

**City of Winnipeg**  
**Water and Waste Department**  
**North End Water Pollution Control Centre Monitoring Data**  
**April 2008**

Date	Raw Sewage	Final Effluent 24 Hour Composite										Final Effluent Grab Sample			
	Daily Flow	TSS	BOD5	cBOD5	Ammonia		Ortho Phosphorus	Total Phosphorus		Total Nitrogen		Temp.	pH	Fecal Coliform	E.Coli
	ML**	(mg/L)	(mg/L)	(mg/L)	(mg/L-N)	(kg NH3-N/day)	(mg/L-P)	(mg/L-P)	(mg/L-P)*	(mg/L-N)	(mg/L-N)*	(°C)	(units)	MPN/100 mL	
1-Apr-08	224.5	15	52	9	23	5,164	2.36	3.0	4.0	34	37	13	7.13	2,300	2,300
2-Apr-08	274.8	33	34	13	21	5,771	2.24	3.1	4.0	31	37	12	7.10	3,600	3,600
3-Apr-08	331.9	43	44	16	15	4,979	1.88	2.5	3.9	25	37	11	7.06	920	360
4-Apr-08	253.8	24	31	10	16	4,061	1.82	2.6	3.9	23	36	10	7.03	3,600	3,600
5-Apr-08	202.8	19	32	9	19	3,853	2.13	2.9	3.8	24	35	12	7.06	3,600	360
6-Apr-08	182.3	26	33	9	21	3,828	2.50	3.2	3.7	28	35	11	7.02	720	720
7-Apr-08	218.9	28	35	11	21	4,597	2.51	3.4	3.7	27	34	11	6.99	2,300	2,300
8-Apr-08	229.7	21	28	21	25	5,743	2.44	3.2	3.6	31	34	12	6.95	9,200	9,200
9-Apr-08	229.8	22	23	10	24	5,515	2.25	3.1	3.5	32	34	12	7.07	360	360
10-Apr-08	215.8	21	26	9	26	5,589	2.51	3.3	3.5	35	34	13	7.04	230	230
11-Apr-08	201.4	21	26	13	27	5,357	2.62	3.3	3.4	34	34	13	7.01	360	360
12-Apr-08	186.5	16	21	9	26	4,830	2.56	3.2	3.4	34	34	12	6.99	920	920
13-Apr-08	184.1	17	22	8	27	4,915	2.57	3.1	3.4	32	34	13	7.09	230	230
14-Apr-08	197.3	17	25	10	25	4,933	2.58	3.1	3.4	31	34	13	7.02	2,300	2,300
15-Apr-08	204.2	11	20	8	28	5,677	2.56	3.3	3.4	35	34	13	7.09	2,300	2,300
16-Apr-08	190.0	10	22	6	29	5,453	2.80	3.4	3.4	35	34	13	7.04	920	230
17-Apr-08	177.8	13	23	7	29	5,156	2.94	3.7	3.3	37	34	13	6.92	230	230
18-Apr-08	172.3	10	20	7	30	5,169	3.20	3.9	3.3	33	34	13	6.98	36	36
19-Apr-08	165.4	7	26	7	30	4,879	3.12	3.6	3.3	33	34	13	6.90	360	360
20-Apr-08	160.9	12	31	7	33	5,245	3.49	3.9	3.4	36	34	13	6.97	36	36
21-Apr-08	235.6	30	53	13	30	6,974	3.26	3.4	3.3	31	34	13	7.12	920	920
22-Apr-08	175.6	8	31	6	30	5,198	2.59	2.8	3.3	32	33	13	6.99	920	920
23-Apr-08	167.2	14	33	6	35	5,802	3.38	3.7	3.3	37	33	13	6.90	24,000	24,000
24-Apr-08	325.6	43	38	14	21	6,968	2.27	2.9	3.2	25	32	12	7.02	23,000	920
25-Apr-08	226.7	15	32	8	19	4,353	1.68	2.2	3.2	21	32	11	7.02	920	920
26-Apr-08	175.4	13	35	6	24	4,175	2.27	3.0	3.1	29	31	11	7.07	36	36
27-Apr-08	167.4	13	nr	nr	29	4,821	3.08	3.4	3.1	27	31	11	7.08	92	92
28-Apr-08	169.7	11	39	7	32	5,346	3.54	3.9	3.1	40	31	11	7.01	980	980
29-Apr-08	171.1	15	63	7	32	5,527	3.43	4.1	3.2	45	32	11	6.92	230	230
30-Apr-08	170.9	15	51	7	33	5,674	3.18	3.7	3.3	45	32	12	6.81	3,600	3,600
<b>Max:</b>	332														
<b>Min:</b>	161														
<b>Average:</b>	<b>206</b>	<b>19</b>	<b>33</b>	<b>9</b>	<b>26</b>	<b>5,185</b>	<b>2.66</b>	<b>3.3</b>		<b>32</b>		<b>12</b>	<b>7.01</b>		
<b>Geo.Mean:</b>														<b>842</b>	<b>648</b>

**Notes:**

- (1) Effluent ammonia load based upon Raw Sewage flows and Final 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)\*\* Flow, highlighted in bold, in excess of 380 ML/D per clause 26 of Licence 2684RR.
- (6) Bracketed Coliform results not used in the Geometric Mean calculation.
- (7) Raw wastewater flows in excess of 400 ML/D will by-pass the secondary process and flows in excess of 675 ML/D will cause raw sewage to by-pass the plant.
- (8) Total Phosphorus and Total Nitrogen results are corrected based on the recovery of a quality control standard.