

**City of Winnipeg
Water and Waste Department
West End Water Pollution Control Centre Monitoring Data
September 2017**

| Licence # 2669 E RR | File # 53.10 | Final Effluent 24 Hour Composite | | | | | | Final Effluent Grab Sample | | | | | |
|------------------------|-----------------|-------------------------------------|--------------------------------|--------|--------|----------------|---------------------|-------------------------------|-------------------|-------|---------|-------------------|--------|
| | | Date | Raw Sewage Daily Flow ML | TSS | cBOD5 | Ammonia | Ortho Phosphorus | Total Phosphorus | Total Nitrogen | Temp. | pH | Fecal Coliform | E.Coli |
| | | | | (mg/L) | (mg/L) | (kg NH3-N/day) | (mg/L-P) | (mg/L-P)* | (mg/L-N)* | (°C) | (units) | MPN/100 mL | |
| 1-Sep-17 | 22.8 | 4 | <3 | 0.1 | 0.32 | 0.3 | 1.4 | 18.8 | 9.79 | 50 | 72 | | |
| 2-Sep-17 | 21.5 | 5 | <3 | 1.5 | 0.32 | 0.3 | 1.4 | 18.8 | 9.68 | 20 | 36 | | |
| 3-Sep-17 | 20.9 | 5 | <3 | 0.4 | 0.33 | 0.3 | 1.5 | 18.8 | 9.67 | 24 | 40 | | |
| 4-Sep-17 | 23.1 | 5 | <3 | 0.5 | 0.35 | 0.3 | 1.5 | 18.7 | 9.61 | 61 | 58 | | |
| 5-Sep-17 | 22.4 | 6 | <3 | 0.1 | 0.33 | 0.3 | 1.5 | 17.0 | 9.55 | 91 | 122 | | |
| 6-Sep-17 | 22.3 | 10 | <3 | 0.1 | 0.35 | 0.4 | 1.5 | 16.8 | 9.49 | 42 | 62 | | |
| 7-Sep-17 | 22.4 | 7 | <3 | 0.1 | 0.35 | 0.4 | 1.5 | 17.8 | 9.49 | 61 | 107 | | |
| 8-Sep-17 | 22.1 | 9 | <3 | 0.1 | 0.37 | 0.4 | 1.5 | 17.8 | 9.43 | 83 | 114 | | |
| 9-Sep-17 | 22.2 | 11 | <3 | 0.1 | 0.39 | 0.4 | 1.5 | 16.5 | 9.49 | 55 | 66 | | |
| 10-Sep-17 | 23.1 | 13 | <3 | 0.1 | 0.39 | 0.4 | 1.5 | 18.4 | 9.40 | 75 | 91 | | |
| 11-Sep-17 | 22.6 | 20 | <3 | 0.1 | 0.41 | 0.4 | 1.5 | 19.2 | 9.38 | 138 | 112 | | |
| 12-Sep-17 | 22.3 | 18 | <3 | 0.1 | 0.42 | 0.4 | 1.5 | 19.2 | 9.34 | 130 | 99 | | |
| 13-Sep-17 | 22.2 | 17 | <3 | 0.1 | 0.43 | 0.4 | 1.5 | 19.2 | 9.34 | 172 | 201 | | |
| 14-Sep-17 | 22.3 | 14 | <3 | 0.1 | 0.49 | 0.4 | 1.5 | 17.9 | 9.25 | 276 | 199 | | |
| 15-Sep-17 | 22.0 | 22 | <3 | 0.1 | 0.53 | 0.4 | 1.5 | 16.5 | 9.20 | 154 | 161 | | |
| 16-Sep-17 | 26.7 | 12 | <3 | 0.5 | 0.55 | 0.5 | 1.5 | 13.0 | 9.14 | 921 | 1,050 | | |
| 17-Sep-17 | 26.2 | 14 | <3 | 0.1 | 0.57 | 0.5 | 1.5 | 12.5 | 9.08 | 649 | 613 | | |
| 18-Sep-17 | 22.9 | 18 | <3 | 0.1 | 0.59 | 0.5 | 1.5 | 12.8 | 9.05 | 548 | 435 | | |
| 19-Sep-17 | 22.4 | 16 | <3 | 0.1 | 0.61 | 0.5 | 1.5 | ns | ns | ns | ns | | |
| 20-Sep-17 | 23.6 | 17 | <3 | 0.1 | 0.65 | 0.5 | 1.5 | 14.9 | 8.96 | 1,120 | 1,410 | | |
| 21-Sep-17 | 22.2 | 14 | 4 | 0.1 | 0.66 | 0.5 | 1.5 | 14.5 | 8.95 | 613 | 816 | | |
| 22-Sep-17 | 26.0 | 16 | 3 | 0.1 | 0.72 | 0.5 | 1.4 | 15.4 | 8.84 | 387 | 308 | | |
| 23-Sep-17 | 29.8 | 14 | 4 | 0.1 | 0.74 | 0.6 | 1.4 | 14.2 | 8.75 | 435 | 517 | | |
| 24-Sep-17 | 36.9 | 11 | 3 | 0.2 | 0.78 | 0.6 | 1.4 | 13.6 | 8.73 | 291 | 228 | | |
| 25-Sep-17 | 30.7 | 10 | 4 | 0.2 | 0.76 | 0.6 | 1.5 | 13.3 | 8.70 | 579 | 308 | | |
| 26-Sep-17 | 29.2 | 11 | 4 | 0.9 | 0.79 | 0.6 | 1.5 | 12.8 | 8.69 | 579 | 488 | | |
| 27-Sep-17 | 24.7 | 14 | 4 | 0.5 | 0.75 | 0.6 | 1.5 | 12.1 | 8.63 | 517 | 411 | | |
| 28-Sep-17 | 21.9 | 18 | 5 | 1.1 | 0.76 | 0.7 | 1.5 | 13.4 | 8.66 | 435 | 461 | | |
| 29-Sep-17 | 20.7 | 13 | 5 | 1.5 | 0.75 | 0.7 | 1.6 | 13.2 | 8.60 | 1,200 | 187 | | |
| 30-Sep-17 | 21.1 | 13 | 5 | 1.7 | 0.85 | 0.7 | 1.6 | 12.9 | 8.58 | 579 | 649 | | |
| Max: | 36.9 | | | | | | | | | | | | |
| Min: | 20.7 | | | | | | | | | | | | |
| Average: | 24.0 | 13 | <3 | 0.4 | 0.54 | | | 15.9 | 9.15 | | | | |
| Total Flow: | 719.3 | | | | | | | | | | | | |
| Geo.Mean: | | | | | | | | | | 203 | 204 | | |

Notes:

(1) Effluent ammonia load based upon Raw Sewage flows and Final Cell NH3-N concentrations

(2) nr - not recorded or no result; na - not analyzed; ns - no sample

(3) Where value is expressed as less than (<), the value is halved and used in the calculations

(4) * = 30 day rolling average