

City of Winnipeg
Water and Waste Department
West End Water Pollution Control Centre Monitoring Data
May 2014

| Licence 2669 E RR | Raw Sewage | Final Effluent 24 Hour Composite | | | | | | Final Effluent Grab Sample | | | | | |
|----------------------|---------------|-------------------------------------|---------------|----------|-------------|----------------|---------------------|-------------------------------|-------------------|-----------|-----------|-------------------|--------|
| | | Date | Daily Flow | TSS | cBOD5 | Ammonia | Ortho Phosphorus | Total Phosphorus | Total Nitrogen | Temp. | pH | Fecal Coliform | E.Coli |
| | | | ML | (mg/L) | (mg/L) | (kg NH3-N/day) | (mg/L-P) | (mg/L-P)* | (mg/L-N)* | (°C) | (units) | MPN/100 mL | |
| 1-May-14 | 32.2 | 11 | 6 | 33.5 | 0.03 | 0.3 | 6 | 2 | 8.89 | 23 | 9 | | |
| 2-May-14 | 30.6 | 17 | 7 | 30.9 | 0.02 | 0.3 | 6 | 3 | 9.00 | 4 | 4 | | |
| 3-May-14 | 30.8 | 16 | 7 | 26.8 | 0.01 | 0.3 | 6 | 2 | 9.05 | 9 | 4 | | |
| 4-May-14 | 29.2 | 14 | 7 | 22.8 | 0.02 | 0.3 | 6 | 2 | 9.04 | 23 | 23 | | |
| 5-May-14 | 27.6 | 18 | 8 | 20.2 | 0.02 | 0.3 | 6 | 4 | 9.13 | 15 | 15 | | |
| 6-May-14 | 26.4 | 22 | 9 | 16.9 | <0.01 | 0.3 | 6 | 4 | 9.20 | 9 | 9 | | |
| 7-May-14 | 27.6 | 14 | 9 | 18.0 | <0.01 | 0.3 | 6 | 5 | 9.30 | 23 | 23 | | |
| 8-May-14 | 29.3 | 17 | 8 | 14.9 | <0.01 | 0.3 | 5 | 6 | 9.28 | 23 | 23 | | |
| 9-May-14 | 26.9 | 19 | 9 | 10.8 | <0.01 | 0.3 | 5 | 6 | 9.35 | 23 | 23 | | |
| 10-May-14 | 26.4 | 23 | 10 | 8.2 | 0.02 | 0.3 | 5 | 7 | 9.37 | 23 | 23 | | |
| 11-May-14 | 26.0 | 20 | 9 | 8.6 | 0.02 | 0.3 | 5 | 9 | 9.36 | 43 | 15 | | |
| 12-May-14 | 25.7 | 20 | 9 | 6.2 | 0.02 | 0.3 | 5 | 9 | 9.34 | 23 | 9 | | |
| 13-May-14 | 26.0 | 27 | 10 | 11.4 | 0.04 | 0.3 | 5 | 8 | 9.24 | 23 | 23 | | |
| 14-May-14 | 25.3 | 20 | 8 | 2.5 | 0.03 | 0.3 | 5 | 8 | 9.28 | 43 | 43 | | |
| 15-May-14 | 24.8 | 19 | 10 | 0.1 | <0.01 | 0.3 | 5 | 8 | 9.29 | 4 | 4 | | |
| 16-May-14 | 24.4 | 20 | 10 | 0.1 | 0.01 | 0.3 | 5 | 9 | 9.45 | 4 | 4 | | |
| 17-May-14 | 23.4 | 12 | 11 | 3.7 | <0.01 | 0.3 | 4 | 11 | 9.56 | 23 | 23 | | |
| 18-May-14 | 22.4 | 21 | 10 | 0.1 | <0.01 | 0.3 | 4 | 11 | 9.60 | 23 | 23 | | |
| 19-May-14 | 29.3 | 19 | 9 | 1.8 | 0.03 | 0.3 | 4 | 11 | 9.60 | 15 | 15 | | |
| 20-May-14 | 29.3 | 14 | 8 | 1.2 | 0.06 | 0.3 | 4 | 11 | 9.43 | 15 | 15 | | |
| 21-May-14 | 26.4 | 16 | 9 | 0.1 | 0.04 | 0.3 | 4 | 11 | 9.28 | 23 | 23 | | |
| 22-May-14 | 25.5 | 12 | 8 | 0.8 | 0.08 | 0.3 | 4 | 11 | 9.50 | 43 | 15 | | |
| 23-May-14 | 24.9 | 11 | 7 | 0.1 | 0.08 | 0.3 | 4 | 14 | 9.46 | 15 | 15 | | |
| 24-May-14 | 26.9 | 17 | 8 | 0.1 | 0.10 | 0.3 | 4 | 16 | 9.43 | 43 | 43 | | |
| 25-May-14 | 48.4 | 14 | 7 | 0.2 | 0.19 | 0.3 | 3 | 17 | 9.44 | 93 | 93 | | |
| 26-May-14 | 43.8 | 11 | 7 | 0.2 | 0.24 | 0.3 | 3 | 18 | 9.32 | 15 | 15 | | |
| 27-May-14 | 33.1 | 11 | 7 | 0.2 | 0.30 | 0.3 | 3 | 19 | 9.34 | 75 | 15 | | |
| 28-May-14 | 31.0 | 14 | 8 | 0.2 | 0.30 | 0.3 | 3 | 20 | 9.31 | 43 | 43 | | |
| 29-May-14 | 29.5 | 21 | 6 | 0.1 | 0.36 | 0.3 | 3 | 20 | 9.30 | 230 | 230 | | |
| 30-May-14 | 29.5 | 15 | 8 | 0.1 | 0.48 | 0.3 | 3 | 20 | 9.12 | 230 | 230 | | |
| 31-May-14 | 28.6 | 14 | 8 | 0.1 | 0.52 | 0.3 | 3 | 21 | 9.23 | 230 | 230 | | |
| Max: | 48.4 | | | | | | | | | | | | |
| Min: | 22.4 | | | | | | | | | | | | |
| Average: | 28.74 | 17 | 8 | 8 | 0.10 | | | 10 | 9.31 | | | | |
| Total Flow: | 890.9 | | | | | | | | | | | | |
| Geo.Mean: | | | | | | | | | | 26 | 21 | | |

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

(5) Total Nitrogen results are calculated from TKN and nitrate values