

**City of Winnipeg  
Water and Waste Department  
North End Water Pollution Control Centre Monitoring Data  
November, 2005**

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-Nov-05	178.1	6	25	6	26	4,630	3.58	3.9	3.7	37	33	17.5	6.89	43,000	43,000
2-Nov-05	179.7	9	24	7	29	5,210	4.04	4.2	3.7	38	33	18.0	6.90	93,000	43,000
3-Nov-05	178.5	7	28	6	30	5,360	4.09	4.5	3.7	43	34	18.0	6.85	150,000	75,000
4-Nov-05	185.5	10	35	8	32	5,940	4.24	4.5	3.7	46	34	18.0	6.85	380,000	380,000
5-Nov-05	183.5	7	29	6	28	5,140	3.82	4.4	3.7	41	34	17.5	6.94	38,000	38,000
6-Nov-05	175.7	7	24	7	26	4,570	3.70	4.4	3.7	39	34	18.0	6.92	9,300	9,300
7-Nov-05	168.9	9	24	7	27	4,560	4.32	nr	nr	30	34	18.0	6.89	3,800	3,800
8-Nov-05	208.1	23	34	17	24	4,990	3.53	3.6	3.7	32	34	18.0	7.05	9,300	4,300
9-Nov-05	244.0	8	34	8	15	3,660	1.75	1.9	3.6	20	34	14.0	6.78	150,000	150,000
10-Nov-05	190.5	7	20	7	24	4,570	3.18	3.4	3.6	32	34	16.0	7.18	15,000	7,500
11-Nov-05	181.7	6	21	6	28	5,090	4.11	4.3	3.7	37	35	17.0	6.83	4,300	4,300
12-Nov-05	173.8	9	26	7	28	4,870	4.07	4.0	3.7	36	35	16.5	7.10	9,300	9,300
13-Nov-05	175.9	7	21	7	27	4,750	4.14	nr	nr	33	35	17.0	6.95	23,000	23,000
14-Nov-05	166.4	7	23	8	26	4,330	4.03	4.1	3.7	36	35	17.0	6.92	23,000	23,000
15-Nov-05	176.3	12	25	9	27	4,760	3.73	4.3	3.8	38	35	17.0	6.87	230,000	230,000
16-Nov-05	176.3	10	23	8	24	4,230	3.42	3.6	3.8	34	35	17.0	6.89	43,000	43,000
17-Nov-05	173.2	11	28	9	26	4,500	3.68	4.0	3.7	36	35	16.0	6.98	93,000	43,000
18-Nov-05	179.6	12	32	8	28	5,030	3.38	3.4	3.7	35	35	17.0	6.82	43,000	43,000
19-Nov-05	193.2	9	27	8	27	5,220	2.97	3.0	3.7	34	35	16.5	6.99	23,000	23,000
20-Nov-05	228.7	10	31	10	25	5,720	3.12	3.4	3.7	31	34	16.5	7.02	9,300	9,300
21-Nov-05	214.0	7	22	7	20	4,280	2.24	2.4	3.6	27	34	17.0	6.93	9,300	9,300
22-Nov-05	203.3	7	34	7	24	4,880	3.18	3.2	3.6	32	35	16.0	6.99	9,300	9,300
23-Nov-05	214.5	8	25	6	24	5,150	3.13	3.0	3.6	30	34	16.0	6.94	150,000	93,000
24-Nov-05	195.4	8	36	6	25	4,890	3.41	3.3	3.6	31	35	16.0	6.68	15,000	15,000
25-Nov-05	192.7	10	41	6	24	4,630	3.15	3.3	3.6	31	34	16.0	6.94	75,000	75,000
26-Nov-05	188.6	8	38	5	28	5,280	3.41	3.5	3.7	33	34	16.5	7.30	23,000	23,000
27-Nov-05	182.6	8	33	6	28	5,110	3.73	nr	nr	32	34	16.0	7.10	15,000	15,000
28-Nov-05	186.3	8	30	6	26	4,840	3.93	4.4	3.7	39	34	16.0	6.95	43,000	43,000
29-Nov-05	186.5	9	26	6	28	5,220	3.52	3.5	3.7	34	34	16.0	6.89	120,000	120,000
30-Nov-05	182.5	7	33	5	29	5,290	3.29	3.5	3.6	36	34	16.0	6.99	43,000	43,000
<b>Total:</b>	5664														
<b>Max:</b>	244.0														
<b>Min:</b>	166.4														
<b>Average:</b>	<b>188.8</b>	<b>9</b>	<b>28</b>	<b>7</b>	<b>26</b>	<b>4,890</b>	<b>3.53</b>	<b>3.7</b>		<b>34</b>		<b>16.7</b>	<b>6.94</b>		
<b>Geo.Mean:</b>														<b>32,000</b>	<b>28,000</b>

**Notes:**

(1) \* = 30 day rolling average

(2) effluent ammonia load based upon Raw Sewage flows and Final NH3-N concentrations

(3) nr - not recorded; na - not analyzed; ns - no sample

(4)\*\* During normal plant operation any flow greater than 400 ML/ day will by-pass the secondary process