

Town of Fort Frances - Water treatment Plant - Water Works # 220000978
Monitoring Record
Dec-20

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	31	Total	Average	
		or Range																																		
Flow rates																																				
Raw Water	1000 m³	17	5.05	5.03	5.07	5.08	5.25	5.06	4.83	5.14	5.06	5.06	5.07	5.00	5.05	5.17	5.02	5.09	5.11	5.05	4.75	5.08	5.37	5.03	5.07	5.08	5.18	5.04	5.07	5.15	4.90	5.08	5.10	157.09	5.07	
Peak Instantaneous - Raw Water	l/s	n/a	59.31	59.27	59.28	59.23	59.32	59.39	59.32	59.18	59.20	59.27	59.16	59.28	59.21	59.14	59.32	59.30	59.26	59.36	59.23	59.31	59.30	59.26	59.42	59.45	59.31	59.36	59.16	59.14	59.18	59.14	59.14		59.26	
Treated Water	1000 m³	17	3.45	3.30	3.30	3.53	3.23	3.52	3.42	3.17	3.46	3.05	3.46	3.18	3.30	3.68	3.31	3.37	3.62	3.43	2.78	3.46	3.79	3.04	3.50	3.17	3.66	3.03	3.51	3.31	3.41	3.64	3.27	104.35	3.37	
Peak Instantaneous - Treated Water	l/s	n/a	62.57	62.61	62.41	62.54	62.26	62.71	62.46	62.73	62.85	63.04	62.90	62.57	62.85	62.89	62.82	62.72	67.53	62.75	62.32	62.42	61.92	62.98	63.14	62.27	64.07	62.04	62.45	62.55	62.39	64.07	62.98		62.86	
BackWash Water	1000 m³	n/a	0.27	0.25	0.29	0.27	0.25	0.35	0.20	0.25	0.29	0.27	0.25	0.29	0.27	0.25	0.28	0.27	0.25	0.28	0.27	0.25	0.29	0.55	0.25	0.28	0.25	0.55	0.25	0.28	0.27	0.247	0.283	8.823	0.285	
Fluoride Information																																				
Fluoride Residual - Treated Water	mg/l	0.5 to 0.8	0.72	0.72	0.71	0.75	0.73	0.71	0.72	0.71	0.74	0.74	0.73	0.73	0.73	0.69	0.68	0.62	0.74	0.72	0.71	0.74	0.74	0.74	0.73	0.61	0.70	0.71	0.73	0.68	0.70	0.71	0.72		0.71	
Turbidity Information																																				
Raw Water	NTU	n/a	1.31	1.30	1.07	1.32	1.33	1.35	1.17	1.23	1.21	1.11	1.09	1.07	1.12	1.18	0.73	1.05	0.72	0.76	1.01	0.97	0.83	0.68	0.80	0.66	0.61	0.74	0.57	0.55	0.47	0.57	0.55		0.94	
Settled Water	NTU	n/a	0.07	0.13	0.14	0.12	0.11	0.09	0.13	0.14	0.13	0.14	0.13	0.13	0.13	0.10	0.10	0.16	0.14	0.12	0.07	0.11	0.10	0.16	0.24	0.21	0.24	0.22	0.20	0.14	0.13	0.14	0.14		0.14	
Treated Water	NTU	1	0.06	0.08	0.07	0.07	0.06	0.07	0.07	0.08	0.07	0.07	0.06	0.06	0.07	0.08	0.05	0.03	0.03	0.03	0.01	0.02	0.01	0.05	0.03	0.04	0.04	0.05	0.03	0.02	0.03	0.03	0.03		0.05	
Other Operating Parameters																																				
pH - Treated Water	no units	6.5 to 8.5	7.32	7.37	7.34	7.35	7.33	7.37	7.26	6.94	7.11	7.06	7.03	7.07	7.03	7.37	7.04	7.44	7.06	7.11	7.35	7.40	7.50	7.55	7.43	7.40	7.38	7.25	7.24	7.28	7.24	7.18	7.20		7.26	
pH - Settled water	no units	n/a	7.12	6.56	6.53	7.03	6.51	6.55	6.56	6.49	6.46	6.49	6.38	6.45	6.42	6.40	6.38	6.51	6.42	6.44	6.48	6.42	6.27	6.38	6.31	6.29	6.35	6.30	6.28	6.33	6.32	6.33	6.37		6.46	
pH - Raw Water	no units	n/a	7.38	7.39	7.23	7.16	7.11	7.09	7.25	7.10	7.13	7.09	7.12	7.16	7.09	7.18	7.21	7.21	7.19	7.11	7.21	7.18	7.20	7.23	7.33	7.33	7.29	7.15	7.19	7.24	7.06	7.02	7.04		7.18	
FAC - Treated Water	mg/l	0.2 to 4	2.12	2.12	2.18	2.18	2.35	2.32	2.64	2.05	2.03	2.01	2.05	2.03	1.91	1.98	2.02	2.06	2.08	2.08	2.16	2.13	2.11	2.12	2.16	2.10	2.10	2.06	2.08	2.02	2.17	2.11	2.07		2.12	
Total Chlorine Residual Treated	mg/l	0.3 to 7	2.40	2.30	2.42	2.50	2.52	2.48	2.80	2.32	2.28	2.32	2.36	2.28	2.19	2.32	2.42	2.38	2.52	2.44	2.48	2.54	2.42	2.38	2.48	2.42	2.30	2.32	2.28	2.20	2.38	2.40	2.28		2.39	
Temperature	°C	15	3.0	3.0	3.0	3.0	3.0	3.0	3.0	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	2.0	2.0	2.0	2.0	2.0		2.4		
Fluoride used (Total Daily Consumption)	kg	n/a	15.0	15.0	17.0	19.0	19.0	18.0	17.0	17.0	18.0	17.0	18.0	17.0	17.0	18.0	16.0	18.0	16.0	17.0	15.0	16.0	17.0	16.0	16.0	18.0	18.0	18.0	17.0	18.0	17.0	17.0	530.00	17.1		
Chlorine used (Total Daily Consumption)	kg	n/a	18.0	18.0	18.0	18.0	22.0	22.0	20.0	18.0	17.0	18.0	18.0	18.0	18.0	18.0	19.0	20.0	19.0	19.0	17.0	20.0	19.0	19.0	19.0	20.0	20.0	18.0	19.0	19.0	20.0	18.0	19.0	585.00	18.9	
Soda Ash (Total Daily Consumption)	kg	n/a	186.9	186.1	187.6	188.0	194.3	187.2	178.7	190.2	187.2	187.2	187.6	185.0	186.9	191.3	185.7	188.3	189.1	186.9	175.8	188.0	198.7	186.1	187.6	188.0	191.7	186.5	187.6	190.6	181.3	188.0	188.7	5812.33	187.5	
Soda Ash - Dosage	mg/l	n/a	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37		37.0		
Alum residual - (Total Daily Consumption)	kg	n/a	171.7	171.0	172.4	172.7	178.5	172.0	164.2	174.8	172.0	172.0	172.4	170.0	171.7	175.8	170.7	173.1	173.7	171.7	161.5	172.7	182.6	171.0	172.4	172.7	176.1	171.4	172.4	175.1	166.6	172.7	173.4	5341.06	172.3	
Alum residual - Dosage	mg/l	n/a	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0		34.0		
Alum residual - Treated Water	mg/l	0.1	0.03	0.02	0.02	0.06	0.03	0.02	0.04	0.03	0.03	0.08	0.06	0.06	0.05	0.08	0.02	0.09	0.08	0.04	0.07	0.04	0.08	0.08	0.08	0.08	0.04	0.06	0.04	0.04	0.04	0.07	0.04	0.03		0.05
Poly bags added (25 kg bags)	kg	n/a							0.5				0.5						0.5							0.5					0.5			62.5		

* MAC - maximum acceptable range

Minimum	Maximum
4.75	5.37
59.14	59.45
2.78	3.79
61.92	67.53