1	2	3	4	Salt Used lbs.	Washed Water Gal.
																						1	2	3													
1	7:00	20.9	1.389	1.264	0.009	1.117	24	0.41	0.00	170	2.02	0.00	41	0.84	7	0.25	12	#DIV/0!	0.66	0.66	0.66	0.148															
2	7:00	20.2	1.370	1.236	0.004	1.012	21	0.37	0.00	155	1.88	0.00	41	0.92	7	0.27	13	#DIV/0!	0.66	0.66	0.66	0.138															
3	7:00	21.3	1.435	1.306	0.011	1.099	23	0.38	0.00	163	1.87	0.00	41	0.85	8	0.29	13	#DIV/0!	0.66	0.66	0.66	0.139															
4	7:00	21.3	1.503	1.363	0.004	1.127	24	0.38	0.00	174	1.91	0.00	42	0.85	11	0.39	15	#DIV/0!	0.66	0.66	0.66	0.148															
5	7:00	21.4	1.468	1.329	0.013	1.108	23	0.38	0.00	161	1.82	0.00	39	0.80	12	0.43	11	#DIV/0!	0.66	0.66	0.66	0.160															
6	7:00	19.4	1.320	1.189	0.004	0.944	20	0.36	0.00	135	1.70	0.00	26	0.63	20	0.84	15	#DIV/0!	0.66	0.66	0.66	0.128															
7	7:00	20.1	1.368	1.241	0.016	1.018	23	0.40	0.00	159	1.92	0.00	41	0.92	29	1.13	7	#DIV/0!	0.66	0.66	0.66	0.133															
8	7:00	19.6	1.292	1.174	0.000	0.981	20	0.37	0.00	137	1.75	0.00	35	0.81	35	1.41	7	#DIV/0!	0.66	0.66	0.66	0.130															
9	7:00	18.8	1.253	1.136	0.012	0.939	22	0.42	0.00	150	1.98	0.00	40	0.97	42	1.77	15	#DIV/0!	0.66	0.66	0.66	0.116															
10	7:00	21.3	1.414	1.282	0.009	1.122	22	0.37	0.00	157	1.84	0.00	44	0.89	47	1.66	11	#DIV/0!	0.66	0.66	0.66	0.140															
11	7:00	21.4	1.506	1.364	0.000	1.160	21	0.33	0.00	178	1.96	0.00	41	0.81	44	1.50	11	#DIV/0!	0.66	0.66	0.66	0.147															
12	7:00	21.6	1.482	1.340	0.017	1.090	24	0.39	0.00	164	1.83	0.00	44	0.92	48	1.74	12	#DIV/0!	0.66	0.66	0.66	0.140															
13	7:00	21.4	1.489	1.350	0.006	1.143	26	0.42	0.00	178	1.98	0.00	43	0.86	12	0.42	10	#DIV/0!	0.66	0.66	0.66	0.166															
14	7:00	21.3	1.474	1.338	0.004	1.073	23	0.37	0.00	149	1.67	0.00	42	0.89	8	0.30	12	#DIV/0!	0.66	0.66	0.66	0.151															
15	7:00	19.8	1.401	1.266	0.008	1.060	24	0.41	0.00	159	1.88	0.00	43	0.92	9	0.34	12	#DIV/0!	0.66	0.66	0.66	0.139															
16	7:00	19.8	1.396	1.259	0.010	1.049	24	0.41	0.00	162	1.93	0.00	39	0.85	15	0.57	12	#DIV/0!	0.66	0.66	0.66	0.136															
17	7:00	21.3	1.475	1.337	0.004	1.100	23	0.37	0.00	140	1.57	0.00	37	0.77	37	1.33	11	1.51	0.66	0.66	0.66	0.153															
18	7:00	21.4	1.516	1.376	0.015	1.202	24	0.38	0.00	165	1.80	0.00	41	0.78	50	1.65	7	0.91	0.66	0.66	0.66	0.146															
19	7:00	21.4	1.531	1.385	0.003	1.132	22	0.34	0.00	155	1.68	0.00	42	0.85	38	1.33	16	2.30	0.66	0.66	0.66	0.150															
20	7:00	18.1	1.295	1.168	0.011	0.925	23	0.43	0.00	158	2.03	0.00	38	0.94	44	1.88	12	1.76	0.66	0.66	0.66	0.124															
21	7:00	20.5	1.430	1.293	0.008	1.091	21	0.35	0.00	147	1.70	0.00	41	0.86	40	1.45	5	0.70	0.66	0.66	0.66	0.139															
22	7:00	19.6	1.326	1.206	0.013	1.026	21	0.38	0.00	57	0.71	0.00	32	0.71	5	0.19	14	2.12	0.66	0.66	0.66	0.132															
23	7:00	17.7	1.256	1.126	0.003	0.900	21	0.40	0.00	154	2.05	0.00	35	0.89	7	0.31	8	1.13	0.66	0.66	0.66	0.123															
24	7:00	19.8	1.375	1.212	0.005	1.049	22	0.38	0.00	166	2.05	0.00	37	0.80	7	0.26	15	2.20	0.66	0.66	0.66	0.132															
25	7:00	21.4	1.500	1.367	0.016	1.101	23	0.37	0.00	160	1.75	0.00	38	0.79	9	0.32	11	1.39	0.66	0.66	0.66	0.147															
26	7:00	20.8	1.437	1.286	0.004	1.086	20	0.33	0.00	145	1.69	0.00	33	0.69	11	0.40	9	1.30	0.66	0.66	0.66	0.137															
27	7:00	18.7	1.296	1.163	0.012	0.967	21	0.39	0.00	148	1.91	0.00	34	0.80	16	0.65	12	1.78	0.66	0.66	0.66	0.125															
28	7:00	18.8	1.257	1.138	0.005	0.967	9	0.17	0.00	155	2.04	0.00	37	0.87	46	1.88	9	1.44	0.66	0.66	0.66	0.125															
29																																					
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<b>Total</b>		569.1	39.254	35.494	0.226	29.588	4.041	614	10.50	0	0	4301	50.91	0	0.00	1087	23.46	664	24.95	317	#DIV/0!		3.892	0.000	0.000	678	672	678	668	52,463	238,050						
<b>Ave.</b>		20.3	1.402	1.268	0.008	1.057	0.337	21.9	0.37	#DIV/0!	0	154	1.82	#DIV/0!	0.00	38.8	0.84	23.7	0.89	11.3	#DIV/0!	0.66	0.66	0.66	#DIV/0!	0.139	#DIV/0!	#DIV/0!	75.3	56.0	42.4	39.3	5,246	23,805			
<b>Max</b>		21.6	1.531	1.385	0.017	1.202	0.379	26.0	0.43	0	0	178	2.05	0	0	44	0.97	50	1.88	16	#DIV/0!	0.66	0.66	0.66	0	0.166	0.000	0.000	149.2	78.7	88.2	68.4	9,124	41,400			
<b>Min</b>		17.7	1.253	1.126	0.000	0.900	0.300	9.0	0.17	0	0	57	0.71	0	0.00	26	0.63	5	0.19	5	#DIV/0!	0.66	0.66	0.66	0	0.116	0.000	0.000	38.3	39.3	26.1	31.4	2,281	10,350			

1	20	% Sodium Permanganate	Pre-aerator	<b>CHLORINATION</b>  Type of Chlorine Used Sodium Hypochlorite 12.5 %  Chlorine Analyzers Used: Hach CL17 (2) & 5500sc	<b>FLUORIDATION</b>  Type of Fluoride Used Hydrofluosilicic Acid 19% F  Fluoride Analyzer Used: Hach 2200, SPADNS method	I certify that the information in this report is complete and accurate to the best of my knowledge. Reported by: _____ Illinois Operator Certification ID: _____ Date: _____  Date Bacterials Sent: Feb. 20 _____
2	40	% Bisulfite Solution	Membrane Backwash			
3	12.5	% Sodium Hypochlorite Solution	Post Softener			
4	20	% Ammonium Sulfate Solution	Post Softener			
5	19	% Fluorosilicic Acid Solution	Post Clearwell			
6	33	% Phosphate Solution	Post Clearwell			
7	40	% Bisulfite Solution	Lagoon Effluent			

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February 2019

Physical and Chemical Tests																												Membrane Integrity								
Date	Raw						Pre UF Membrane			Post UF Membrane			Post IEX				Finished											Post Filter								
	pH	Temp deg. C	Total Alk. mg/L as CaCO3	Total Hard. mg/L	Total Fe mg/L	Total Mn mg/L	Turbidity NTU	Total Fe mg/L	Total Mn mg/L	Soluble Mn mg/L	Total Fe mg/L	Total Mn mg/L	Turbidity NTU	Chloride				pH	Turbidity NTU	Total Alk. mg/L as CaCO3	Total Hard. mg/L	Total Fe mg/L	Total Mn mg/L	Fluoride F mg/L	Ortho Phosphate mg/L	Free Ammonia mg/l	Mono-Chloramine mg/l	Chlorine		Bank 1 psi	Bank 2 psi	Bank 3 psi				
														1	2	3	4											F mg/l	T mg/L							
														mg/L	mg/L	mg/L	mg/L																F	T		
1	7.36	13.5	278	360	0.95	0.238			0.358	0.048		0.038	0.37					8.21		260	110	0.01	0.130	0.30	1.65			0.93	1.12							
2	6.97	13.2	276	356	0.57	0.218			0.324	0.046		0.050	0.33					7.97		266	200	0.01	0.016	0.44	1.34			1.17	1.26							
3					0.60	0.226			0.340	0.033		0.030	0.30									0.03	0.022	0.21	1.60			1.26	1.36							
4	7.61	13.5	270	360	0.64	0.209			0.322	0.026		0.026	0.36					8.11		276	150	0.02	0.025	0.32	1.65			1.29	1.48	17.41	24.03	27.11				
5	7.64	13.3	274	354	0.54	0.210			0.327	0.039		0.034	0.41					8.18		272	170	0.01	0.011	0.31	1.54			1.22	1.40							
6	7.87	14.3	274	360	1.04	0.239			0.347	0.048		0.038	0.40					7.63		274	100	0.01	0.028	0.21	1.40			1.42	1.40							
7	7.66	14.3	276	358	1.50	0.242			0.346	0.036		0.043	0.25					8.22		272	110	0.02	0.016	0.34	1.46			1.21	1.46							
8	7.69	12.5	280	364	1.08	0.224			0.339	0.031		0.029	0.27					8.30		268	100	0.01	0.018	0.23	1.54			1.26	1.54							
9	7.81	12.5	274	360	0.86	0.229			0.325	0.040		0.040	0.33					8.43		272	122	0.02	0.010	0.33	1.35			1.28	1.35							
10	7.72	12.7	274	356	1.63	0.239			0.353	0.055		0.032	0.32					8.20		276	140	0.01	0.020	0.23	1.72			1.14	1.30							
11	7.71	13.1	278	356	0.76	0.260			0.346	0.053		0.046	0.42					8.19		272	150	0.01	0.015	0.24	1.49			1.19	1.35							
12	7.83	13.0	272	352	1.66	0.246			0.324	0.035		0.030	0.51					8.34		258	160	0.01	0.016	0.25	1.06			1.19	1.39							
13	7.58	12.7	290	362	1.26	0.243			0.316	0.034		0.034	0.47					8.18		282	120	0.01	0.011	0.39	1.45			1.32	1.45							
14	7.59	12.9	280	360	0.53	0.226			0.330	0.037		0.061	0.39					8.14		270	138	0.01	0.016	0.35	1.59			1.29	1.49							
15	7.68	13.1	278	358	0.69	0.226			0.334	0.056		0.039	0.35					8.11		282	152	0.01	0.011	0.95	1.47			1.19	1.29							
16	7.93	13.0	280	360	0.54	0.225			0.397	0.038		0.046	0.42					8.82		278	150	0.01	0.011	0.50	1.49			1.14	1.23							
17	7.74	13.0	272	356	0.76	0.214			0.340	0.033		0.042	0.32							276	142	0.01	0.010	0.79	1.36			1.01	1.13							
18	7.80	12.9	300	366	0.78	0.228	4.350	0.52	0.329	0.060	0.01	0.044	0.28					8.41	0.35	262	160	0.01	0.015	0.90	1.63			1.15	1.26							
19	7.70	13.1	350	290	0.59	0.229	4.310	0.52	0.345	0.047	0.01	0.026	0.28					8.37	0.45	290	138	0.01	0.013	0.89	1.69			1.12	1.38							
20	7.75	13.2	320	340	0.55	0.225	4.890	0.55	0.344	0.039	0.01	0.034	0.23					8.25	0.40	382	144	0.02	0.011	1.10	1.16			1.03	1.17	1.10						
21	7.65	12.9	300	320	0.80	0.229	5.660	0.64	0.342	0.049	0.01	0.046	0.38					7.86	0.35	290	126	0.02	0.012	0.86	1.21			1.10	1.27							
22	7.43	13.5	290	366	1.21	0.185	5.080	0.58	0.283	0.038	0.03	0.041	0.33					7.83	0.34	290	130	0.01	0.011	0.85	1.52			1.02	1.24							
23	7.52	13.1	310	362	0.72	0.228	5.650	0.48	0.317	0.047	0.01	0.039	0.34					7.45	0.34	284	134	0.01	0.012	0.90	1.54			1.19	1.28							
24	7.71	12.9	300	380	0.80	0.222	5.660	0.60	0.375	0.077	0.09	0.054	0.36					8.20	0.44	262	120	0.01	0.008	0.78	1.53			0.96	1.34							
25	7.34	13.3	284	352	0.55	0.212	4.930	0.56	0.321	0.052	0.03	0.049	0.32					7.42	0.36	270	170	0.01	0.015	0.73	1.65			1.18	1.28	18.13	26.08	28.19				
26	7.14	13.2	290	356	0.57	0.216	4.020	0.50	0.332	0.051	0.04	0.067	0.44					7.23	0.28	280	122	0.02	0.012	0.75	1.50			1.19	1.24							
27	7.11	13.2	296	350	0.85	0.224	3.460	0.39	0.344	0.044	0.03	0.045	0.33					7.45	0.39	290	128	0.01	0.011	0.91	1.35			0.99	1.19							
28	7.81	13.7	300	352	0.80	0.220	5.120	0.64	0.336	0.032	0.01	0.037	0.45					8.17	0.30	278	100	0.01	0.009	0.82	1.70			1.12	1.21							
29																																				
30																																				
31																																				
<b>Ave.</b>	7.61	13.2	288	354	0.85	0.226	4.83	0.54	0.337	0.044	0.03	0.041	0.36	#####	#####	#####	#####	8.06	0.36	279	137	0.01	0.018	0.57	1.49	#DIV/0!	#DIV/0!	1.16	1.32	#DIV/0!	1.10	17.77	25.06	27.65		
<b>Max</b>	7.93	14.3	350	380	1.66	0.260	5.66	0.64	0.397	0.077	0.09	0.067	0.51	0	0	0	0	8.82	0.45	382	200	0.03	0.130	1.10	1.72	0.00	0.00	1.42	1.54	0.00	1.10	18.13	26.08	28.19		
<b>Min</b>	6.97	12.5	270	290	0.53	0.185	3.46	0.39	0.283	0.026	0.01	0.026	0.23	0	0	0	0	7.23	0.28	258	100	0.01	0.008	0.21	1.06	0.00	0.00	0.93	1.12	0.00	1.10	17.41	24.03	27.11		
<b>Lagoon Effluent Tests</b>			pH	Temp °C	T Chlor mg/l	Mn mg/l	Fe mg/l	Chloride mg/L	TSS mg/L											<b>Distribution Stability Tests</b>				pH	Temp °C	TDS mg/L	Alkalinity mg/L as CaCO3	Calcium mg/L	Chloride mg/L	Sulfate mg/L	Remarks: Phosphate feeds are inaccurate due to a scale malfunction.					
<b>Monthly</b>																			<b>Every Two Weeks</b>																	
<b>Date</b>			2/18	7.61	8.0	0.87	1.18	1.04	200	<4															2/1	7.20	9.60									
<b>Date</b>																																				