

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
August, 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-Aug-05	229.5	6	30	4	7	1,610	1.72	1.7	2.2	16	18	nr	7.28	9,300	9,300
2-Aug-05	232.7	10	34	11	9	2,090	2.17	2.4	2.2	19	18	22.0	7.19	23,000	23,000
3-Aug-05	362.8	5	27	6	7	2,540	1.63	1.8	2.2	16	18	22.0	7.06	430,000	230,000
4-Aug-05	225.7	5	32	5	10	2,260	2.17	2.2	2.2	21	18	20.0	7.09	38,000	9,300
5-Aug-05	187.6	8	45	6	14	2,630	2.53	2.9	2.2	30	19	21.0	6.68	23,000	23,000
6-Aug-05	165.6	4	37	5	12	1,990	2.59	2.9	2.2	34	19	21.0	6.81	9,300	9,300
7-Aug-05	154.1	6	43	6	12	1,850	2.75	3.0	2.2	34	20	21.0	6.79	9,300	9,300
8-Aug-05	169.3	4	27	5	11	1,860	2.93	3.2	2.3	26	20	21.0	6.82	9,300	4,300
9-Aug-05	180.4	5	28	5	14	2,530	3.05	3.4	2.3	29	20	21.0	6.89	9,300	9,300
10-Aug-05	164.8	7	29	6	17	2,800	3.18	3.5	2.4	30	21	21.0	7.05	430,000	430,000
11-Aug-05	164.7	4	32	6	18	2,970	3.15	3.2	2.4	30	21	21.0	6.90	230,000	230,000
12-Aug-05	159.1	6	42	5	19	3,020	3.31	3.6	2.4	31	22	20.0	6.61	230,000	230,000
13-Aug-05	146.2	8	37	6	20	2,920	3.59	3.9	2.5	33	22	20.0	6.74	93,000	93,000
14-Aug-05	163.9	6	33	6	20	3,280	3.67	4.1	2.5	33	22	20.0	6.81	43,000	43,000
15-Aug-05	155.8	7	29	5	20	3,120	3.74	4.1	2.6	31	23	19.5	6.76	93,000	15,000
16-Aug-05	165.3	7	30	6	23	3,800	4.15	4.2	2.7	34	24	20.0	6.78	4,300	4,300
17-Aug-05	229.4	19	40	14	16	3,670	2.98	3.5	2.8	27	24	20.0	7.23	23,000	9,300
18-Aug-05	158.4	6	22	6	18	2,850	2.97	3.2	2.8	29	24	21.0	6.70	38,000	23,000
19-Aug-05	156.2	6	28	5	21	3,280	3.55	3.8	2.9	32	25	20.0	6.86	23,000	4,300
20-Aug-05	144.6	5	27	5	22	3,180	3.61	3.7	2.9	32	25	20.0	6.62	4,300	2,300
21-Aug-05	137.0	7	29	7	23	3,150	3.69	4.5	3.0	36	26	20.0	6.81	4,300	2,300
22-Aug-05	175.7	7	24	7	20	3,510	3.53	4.3	3.1	32	26	20.0	na	2,300	2,300
23-Aug-05	173.4	8	28	8	19	3,300	3.34	4.0	3.1	29	27	21.0	6.60	4,300	4,300
24-Aug-05	249.9	29	44	16	17	4,250	2.79	3.8	3.2	26	27	21.5	6.67	7,500	3,800
25-Aug-05	222.4	7	22	6	14	3,110	2.02	2.9	3.2	24	27	22.0	6.67	21,000	15,000
26-Aug-05	208.9	8	22	6	19	3,970	2.95	3.1	3.2	27	27	21.0	6.67	23,000	9,300
27-Aug-05	202.7	7	28	6	17	3,450	2.63	2.8	3.2	31	28	21.0	6.74	9,300	9,300
28-Aug-05	179.6	8	28	8	19	3,410	2.92	3.3	3.2	30	28	21.0	6.68	4,300	4,300
29-Aug-05	194.5	5	31	8	19	3,700	3.65	3.8	3.3	30	28	20.0	6.79	23,000	23,000
30-Aug-05	197.8	8	29	6	19	3,760	3.42	3.9	3.4	30	29	19.5	6.82	75,000	75,000
31-Aug-05	213.5	7	29	8	17	3,630	3.15	3.4	3.4	26	29	20.5	6.68	43,000	4,300
Total:	5872														
Max:	362.8														
Min:	137.0														
Average:	189.4	8	31	7	17	3,020	3.02	3.4		29		20.6	6.83		
Geo.Mean:														23,000	15,000

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) Final Effluent flow data unavailable, data in **bold** text adjusted using secondary flow data

(5) July 1 to 18 - Secondary treatment process shut-down due to high river levels, process fully restored by July 22

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