ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES

MONTHLY IRON REMOVAL AND ION EXCHANGE SOFTENING REPORT
South Sangamon Water Commission
FOR MONTH OF December 2018 CORRECTED

		Pumping Totals				Chemicals Applied										UF Filters					Softeners								Chloride			
						Chlorine		Fluoride		Phosphate		NaMnO4		Bi-Sulfite		Each day indicate total number of hours since previous backwash. If backwashed at mid-day indicate "hours previous" / "hours following."				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.				Soft. Regen		In mg/L			
Date	Time Meter Read	Hours Filter Ran	UF Gal. Filtered (M gal)	Water Treated (M gal)	Plant Water (M gal)	Am't Used lbs.	Calc mg/l as Cl	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 as NaMnO4	Am't Used lbs.	Calc mg/l	1	2	3	4				1	2	3	4	Salt Used lbs.	Washed Water Gal.	IEX 1	IEX 2	IEX 3	IEX 4
1	7:00	19.9	1.280	1.042	0.012	202	2.91	28	0.40	41	0.90	10	0.19	13		0.66	0.66	0.66	0.66	129	0.845	0.435	2,244		1,616							
2	7:00	16.8	1.090	0.948	0.008	238	3.42	31	0.45	6	0.13	3	0.06	15		0.66	0.66	0.66	0.66	50	0.719	0.371		758								
3	7:00	9.5	0.530	0.442	0.004	25	0.36	5	0.07	12	0.26	5	0.09	3		0.66	0.66	0.66	0.66	89	0.350	0.180				1,408						
4	7:00	15.2	0.845	0.696	0.004	204	2.93	29	0.42	20	0.44	7	0.13	7		0.66	0.66	0.66	0.66	132	0.558	0.287										
5	7:00	18.7	1.204	1.068	0.000	236	3.39	30	0.43	21	0.46	13	0.24	9		0.66	0.66	0.66	0.66	153	0.795	0.409		852	1326	204						
6	7:00	21.2	1.437	1.259	0.012	199	2.86	30	0.43	21	0.46	15	0.28	14		0.66	0.66	0.66	0.66	144	0.948	0.489				1234						
7	7:00	20.3	1.271	0.984	0.003	237	3.41	28	0.40	4	0.09	17	0.32	11		0.66	0.66	0.66	0.66	125	0.839	0.432		1,101	827							
8	7:00	18.1	1.179	0.945	0.008	162	2.33	31	0.45	4	0.09	14	0.26	17		0.66	0.66	0.66	0.66	123	0.778	0.401			2359	206						
9	7:00	17.8	1.132	0.958	0.008	199	2.86	25	0.36	5	0.11	15	0.28	10		0.66	0.66	0.66	0.66	124	0.747	0.385		2232		1,244						
10	7:00	18.1	1.165	0.996	0.008	214	3.08	33	0.47	6	0.13	16	0.30	13		0.66	0.66	0.66	0.66	141	0.769	0.396	1220		1703	2222						
11	7:00	20.9	1.367	1.150	0.012	188	2.70	30	0.43	6	0.13	15	0.28	12		0.66	0.66	0.66	0.66	137	0.902	0.465										
12	7:00	18.7	1.200	1.029	0.000	212	3.05	27	0.39	9	0.20	24	0.45	7		0.66	0.66	0.66	0.66	128	0.792	0.408	1139	737	1418	1541						
13	7:00	17.7	1.162	0.971	0.016	193	2.78	29	0.42	13	0.28	22	0.41	10		0.66	0.66	0.66	0.66	135	0.767	0.395										
14	7:00	18.7	1.182	1.000	0.000	203	2.92	27	0.39	17	0.37	21	0.39	9		0.66	0.66	0.66	0.66	119	0.780	0.402		824	1,306	947						
15	7:00	17.8	1.184	0.997	0.003	250	3.60	28	0.40	24	0.52	30	0.56	9		0.66	0.66	0.66	0.66	128	0.781	0.403	836			2237						
16	7:00	17.8	1.177	1.050	0.008	246	3.54	37	0.53	25	0.55	31	0.58	7		0.66	0.66	0.66	0.66	157	0.777	0.400		846	1322							
17	7:00	21.3	1.414	1.188	0.009	237	3.41	32	0.46	25	0.55	29	0.54	10		0.66	0.66	0.66	0.66	157	0.933	0.481	1524		1325	643						
18	7:00	21.1	1.373	1.223	0.011	216	3.11	35	0.50	26	0.57	27	0.51	13		0.66	0.66	0.66	0.66	161	0.906	0.467		646		1633						
19	7:00	21.4	1.345	1.018	0.009	221	3.18	27	0.39	26	0.57	28	0.52	8		0.66	0.66	0.66	0.66	141	0.894	0.460	1618		155							
20	7:00	20.2	1.289	1.139	0.007	228	3.28	34	0.49	24	0.52	28	0.52	7		0.66	0.66	0.66	0.66	152	0.851	0.438		430	1305	700						
21	7:00	21.3	1.428	1.230	0.012	230	3.31	34	0.49	28	0.61	27	0.51	13		0.66	0.66	0.66	0.66	154	0.943	0.485	944	1911		1625						
22	7:00	21.4	1.422	1.185	0.012	196	2.82	37	0.53	14	0.31	28	0.52	7		0.66	0.66	0.66	0.66	162	0.938	0.484			307							
23	7:00	21.5	1.405	1.175	0.004	185	2.66	32	0.46	23	0.50	23	0.43	7		0.66	0.66	0.66	0.66	156	0.927	0.478		951	1234	152						
24	7:00	21.4	1.141	1.189	0.012	163	2.34	35	0.50	18	0.39	26	0.49	11		0.66	0.66	0.66	0.66	147	0.933	0.481	756		2,350	1507						
25	7:00	21.5	1.382	1.189	0.011	187	2.69	34	0.49	20	0.44	18	0.34	11		0.66	0.66	0.66	0.66	147	0.912	0.470		722								
26	7:00	20.6	1.368	1.077	0.006	126	1.81	29	0.42	2	0.04	12	0.22	5		0.66	0.66	0.66	0.66	112	0.903	0.465	1331		1610	48						
27	7:00	17.5	1.115	0.973	0.010	151	2.17	26	0.37	2	0.04	31	0.58	9		0.66	0.66	0.66	0.66	122	0.736	0.379		1,003		2,024						
28	7:00	16.9	1.095	0.903	0.008	144	2.07	27	0.39	3	0.07	23	0.43	13		0.66	0.66	0.66	0.66	130	0.723	0.372	850		1,017							
29	7:00	18.8	1.205	1.027	0.009	146	2.10	28	0.40	3	0.07	24	0.45	2		0.66	0.66	0.66	0.66	122	0.795	0.410		1609		1442						
30	7:00	17.2	1.078	0.949	0.008	155	2.23	28	0.40	5	0.11	24	0.45	12		0.66	0.66	0.66	0.66	122	0.711	0.367			453							
31	7:00	18.3	1.139	0.930	0.003	148	2.13	28	0.40	6	0.13	31	0.58	9		0.66	0.66	0.66	0.66	114	0.751	0.387	950	1910	2038	720						
Total		587.6	37.604	31.93	0.237	5941	85.45	914	13.15	459	10.04	637	11.93	303	0					4113	25.003	12.882	13,412	16,532	23,671	21,737	0	0	0	0	0	0
Max		21.5	1.437	1.259	0.016	250	3.60	37	0.53	41	0.90	31	0.58	17	0					162	0.948	0.489	2,244	2,232	2,359	2,237	0	0	0	0	0	0
Min		9.5	0.53	0.442	0.000	25	0.36	5	0.07	2	0.04	3	0.06	2	0					50	0.350	0.180	756	430	155	48	0	0	0	0	0	0
Ave.		19.0	1.213	1.030	0.008	192	2.76	29.5	0.42	14.8	0.32	20.5	0.38	9.77419	#DIV/0!	0.66	0.66	0.66	0.66	133	0.807	0.416	1,219	1,102	1,315	1,144	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

*Enter Final Reading Last Month

POINT OF APPLICATION

METER LOCATION:

1 12.5 % Chlorine Solution Fed
2 19 % Fluoride Solution Fed
3 40 % BisulfiteSolution Fed
4 33 % Phosphate Solution Fed
5 20 % Sodium Permanganate Fed

I certify that the information in this report is complete and accurate to the best of my knowledge
Reported by: _____ Cert or Req: 7337
Bacterials Sent: 12/10/18
Date:

CHLORINATION
Type of Chlorine Used
Chlorine Gas
Calcium Hypochlorite ____%
Sodium Hypochlorite _12.5 %
Chlorine Test Kit Used: _____

FLUORIDATION
Type of Fluoride Used
Hydrofluosilicic Acid _19___%F
Sodium Fluoride ____%F
Other _____
Type of Test Instrument Used:

RTW Sample

Temp	°C
TDS	mg/L
pH	SU
Alkalinity	mg/L
Calcium Hardness	mg/L
Chloiride	mg/L
Sulfate	mg/L

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES

MONTHLY IRON REMOVAL AND ION EXCHANGE SOFTENING REPORT

South Sangamon Water Commission

FOR MONTH OF December 2018 CORRECTED

			Pumping Totals				Chemical Tests																							Membrane Integrity Test		
							Raw						Pre Filter			Post Filter			Post IEX		Finished									Post Filter		
Date	Time Meter Read	Hours Filter Ran	Total Well (M gal)	UF Gallons Filtered (M gal)	Water Treated (M gal)	Plant Water (M gal)	pH	Temp deg. C	Total Alk. mg/L	Total Hard. mg/L	Total Fe mg/L	Total Mn mg/L	Tot Fe mg/L	Tot Mn mg/L	Sol Mn mg/L	Total Fe mg/L	Total Mn mg/L	Mem Turb. NTU	Total Fe mg/L	Total Mn mg/L	pH	Total Alk. mg/L	Total Hard. mg/L	Total Fe mg/L	Total Mn mg/L	F mg/L	Dist. Cl res F = Free T = Total F mg/L	Dist. Cl res F = Free T = Total T mg/L	PO4 3-	Bank 1	Bank 2	Bank 3
1	7:00	19.9	1.421	1.280	1.042	0.012	7.05	13.9	284	356	1.65	0.266		0.327	0.111		0.121	0.28			7.31	254	112	0.01	0.058	0.88	1.53	1.78	1.35			
2	7:00	16.8	0.940	1.090	0.948	0.008	8.09	14.3	284	356	0.70	0.237		0.320	0.128		0.133	0.19			8.0	254	112	0.01	0.075	0.48	1.48	1.78	1.25			
3	7:00	9.5	0.541	0.530	0.442	0.004	8.05	14.1	284	356	0.70	0.255		0.128	0.435		0.138	0.63			8.21	258	120	0.02	0.072	0.25	0.94	1.06	1.42			
4	7:00	15.2	0.951	0.845	0.696	0.004	7.79	14.1	272	360	0.50	0.231		0.263	0.239		0.234	0.43			8.13	260	160	0.00	0.072	0.33	1.60	1.87	0.78			
5	7:00	18.7	1.322	1.204	1.068	0.000	8.15	14.0	282	358	1.21	0.246		0.260	0.217		0.185	0.26			8.24	228	136	0.00	0.109	0.10	1.44	1.66	0.89			
6	7:00	21.2	1.585	1.437	1.259	0.012	7.99	14.1	270	352	1.40	0.230		0.326	0.089		0.083	0.19			8.20	240	140	0.03	0.082	0.12	1.59	1.79	0.74			
7	7:00	20.3	1.397	1.271	0.984	0.003	7.83	13.8	274	350	0.72	0.232		0.379	0.030		0.043	0.39			8.10	250	150	0.00	0.073	0.08	1.24	1.48	0.84			
8	7:00	18.1	1.304	1.179	0.945	0.008	7.91	14.0	276	350	0.94	0.238		0.354	0.022		0.091	0.23			8.16	260	140	0.00	0.067	0.44	1.36	1.55	1.12			
9	7:00	17.8	1.249	1.132	0.958	0.008	8.02	14.0	276	354	1.16	0.247		0.320	0.028		0.087	0.37			8.20	260	166	0.01	0.420	0.50	1.40	1.60	0.88			
10	7:00	18.1	1.279	1.165	0.996	0.008	7.38	13.8	280	350	1.12	0.228		0.317	0.119		0.085	0.32			7.53	280	110	0.00	0.052	0.22	1.63	1.84	0.89			
11	7:00	20.9	1.506	1.367	1.150	0.012	7.22	14.2	280	352	0.79	0.223		0.331	0.070		0.050	0.28			7.51	240	130	0.01	0.036	0.22	1.56	1.74	0.89			
12	7:00	18.7	1.326	1.200	1.029	0.000	8.29	14.5	274	356	0.74	0.231		0.390	0.049		0.042	0.33			8.32	272	110	0.01	0.042	0.17	1.49	1.72	0.79			
13	7:00	17.7	1.281	1.162	0.971	0.016	7.86	14.0	272	360	0.75	0.233		0.373	0.032		0.030	0.19			8.15	256	108	0.01	0.012	0.22	1.50	1.78	0.88			
14	7:00	18.7	1.304	1.182	1.000	0.000	7.88	14.7	278	352	1.00	0.243		0.372	0.041		0.037	0.27			7.77	250	112	0.01	0.013	0.24	1.48	1.69	0.88			
15	7:00	17.8	1.288	1.184	1.050	0.008	8.33	14.2	280	358	0.93	0.227		0.382	0.036		0.033	0.27			8.26	258	116	0.01	0.039	0.20	1.51	1.84	0.87			
16	7:00	17.8	1.288	1.177	1.050	0.008	7.73	14.4	276	360	0.60	0.221		0.435	0.039		0.058	0.19			8.13	250	122	0.01	0.028	0.22	1.40	1.64	0.78			
17	7:00	21.3	1.568	1.414	1.188	0.009	7.43	14.4	282	348	0.73	0.206		0.399	0.012		0.016	0.30			7.51	264	122	0.01	0.020	0.26	1.44	1.85	0.82			
18	7:00	21.1	1.511	1.373	1.223	0.011	7.24	13.8	278	352	1.10	0.217		0.405	0.041		0.055	0.34			7.46	270	100	0.01	0.018	0.20	1.54	1.78	0.79			
19	7:00	21.4	1.490	1.345	1.018	0.009	7.80	14.1	280	358	0.41	0.216		0.364	0.044		0.068	0.64			7.83	270	104	0.01	0.015	0.19	1.57	1.80	0.93			
20	7:00	20.2	1.418	1.289	1.139	0.007	7.20	14.1	274	354	0.37	0.200		0.417	0.044		0.047	0.29			7.46	268	112	0.01	0.013	0.14	1.46	1.76	0.87			
21	7:00	21.3	1.538	1.428	1.230	0.012	7.45	14.4	280	352	0.09	0.223		0.343	0.043		0.033	0.41			7.40	270	112	0.00	0.018	0.25	1.57	1.80	0.81			
22	7:00	21.4	1.591	1.422	1.185	0.012	7.53	14.4	280	352	0.27	0.216		0.377	0.040		0.045	0.32			7.44	270	118	0.00	0.022	0.47	1.50	1.75	0.89			
23	7:00	21.5	1.549	1.405	1.175	0.004	7.60	14.1	280	356	0.33	0.208		0.365	0.036		0.047	0.35			7.53	264	118	0.00	0.033	0.60	1.40	1.70	0.95			
24	7:00	21.4	1.558	1.141	1.189	0.012	7.28	14.2	268	352	0.89	0.236		0.414	0.053		0.043	0.23			7.54	250	122	0.00	0.023	0.46	1.27	1.52	0.79			
25	7:00	21.5	1.523	1.382	1.189	0.011	7.36	14.2	274	360	0.95	0.342		0.424	0.060		0.047	0.28			7.62	258	118	0.00	0.028	0.57	1.36	1.47	0.93			
26	7:00	20.6	1.504	1.368	1.077	0.006	7.07	14.0	260	356	0.57	0.223		0.410	0.049		0.044	0.31			7.34	252	124	0.02	0.023	0.35	0.92	1.21	0.84			
27	7:00	17.5	1.230	1.115	0.973	0.010	7.41	14.3	268	360	0.71	0.227		0.362	0.035		0.028	0.26			7.72	252	110	0.00	0.013	0.29	1.10	1.32	0.81			
28	7:00	16.9	1.175	1.095	0.903	0.008	7.15	13.9	272	356	0.70	0.245		0.367	0.025		0.022	0.30			7.31	258	112	0.00	0.017	0.23	1.10	1.37	0.97			
29	7:00	18.8	1.289	1.205	1.027	0.009	7.11	14.0	264	362	0.45	0.245		0.336	0.043		0.029	0.26			7.14	262	112	0.02	0.021	0.29	1.07	1.23	1.34			
30	7:00	17.2	1.163	1.078	0.949	0.008	7.21	13.8	262	358	0.60	0.231		0.361	0.033		0.027	0.22			7.28	254	116	0.01	0.018	0.29	1.21	1.39	1.24			
31	7:00	18.3	1.199	1.139	0.930	0.003	7.74	13.9	266	362	0.37	0.227		0.329	0.039		0.029	0.35			8.20	258	122	0.03	0.020	0.19	0.99	1.25	1.40			
Total		588	41.29	37.60	31.98	0.242																										
Max		21.5	1.6	1.4	1.3	0.016	8.33	14.7	284	362	1.65	0.342	0.0	0.435	0.435	0.0	0.234	0.64	0.0	0.0	8.32	280	166	0.03	0.420	0.88	1.63	1.87	1.42	0.0	0.0	0.0
Min		9.5	0.5	0.5	0.4	0.000	7.05	13.8	260	348	0.09	0.200	0.0	0.128	0.012	0.0	0.016	0.19	0.0	0.0	7.14	228	100	0.00	0.012	0.08	0.92	1.06	0.74	0.0	0.0	0.0
Ave.		19.0	1.3	1.2	1.0	0.008	7.62	14.1	275	355	0.76	0.234	#DIV/0!	0.353	0.074	#DIV/0!	0.065	0.31	#DIV/0!	#DIV/0!	7.77	258	121	0.01	0.050	0.30	1.38	1.61	0.96	#DIV/0!	#DIV/0!	#DIV/0!

*Enter Final Reading Last Month

POINT OF APPLICATION

METER LOCATION:

1	12.5 %	Chlorine Solution Fed
2	19 %	Fluoride Solution Fed
3	40 %	Bisulfite Solution Fed
4	33 %	Phosphate Solution Fed
5	20 %	Sodium Permanganate Fed

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

Reported by: Cert or Req: 7337

Bacterials Sent: 12/10/2018

Date:

CHLORINATION

Type of Chlorine Used

Chlorine Gas

Calcium Hypochlorite ____%

Sodium Hypochlorite _12.5 %

Chlorine Test Kit Used: _____

FLUORIDATION

Type of Fluoride Used

Hydrofluosilicic Acid _19___%F

Sodium Fluoride ____%F

Other _____

Type of Test Instrument Used: