ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

DIVISION OF PUBLIC WATER SUPPLIES

MONTHLY IRON REMOVAL AND ION EXCHANGE SOFTENING REPORT

ON South Sangamon Water Commission

FOR MONTH OI November 2017

		Pumping Totals				Chemicals Applied										UF Filters					Softeners								Chloride			
						Chlorine		Fluoride		Phosphate		NaMnO4		Bi-Sulfite		ach day indicate total number of hours sinc				Wash	Water	Water	Each day indicate total number of				Soft. Regen		In mg/L			
																evious backwash. If backwashed at mid-da				Water	Softened	Bypassed	hours since previous regeneration.				Salt	Washed				
																indicate "hours previous" / "hours				Gal.	Gal.	Gal	If regeneration at mid-day, indicate				Used	Water				
																following."				(M gal)	(M gal)	(M gal)	hours previous/hours following.				lbs.	Gal.				
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	Am't Used lbs.	Calc mg/l	Am't Used lbs.	Calc mg/l	Am't Used lbs.	Calc mg/l	Am't Used lbs.	Calc mg/l	1	2	3	4				1	2	3	4			IEX 1	IEX 2	IEX 3	IEX 4
1	7:00	15.8	1.123	0.979	0.014	193.0	2.58	32.0	1.29	39.0	1.58	24.00	2.23			0.75	0.75	0.75	0.75	0.103	0.741	0.382				42	2,281	10,350				
2	7:00	14.1	1.016	0.921	0.004	162.0	2.39	5.0	0.21	34.0	1.46	18.00	1.90			0.75	0.75	0.75	0.75	0.100	0.671	0.345	48	48	48		6,843	31,050				
3	7:00	16.0	1.135	1.012	0.013	214.0	2.83	23.0	0.90	41.0	1.60	27.00	2.53			0.75	0.75	0.75	0.75	0.112	0.749	0.386				38	2,281	10,350				
4	7:00	15.0	1.051	0.958	0.006	144.0	2.05	21.0	0.87	28.0	1.16	18.00	1.83			0.75	0.75	0.75	0.75	0.097	0.694	0.357	47	47	48	40	9,124	41,400				
5	7:00	15.9	1.134	1.026	0.018	192.0	2.54	31.0	1.20	37.0	1.43	25.00	2.42			0.75	0.75	0.75	0.75	0.104	0.748	0.386			38		2,281	10,350				
6	7:00	16.2	1.191	1.052	0.009	190.0	2.39	9.0	0.34	37.0	1.39	25.00	2.33			0.75	0.75	0.75	0.75	0.125	0.786	0.405	45	45		37	6,843	31,050				
7	7:00	15.8	1.147	0.970	0.008	165.0	2.16	17.0	0.69	19.0	0.78	21.00	1.76			0.75	0.75	0.75	0.75	0.116	0.757	0.390	42	42	38		6,843	31,050				
8	7:00	17.8	1.237	1.117	0.014	144.0	1.74	23.0	0.81	11.0	0.39	18.00	1.54			0.75	0.75	0.75	0.75	0.134	0.816	0.421				38	2,281	10,350				
9	7:00	14.5	0.928	0.774	0.006	189.0	3.05	30.0	1.53	12.0	0.61	22.00	2.53			0.75	0.75	0.75	0.75	0.111	0.612	0.316		51	51		4,562	20,700				
10	7:00	16.3	1.098	0.937	0.011	207.0	2.83	12.0	0.51	23.0	0.97	26.00	2.53			0.75	0.75	0.75	0.75	0.118	0.725	0.373	51			47	4,562	20,700				
11	7:00	17.5	1.243	1.109	0.008	153.0	1.84	16.0	0.57	26.0	0.93	19.00	1.65			0.75	0.75	0.75	0.75	0.124	0.820	0.423	47	46	43	44	9,124	41,400				
12	7:00	14.7	0.972	0.857	0.018	184.0	2.84	29.0	1.34	37.0	1.71	22.00	2.38			0.75	0.75	0.75	0.75	0.089	0.642	0.330					0	0				
13	7:00	15.8	1.119	0.983	0.000	178.0	2.38	29.0	1.17	34.0	1.37	22.00	2.11			0.75	0.75	0.75	0.75	0.108	0.739	0.380	38	39	43	36	9,124	41,400				
14	7:00	19.8	1.432	1.271	0.018	132.0	1.38	7.0	0.22	24.0	0.75	17.00	1.18			0.75	0.75	0.75	0.75	0.137	0.945	0.487					0	0				
15	7:00	11.0	0.752	0.683	0.000	167.0	3.33	14.0	0.81	31.0	1.80	20.00	2.55			0.75	0.75	0.75	0.75	0.064	0.496	0.256	50	49	45	43	9,124	41,400				
16	7:00	13.7	0.987	0.908	0.011	207.0	3.14	28.0	1.22	41.0	1.79	26.00	3.10			0.75	0.75	0.75	0.75	0.078	0.651	0.336					0	0				
17	7:00	15.1	1.056	0.956	0.000	160.0	2.27	28.0	1.16	31.0	1.28	20.00	2.01			0.75	0.75	0.75	0.75	0.098	0.697	0.359	42	44	47	43	9,124	41,400				
18	7:00	17.3	1.247	1.101	0.020	128.0	1.54	2.0	0.07	25.0	0.90	16.00	1.37			0.75	0.75	0.75	0.75	0.129	0.823	0.424				44	2,281	10,350				
19	7:00	12.7	0.891	0.793	0.004	184.0	3.10	15.0	0.75	36.0	1.80	23.00	2.81			0.75	0.75	0.75	0.75	0.074	0.588	0.303	47	46	47		6,843	31,050				
20	7:00	15.4	1.102	1.015	0.014	202.0	2.75	26.0	1.01	38.0	1.48	26.00	2.47			0.75	0.75	0.75	0.75	0.120	0.727	0.375		39	39	37	6,843	31,050				
21	7:00	19.4	1.413	1.256	0.014	178.0	1.89	31.0	0.98	19.0	0.60	22.00	1.69			0.75	0.75	0.75	0.75	0.128	0.933	0.480	37				2,281	10,350				
22	7:00	11.9	0.860	0.794	0.004	214.0	3.73	10.0	0.50	15.0	0.75	27.00	3.25			0.75	0.75	0.75	0.75	0.083	0.568	0.292		47	44	40	6,843	31,050				
23	7:00	17.9	1.302	1.177	0.017	105.0	1.21	9.0	0.30	11.0	0.37	13.00	1.16			0.75	0.75	0.75	0.75	0.121	0.859	0.443	47			41	4,562	20,700				
24	7:00	13.2	0.914	0.840	0.006	206.0	3.38	26.0	1.22	29.0	1.37	25.00	3.50			0.75	0.75	0.75	0.75	0.079	0.603	0.311		47	48		4,562	20,700				
25	7:00	17.6	1.198	1.090	0.022	171.0	2.14	31.0	1.13	33.0	1.20	21.00	2.28			0.75	0.75	0.75	0.75	0.114	0.791	0.407	47			39	4,562	20,700				
26	7:00	13.7	0.982	0.859	0.004	159.0	2.43	0.0	0.00	33.0	1.52	20.00	2.42			0.75	0.75	0.75	0.75	0.107	0.648	0.334	46	46	45		6,843	31,050				
27	7:00	16.5	1.187	1.081	0.014	179.0	2.26	9.0	0.33	29.0	1.06	22.00	2.16			0.75	0.75	0.75	0.75	0.119	0.783	0.404				39	2,281	10,350				
28	7:00	18.0	1.187	1.053	0.004	144.0	1.82	13.0	0.49	26.0	0.98	18.00	1.76			0.75	0.75	0.75	0.75	0.112	0.783	0.404	46	44	40	41	9,124	41,400				
29	7:00	13.1	0.955	0.845	0.019	182.0	2.86	14.0	0.66	36.0	1.69	24.00	2.90			0.75	0.75	0.75	0.75	0.090	0.630	0.325					0	0				
30	7:00	13.4	0.962	0.863	0.000	192.0	2.99	23.0	1.05	37.0	1.70	23.00	2.80			0.75	0.75	0.75	0.75	0.094	0.635	0.327	44	47	49	40	9,124	41,400				
31	7:00															0.75	0.75	0.75	0.75													

Total	29.28
Max	1.27
Min	0.68
Ave.	0.98

RTW Sample Temp 13.9 °C; TDS 414.0 mg/L; pH 7.81 SU; Alkalinity 226.0 mg/L; Calcium Hardness 66.3 mg/L; Chloride 43.4 mg/L; Sulfate 69.9 mg/L

*Enter Final Reading Last Month

POINT OF APPLICATION

METER LOCATION:

1. 12.5 % Chlorine Solution Fed
2. 23 % 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: _____

Bacterials Sent: _____

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 _23___%F

Sodium Fluoride ____%F

Other _____

Type of Test Instrument Used:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

DIVISION OF PUBLIC WATER SUPPLIES

MONTHLY IRON REMOVAL AND ION EXCHANGE SOFTENING REPC

ON South Sangamon Water Commission

FOR MONTH OF November 2017

			Pumping Totals				Chemical Test																							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	15.8	1.202	1.123	0.979	0.014	7.54	14.1	292	366	0.64	0.235		0.397	0.087		0.068	0.10			7.85	280	104	0.01	0.026	0.97	1.4	1.6	1.58			
2	7:00	14.1	1.087	1.016	0.921	0.004	7.36	14.8	292	370	0.63	0.235		0.404	0.073		0.067	0.10			7.92	290	106	0.01	0.026	0.87	1.4	1.5	1.00			
3	7:00	16.0	1.253	1.135	1.012	0.013	7.42	14.2	296	370	0.64	0.237		0.390	0.079		0.078	0.10			7.86	284	110	0.01	0.027	0.94	1.4	1.6	1.31			
4	7:00	15.0	1.156	1.051	0.958	0.006	7.41	14.7	296	368	0.73	0.239		0.397	0.077		0.066	0.12			7.83	276	110	0.00	0.024	0.80	1.4	1.6	1.20			
5	7:00	15.9	1.218	1.134	1.026	0.018	7.62	14.9	292	358	0.93	0.223		0.385	0.054		0.050	0.08			8.11	278	104	0.00	0.014	0.81	1.3	1.5	1.30			
6	7:00	16.2	1.264	1.191	1.052	0.009	7.41	14.3	298	368	1.01	0.279		0.431	0.094		0.071	0.14			7.83	284	110	0.01	0.023	0.82	1.4	1.6	1.17			
7	7:00	15.8	1.391	1.147	0.970	0.008	7.66	14.2	292	362	0.72	0.228		0.409	0.075		0.071	0.11			7.99	276	110	0.00	0.024	0.90	1.4	1.6	1.10			
8	7:00	17.8	1.358	1.237	1.117	0.014	7.41	14.4	296	370	1.37	0.278		0.391	0.071		0.065	0.11			7.83	278	108	0.01	0.028	0.88	1.4	1.6	1.18			
9	7:00	14.5	1.023	0.928	0.774	0.006	7.37	14.0	294	364	0.72	0.238		0.411	0.085		0.062	0.10			7.81	280	120	0.01	0.025	0.83	1.5	1.6	1.01			
10	7:00	16.3	1.198	1.098	0.937	0.011	7.54	14.1	290	368	0.64	0.251		0.406	0.084		0.081	0.12			7.87	280	116	0.01	0.031	0.97	1.5	1.6	1.41			
11	7:00	17.5	1.343	1.243	1.109	0.008	7.38	14.0	296	370	5.96	0.531		0.373	0.077		0.066	0.11			7.82	284	98	0.01	0.042	0.79	1.5	1.6	1.20			
12	7:00	14.7	1.068	0.972	0.857	0.018	7.39	14.0	288	364	4.30	0.358		0.399	0.088		0.072	0.11			7.89	288	110	0.01	0.029	0.85	1.4	1.6	1.29			
13	7:00	15.8	1.214	1.119	0.983	0.000	7.31	14.1	288	362	0.59	0.227		0.401	0.069		0.065	0.09			7.84	282	118	0.01	0.023	0.91	1.5	1.7	1.52			
14	7:00	19.8	1.550	1.432	1.271	0.018	7.38	14.3	286	364	0.83	0.266		0.370	0.049		0.039	0.13			7.74	282	112	0.00	0.018	0.98	1.4	1.6	1.05			
15	7:00	11.0	0.821	0.752	0.683	0.000	7.39	14.0	292	370	0.66	0.229		0.418	0.076		0.070	0.10			7.91	280	110	0.01	0.019	0.91	1.5	1.7	1.19			
16	7:00	13.7	0.998	0.987	0.908	0.011	7.65	14.1	298	364	0.81	0.248		0.408	0.085		0.070	0.08			7.88	282	108	0.01	0.026	0.89	1.4	1.6	1.28			
17	7:00	15.1	1.159	1.056	0.956	0.000	7.39	14.0	290	360	0.88	0.237		0.412	0.062		0.058	0.08			7.94	276	100	0.01	0.034	0.96	1.5	1.7	1.46			
18	7:00	17.3	1.359	1.247	1.101	0.020	7.45	13.8	290	368	0.64	0.245		0.403	0.050		0.049	0.11			7.78	272	110	0.01	0.018	0.89	1.4	1.6	1.02			
19	7:00	12.7	0.961	0.891	0.793	0.004	7.41	13.6	292	374	0.45	0.257		0.418	0.063		0.062	0.11			7.89	282	110	0.01	0.021	0.94	1.5	1.7	1.16			
20	7:00	15.4	1.223	1.102	1.015	0.014	7.44	14.1	298	364	0.54	0.231		0.392	0.022		0.031	0.11			7.89	270	112	0.01	0.019	0.88	1.5	1.7	1.22			
21	7:00	19.4	1.523	1.413	1.256	0.014	7.42	14.0	292	366	0.77	0.232		0.370	0.026		0.037	0.14			7.83	270	120	0.01	0.010	0.97	1.4	1.5	1.08			
22	7:00	11.9	0.950	0.860	0.794	0.004	7.43	14.1	296	358	3.09	0.299		0.391	0.026		0.035	0.12			7.92	290	108	0.01	0.012	0.93	1.4	1.6	1.23			
23	7:00	17.9	1.411	1.302	1.177	0.017	7.41	14.2	292	370	0.79	0.237		0.375	0.025		0.034	0.11			7.89	270	102	0.01	0.015	0.96	1.4	1.5	1.32			
24	7:00	13.2	1.002	0.914	0.840	0.006	7.40	13.9	290	362	1.65	0.236		0.384	0.036		0.047	0.14			7.78	278	108	0.01	0.012	0.88	1.4	1.6	1.30			
25	7:00	17.6	1.302	1.198	1.090	0.022	7.48	14.2	288	360	1.09	0.225		0.368	0.023		0.018	0.27			8.10	274	110	0.00	0.012	0.87	1.4	1.6	1.12			
26	7:00	13.7	1.069	0.982	0.859	0.004	7.52	14.5	290	362	0.68	0.212		0.421	0.025		0.024	0.13			8.04	274	106	0.00	0.007	0.88	1.3	1.6	1.66			
27	7:00	16.5	1.280	1.187	1.081	0.014	7.36	14.6	286	374	0.91	0.236		0.384	0.036		0.047	0.10			7.78	272	112	0.01	0.012	0.97	1.4	1.6	1.26			
28	7:00	18.0	1.292	1.187	1.053	0.004	7.34	14.8	296	376	1.42	0.228		0.377	0.026		0.026	0.11			7.84	274	110	0.01	0.011	0.93	1.4	1.6	1.16			
29	7:00	13.1	1.047	0.955	0.845	0.019	7.41	14.4	294	360	0.81	0.218		0.387	0.030		0.030	0.12			7.88	284	112	0.01	0.011	0.86	1.4	1.6	1.21			
30	7:00	13.4	1.036	0.962	0.863	0.000	7.42	14.5	288	360	0.76	0.236		0.384	0.036		0.047	0.15			7.84	272	100	0.01	0.012	0.93	1.5	1.7	1.28			
31	7:00																															
Total						29.28																										
Max						1.27																										
Min						0.68																										
Ave.						0.98																										

*Enter Final Reading Last Month

POINT OF APPLICATION

METER LOCATION:

1. 12.5 % Chlorine Solution Fed
2. 23 % 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:

Bacterials Sent:

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 _23___%F

Sodium Fluoride ____%F

Other _____

Type of Test Instrument Used: