

Town of Fort Frances - Water treatment Plant - Water Works # 220000978
Monitoring Record
November 2018

Operating Data	Units	*MAC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total	Average
		or Range																																
Flow rates																																		
Raw Water	10^3 M^3	17	5.36	5.04	5.16	5.33	5.17	4.95	5.26	4.98	4.97	4.99	4.93	4.96	5.22	4.87	5.30	4.77	5.52	5.13	4.95	5.12	5.13	5.09	5.35	5.06	5.15	5.01	5.11	5.29	5.27	5.05	153.49	5.12
Peak Instantaneous - Raw Water	L/s	n/a	60.12	60.06	60.06	59.74	59.59	59.51	59.51	59.83	58.75	58.70	58.58	58.43	58.37	59.38	59.83	59.82	59.79	59.92	59.82	60.04	60.16	60.08	60.04	60.06	60.02	60.04	59.97	60.44	60.59	60.48	1791.73	59.72
Treated Water	10^3 M^3	17	3.36	3.12	3.40	3.43	3.31	3.19	3.47	3.19	3.11	3.39	3.15	3.26	3.56	3.36	3.38	3.02	3.52	3.31	3.09	3.61	3.27	3.12	3.67	3.29	3.12	4.26	4.35	3.72	3.26	3.14	101.43	3.38
Peak Instantaneous - Treated Water	L/s	n/a	80.79	79.16	81.51	81.78	83.45	81.43	81.28	77.77	80.48	80.10	80.36	80.93	79.79	80.96	80.57	79.80	81.60	79.49	79.24	80.69	78.87	86.23	80.15	80.59	81.45	87.83	125.47	83.11	81.46	80.49	2476.83	82.56
BackWash Water	10^3 M^3	n/a	0.239	0.286	0.260	0.000	0.243	0.287	0.264	0.000	0.278	0.261	0.288	0.000	0.000	0.270	0.491	0.265	0.243	0.280	0.264	0.227	0.000	0.285	0.263	0.285	0.000	0.267	0.000	0.245	0.287	0.267	6.345	0.212
Fluoride Information																																		
Fluoride Residual - Treated Water	mg/l	0.5 to 0.8	0.76	0.76	0.71	0.69	0.68	0.66	0.67	0.67	0.66	0.65	0.68	0.67	0.68	0.74	0.75	0.75	0.72	0.71	0.75	0.73	0.73	0.73	0.69	0.75	0.75	0.75	0.75	0.75	0.76	0.77	21.52	0.72
Turbidity Information																																		
Raw Water	NTU	n/a	1.40	1.43	1.51	1.41	1.37	1.54	1.41	1.36	1.41	1.36	1.32	1.33	1.30	1.34	1.40	1.33	1.37	1.40	1.37	1.32	1.41	1.37	1.34	1.40	1.42	1.33	1.36	1.30	1.39	1.26	41.26	1.38
Settled Water	NTU	n/a	0.12	0.13	0.12	0.12	0.11	0.10	0.10	0.09	0.10	0.1	0.11	0.10	0.11	0.11	0.11	0.10	0.09	0.08	0.11	0.11	0.10	0.11	0.10	0.11	0.11	0.10	0.11	0.11	0.11	0.10	3.18	0.11
Treated Water	NTU	1	0.07	0.06	0.06	0.06	0.06	0.04	0.06	0.05	0.04	0.03	0.05	0.05	0.07	0.06	0.06	0.07	0.06	0.06	0.08	0.07	0.07	0.06	0.06	0.07	0.06	0.06	0.05	0.06	0.06	0.04	1.75	0.06
Other Operating Parameters																																		
pH - Treated Water	no units	6.5 to 8.5	7.13	7.15	7.07	7.16	7.15	7.08	7.18	7.22	7.26	7.22	7.04	7.07	7.12	7.10	7.17	7.15	7.12	7.15	7.17	7.18	7.17	7.16	7.17	7.15	7.16	7.15	7.13	7.16	7.16	7.20	214.50	7.15
pH - Settled water	no units	n/a	6.07	6.11	6.09	6.07	6.09	6.06	6.11	6.00	6.04	6.01	5.97	6.00	6.09	6.08	6.00	6.07	6.10	6.12	6.03	6.09	6.16	6.09	5.97	6.01	6.08	6.12	6.13	6.12	6.16	6.11	182.15	6.07
pH - Raw Water	no units	n/a	7.01	7.04	6.92	7.06	7.01	7.09	7.11	7.06	7.07	7.07	7.14	7.12	7.07	6.98	7.04	7.09	7.12	7.01	7.10	7.00	6.98	7.01	6.97	6.90	7.09	7.02	7.06	7.03	7.01	7.07	211.25	7.04
FAC - Treated Water	mg/l	0.2 to 4	2.20	2.17	2.20	2.22	2.26	2.28	2.22	2.16	2.08	2.06	2.38	2.36	2.28	2.34	2.22	2.21	2.17	2.12	2.11	2.17	2.21	2.32	2.26	2.24	2.32	2.38	2.42	2.44	2.22	2.21	67.23	2.24
Total Chlorine Residual Treated	mg/l	0.3 to 7	2.56	2.52	2.48	2.54	2.50	2.56	2.52	2.38	2.22	2.26	2.66	2.54	2.56	2.62	2.50	2.42	2.32	2.26	2.28	2.52	2.60	2.64	2.58	2.54	2.50	2.58	2.62	2.64	2.46	2.48	74.86	2.50
Temperature	C	15	7.0	7.0	7.0	7.0	7.0	6.0	6.0	5.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	110.0	3.7
Fluoride used (Total Daily Consumption)	kg	n/a	18.0	18.0	17.0	18.0	18.0	17.0	21.0	20.0	20.0	19.0	20.0	19.0	20.0	19.0	20.0	18.0	20.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.0	17.0	17.0	19.0	21.0	20.0	559.0	18.6
Chlorine used (Total Daily Consumption)	kg	n/a	24.0	22.0	23.0	24.0	23.0	22.0	23.0	22.0	22.0	19.0	20.0	22.0	21.0	21.0	22.0	19.0	23.0	22.0	19.0	22.0	21.0	21.0	23.0	21.0	21.0	22.0	22.0	21.0	20.0	648.0	21.6	
Soda ash (Total Daily Consumption)	kg	n/a	187.6	176.4	180.6	186.6	181.0	173.3	184.1	174.3	174.0	174.7	172.6	173.6	182.7	170.5	185.5	167.0	193.2	179.6	173.3	179.2	179.6	178.2	187.3	177.1	180.3	175.4	178.9	185.2	184.5	176.8	5372.2	179.1
Soda Ash - Dosage	mg/l	n/a	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	1050.0	35.0
Alum residual - (Total Daily Consumption)	kg	n/a	187.6	176.4	180.6	186.6	181.0	173.3	184.1	174.3	174.0	174.7	172.6	173.6	182.7	170.5	185.5	167.0	193.2	179.6	173.3	179.2	179.6	178.2	187.3	177.1	180.3	175.4	178.9	185.2	184.5	176.8	5372.2	179.1
Alum residual - Dosage	mg/l	n/a	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	1050.0	35.0
Alum residual - Treated Water	mg/l	0.1	0.02	0.02	0.02	0.01	0.03	0.02	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.03	0.02	0.02	0.01	0.01	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04	0.58	0.02	
Poly bags added (25 kg bags)	kg			1.0				0.5			0.5				0.5							0.5		0.5				0.5					100.0	