

**City of Winnipeg  
Water and Waste Department  
North End Water Pollution Control Centre Monitoring Data  
April, 2007**

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-07	<b>602.1</b>	92	39	18	7	4,215	0.90	2.0	3.4	13	30	8.5	7.16	(>1600)	(>1600)
2-Apr-07	<b>429.8</b>	25	21	7	10	4,298	1.42	1.8	3.3	16	29	14.8	6.93	(350)	(240)
3-Apr-07	298.9	15	19	6	15	4,484	1.77	2.1	3.3	20	29	13.7	7.13	70	70
4-Apr-07	264.5	14	28	8	18	4,761	2.05	2.4	3.2	23	29	9.7	7.07	110	110
5-Apr-07	246.6	15	25	6	19	4,685	2.28	2.9	3.2	25	28	11.1	7.16	na	230
6-Apr-07	215.9	14	25	7	19	4,102	2.14	3.1	3.2	26	28	10.8	6.95	210	210
7-Apr-07	208.6	11	27	6	19	3,963	2.18	2.6	3.1	24	27	9.5	6.85	750	750
8-Apr-07	200.2	9	32	7	19	3,804	2.38	2.9	3.1	25	27	11.5	7.05	430	430
9-Apr-07	211.1	13	38	8	20	4,222	2.49	3.2	3.0	28	27	10.0	6.97	540	540
10-Apr-07	234.8	15	42	8	21	4,931	2.44	3.0	3.0	27	26	13.7	7.01	2,400	2,400
11-Apr-07	235.6	14	25	7	20	4,712	2.26	2.8	2.9	26	26	11.0	6.85	350	350
12-Apr-07	212.6	15	31	9	21	4,465	2.54	3.2	2.9	29	25	na	6.91	120	95
13-Apr-07	211.3	13	24	7	23	4,860	2.80	3.4	2.8	31	25	11.8	6.86	920	920
14-Apr-07	211.7	13	30	8	23	4,869	2.70	2.6	2.8	25	24	13.1	6.88	240	240
15-Apr-07	207.0	14	26	8	22	4,554	2.62	3.2	2.8	29	24	12.6	6.8	2,400	2,400
16-Apr-07	236.7	14	37	9	20	4,734	2.53	3.4	2.8	29	24	15.0	7.09	170	170
17-Apr-07	212.5	14	29	8	23	4,888	2.77	3.8	2.8	31	24	13.5	6.92	540	540
18-Apr-07	199.5	13	27	8	24	4,788	2.54	3.5	2.8	32	24	15.8	6.98	na	na
19-Apr-07	196.7	10	28	8	24	4,721	2.71	3.6	2.8	32	24	16.0	7.03	350	350
20-Apr-07	204.0	12	nr	nr	26	5,304	2.74	3.5	2.8	34	24	13.0	6.94	110	110
21-Apr-07	199.7	10	40	6	26	5,192	2.74	3.4	2.8	34	24	14.6	6.86	49	49
22-Apr-07	188.3	10	30	8	27	5,084	2.76	3.5	2.8	36	25	14.5	7.00	130	130
23-Apr-07	195.1	14	35	9	25	4,878	2.88	3.2	2.8	32	25	16.5	6.94	49	49
24-Apr-07	187.4	10	30	9	27	5,060	2.92	3.3	2.8	33	26	15.7	6.92	1,600	540
25-Apr-07	185.0	12	30	8	27	4,995	2.98	3.1	2.9	31	26	15.5	6.91	9,200	9,200
26-Apr-07	178.0	19	39	11	27	4,806	3.01	3.3	2.9	34	26	17.0	6.99	3,500	3,500
27-Apr-07	170.3	12	31	8	30	5,109	3.05	3.7	2.9	38	27	16.0	6.87	46	46
28-Apr-07	161.3	14	40	14	30	4,839	3.79	4.5	3.0	40	28	16.3	6.99	140	140
29-Apr-07	158.6	15	32	9	31	4,917	3.38	3.9	3.1	38	29	15.1	7.05	16,000	3,500
30-Apr-07	208.0	17	52	12	26	5,408	2.97	3.9	3.2	35	29	16.5	6.99	170	70
<b>Max:</b>	602														
<b>Min:</b>	159														
<b>Average:</b>	<b>229.1</b>	<b>16</b>	<b>31</b>	<b>9</b>	<b>22</b>	<b>4,722</b>	<b>2.56</b>	<b>3.2</b>		<b>29</b>		<b>13.5</b>	<b>6.97</b>		
<b>Geo.Mean:</b>														<b>383</b>	<b>328</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.