

Town of Fort Frances - Water treatment Plant - Water Works # 220000978
Monitoring Record
January 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 | 31 | Total | Average | |
|---|----------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|---------|---------|------|
| | | or Range | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flow rates | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw Water | 10^3 M^3 | 17 | 5.30 | 5.46 | 5.23 | 5.23 | 5.11 | 5.40 | 5.32 | 4.98 | 5.27 | 5.25 | 5.22 | 5.22 | 5.17 | 5.20 | 5.30 | 5.25 | 4.97 | 5.35 | 5.24 | 5.22 | 5.24 | 5.20 | 5.21 | 5.02 | 4.93 | 5.30 | 5.42 | 5.31 | 5.01 | 5.26 | 5.17 | 161.76 | 5.22 | |
| Peak Instantaneous - Raw Water | L/s | n/a | 61.15 | 61.09 | 61.08 | 61.03 | 61.07 | 61.07 | 61.20 | 61.17 | 61.08 | 61.17 | 61.09 | 61.14 | 61.05 | 61.06 | 61.12 | 61.00 | 60.94 | 60.97 | 60.91 | 60.85 | 60.99 | 60.92 | 60.84 | 60.94 | 61.20 | 61.21 | 61.15 | 61.18 | 61.11 | 61.47 | 1893.40 | 61.08 | | |
| Treated Water | 10^3 M^3 | 17 | 3.90 | 3.94 | 3.79 | 3.83 | 3.73 | 3.94 | 3.92 | 3.75 | 3.92 | 3.92 | 3.85 | 3.80 | 4.05 | 3.74 | 4.11 | 3.93 | 3.65 | 4.03 | 3.84 | 3.76 | 3.85 | 3.93 | 3.87 | 3.59 | 3.95 | 3.76 | 3.90 | 3.83 | 3.68 | 3.75 | 3.67 | 119.18 | 3.85 | |
| Peak Instantaneous - Treated Water | L/s | n/a | 63.21 | 61.84 | 63.79 | 62.82 | 63.44 | 62.59 | 62.71 | 62.81 | 64.40 | 64.99 | 64.43 | 64.12 | 90.66 | 77.13 | 63.88 | 64.45 | 64.57 | 64.43 | 64.69 | 63.91 | 63.17 | 63.28 | 64.45 | 80.73 | 79.07 | 63.59 | 63.08 | 62.67 | 62.29 | 64.44 | 63.87 | 2045.51 | 65.98 | |
| BackWash Water | 10^3 M^3 | n/a | | 0.280 | 0.163 | 0.249 | | 0.279 | 0.268 | 0.248 | 0.277 | | 0.311 | 0.247 | 0.551 | | | 0.247 | 0.279 | | 0.273 | 0.243 | 0.276 | | 0.274 | 0.220 | 0.281 | 0.273 | 0.236 | 0.279 | 0.275 | 0.240 | 0.279 | 6.548 | 0.273 | |
| Fluoride Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoride Residual - Treated Water | mg/l | 0.5 to 0.8 | 0.56 | 0.55 | 0.55 | 0.56 | 0.55 | 0.56 | 0.55 | 0.52 | 0.54 | 0.50 | 0.50 | 0.52 | 0.53 | 0.50 | 0.53 | 0.55 | 0.57 | 0.57 | 0.57 | 0.56 | 0.56 | 0.57 | 0.58 | 0.57 | 0.58 | 0.57 | 0.58 | 0.57 | 0.57 | 0.57 | 0.57 | 17.13 | 0.55 | |
| Turbidity Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw Water | NTU | n/a | 0.86 | 0.93 | 0.91 | 0.96 | 0.99 | 0.90 | 0.93 | 0.95 | 0.96 | 0.93 | 0.95 | 0.94 | 0.94 | 0.91 | 0.89 | 0.82 | 0.77 | 0.73 | 0.60 | 0.79 | 0.75 | 0.63 | 0.52 | 0.47 | 0.50 | 0.46 | 0.57 | 0.55 | 0.49 | 0.50 | 0.47 | 23.57 | 0.76 | |
| Settled Water | NTU | n/a | 0.14 | 0.13 | 0.14 | 0.14 | 0.12 | 0.11 | 0.12 | 0.14 | 0.14 | 0.15 | 0.14 | 0.14 | 0.16 | 0.14 | 0.16 | 0.17 | 0.16 | 0.16 | 0.14 | 0.12 | 0.11 | 0.12 | 0.12 | 0.11 | 0.12 | 0.11 | 0.10 | 0.11 | 0.11 | 0.12 | 0.11 | 4.06 | 0.13 | |
| Treated Water | NTU | 1 | 0.06 | 0.06 | 0.05 | 0.06 | 0.09 | 0.07 | 0.09 | 0.07 | 0.06 | 0.06 | 0.07 | 0.06 | 0.05 | 0.06 | 0.05 | 0.05 | 0.07 | 0.07 | 0.06 | 0.05 | 0.09 | 0.08 | 0.08 | 0.06 | 0.06 | 0.06 | 0.05 | 0.08 | 0.06 | 0.07 | 0.07 | 2.02 | 0.07 | |
| Other Operating Parameters | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| pH - Treated Water | no units | 6.5 to 8.5 | 7.27 | 7.10 | 7.12 | 7.15 | 7.17 | 7.08 | 7.11 | 7.19 | 7.18 | 7.20 | 7.24 | 7.21 | 7.25 | 7.23 | 7.15 | 7.19 | 7.22 | 7.16 | 7.24 | 7.26 | 7.27 | 7.13 | 7.14 | 7.18 | 7.16 | 7.13 | 7.17 | 7.20 | 7.18 | 7.09 | 7.10 | 222.47 | 7.18 | |
| pH - Settled water | no units | n/a | 6.26 | 6.24 | 6.29 | 6.3 | 6.35 | 6.27 | 6.37 | 6.27 | 6.26 | 6.31 | 6.2 | 6.19 | 6.05 | 6.1 | 6.31 | 6.28 | 6.17 | 6.14 | 6.2 | 6.34 | 6.2 | 6.13 | 6.18 | 6.18 | 6.19 | 6.16 | 6.22 | 6.31 | 6.18 | 6.17 | 6.16 | 192.98 | 6.23 | |
| pH - Raw Water | no units | n/a | 7.06 | 7.08 | 7.05 | 7.01 | 7.07 | 7.00 | 6.97 | 7.10 | 7.01 | 6.89 | 7.01 | 6.91 | 6.98 | 6.92 | 6.95 | 6.87 | 6.87 | 6.84 | 6.90 | 6.92 | 6.86 | 6.91 | 6.89 | 6.86 | 6.89 | 6.81 | 6.88 | 6.94 | 6.94 | 6.95 | 215.34 | 6.95 | | |
| FAC - Treated Water | mg/l | 0.2 to 4 | 2.28 | 2.34 | 2.32 | 2.26 | 2.24 | 2.28 | 2.31 | 2.32 | 2.20 | 2.18 | 2.17 | 1.90 | 2.34 | 2.60 | 2.38 | 2.46 | 2.44 | 2.18 | 2.13 | 2.12 | 2.15 | 2.11 | 2.07 | 2.15 | 2.04 | 2.20 | 2.20 | 2.15 | 2.12 | 2.20 | 2.14 | 2.13 | 68.91 | 2.22 |
| Total Chlorine Residual Treated | mg/l | 0.3 to 7 | 2.46 | 2.46 | 2.42 | 2.38 | 2.48 | 2.56 | 2.58 | 2.60 | 2.40 | 2.30 | 2.26 | 2.22 | 2.42 | 2.76 | 2.48 | 2.62 | 2.58 | 2.32 | 2.26 | 2.28 | 2.30 | 2.40 | 2.36 | 2.44 | 2.28 | 2.42 | 2.20 | 2.32 | 2.46 | 2.46 | 2.38 | 74.86 | 2.41 | |
| Temperature | C | 15 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 62.0 | 2.0 | |
| Fluoride used (Total Daily Consumption) | kg | n/a | 22.0 | 22.00 | 20.0 | 20.0 | 20.0 | 27.0 | 15.0 | 18.0 | 13.0 | 16.0 | 15.0 | 14.0 | 14.0 | 15.0 | 19.0 | 22.0 | 23.0 | 23.0 | 22.0 | 22.0 | 22.0 | 21.0 | 20.0 | 25.0 | 20.0 | 21.0 | 20.0 | 19.0 | 19.0 | 21.0 | 604.00 | 19.5 | | |
| Chlorine used (Total Daily Consumption) | kg | n/a | 21.0 | 21.0 | 20.0 | 20.0 | 20.0 | 20.0 | 21.0 | 21.0 | 19.0 | 20.0 | 21.0 | 21.0 | 15.0 | 20.0 | 22.0 | 22.0 | 22.0 | 19.0 | 21.0 | 20.0 | 20.0 | 20.0 | 20.0 | 19.0 | 16.0 | 22.0 | 20.0 | 21.0 | 18.0 | 21.0 | 623.00 | 20.1 | | |
| Soda ash (Total Daily Consumption) | kg | n/a | 185.5 | 191.1 | 183.1 | 183.1 | 178.9 | 189.0 | 186.2 | 174.3 | 184.5 | 183.8 | 182.7 | 182.7 | 181.0 | 182.0 | 185.5 | 183.8 | 174.0 | 187.3 | 183.4 | 182.7 | 183.4 | 182.0 | 182.4 | 175.7 | 172.6 | 185.5 | 189.7 | 185.9 | 175.4 | 184.1 | 181.0 | 5661.60 | 182.6 | |
| Soda Ash - Dosage | mg/l | n/a | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 1085.00 | 35.0 | |
| Alum residual - (Total Daily Consumption) | kg | n/a | 185.5 | 191.1 | 183.1 | 183.1 | 178.9 | 189.0 | 186.2 | 174.3 | 184.5 | 183.8 | 182.7 | 182.7 | 181.0 | 182.0 | 185.5 | 183.8 | 174.0 | 187.3 | 183.4 | 182.7 | 183.4 | 182.0 | 182.4 | 175.7 | 172.6 | 185.5 | 189.7 | 185.9 | 175.4 | 184.1 | 181.0 | 5661.60 | 182.6 | |
| Alum residual - Dosage | mg/l | n/a | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 1085.00 | 35.0 | |
| Alum residual - Treated Water | mg/l | 0.1 | 0.01 | 0.02 | 0.02 | 0.01 | 0.04 | 0.05 | 0.04 | 0.05 | 0.04 | 0.04 | 0.05 | 0.04 | 0.05 | 0.05 | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 | 0.04 | 0.06 | 0.06 | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | 0.04 | 0.03 | 0.04 | 1.18 | 0.04 | |
| Poly bags added (25 kg bags) | kg | | | | | | | | | | | 1.0 | | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | | | | | | | 62.5 | | |