

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
October, 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-Oct-05	172.3	6	43	8	28	4,820	3.89	4.2	3.7	34	29	19.0	6.80	2,300	2,300
2-Oct-05	173.2	6	26	8	21	3,640	3.69	4.1	3.7	34	30	20.0	6.80	930	930
3-Oct-05	186.3	6	27	6	25	4,660	3.62	4.0	3.7	35	30	19.0	6.71	930	430
4-Oct-05	137.3	6	38	9	24	3,300	3.76	4.1	3.8	37	30	18.5	6.74	4,300	4,300
5-Oct-05	391.8	102	77	30	14	5,490	2.05	3.8	3.8	27	30	18.0	6.79	7,500	7,500
6-Oct-05	312.4	15	31	9	13	4,060	1.53	2.6	3.8	21	30	18.0	6.68	43,000	43,000
7-Oct-05	191.7	12	34	9	17	3,260	1.99	2.8	3.8	25	30	15.0	6.71	7,500	7,500
8-Oct-05	146.7	<4	20	5	19	2,790	2.49	3.2	3.7	29	30	17.0	6.90	2,300	430
9-Oct-05	133.7	9	28	6	20	2,670	2.81	3.6	3.7	28	30	18.0	6.99	4,300	380
10-Oct-05	145.4	7	28	7	19	2,760	3.11	3.4	3.7	30	30	17.0	6.88	4,300	4,300
11-Oct-05	145.4	5	26	6	22	3,200	3.25	3.7	3.7	33	30	17.5	6.83	43,000	43,000
12-Oct-05	162.6	6	29	6	27	4,390	3.76	5.0	3.7	39	30	18.0	6.88	9,300	9,300
13-Oct-05	181.4	6	25	7	29	5,260	3.68	nr	nr	36	30	18.0	6.71	93,000	15,000
14-Oct-05	175.6	6	26	7	30	5,270	3.81	3.7	3.7	40	30	18.5	6.82	23,000	23,000
15-Oct-05	178.9	6	30	7	29	5,190	3.66	4.2	3.7	41	31	18.0	6.83	43,000	15,000
16-Oct-05	175.5	9	27	8	29	5,090	3.45	3.4	3.7	36	31	18.0	6.98	93,000	93,000
17-Oct-05	183.7	6	28	7	28	5,140	3.55	3.9	3.7	36	32	18.0	6.78	230,000	93,000
18-Oct-05	284.3	39	47	15	21	5,970	2.85	3.5	3.7	27	32	18.0	6.64	93,000	43,000
19-Oct-05	158.1	9	56	7	17	2,690	1.98	2.1	3.7	26	32	16.0	6.86	38,000	38,000
20-Oct-05	149.4	12	39	9	26	3,880	3.05	3.3	3.7	35	32	18.0	6.92	23,000	23,000
21-Oct-05	193.6	20	48	10	22	4,260	2.56	2.8	3.7	29	32	18.0	6.74	230,000	93,000
22-Oct-05	180.6	ns	ns	ns	ns	nr	ns	ns	ns	ns	ns	15.0	6.90	43,000	43,000
23-Oct-05	138.8	ns	ns	ns	ns	nr	ns	ns	ns	ns	ns	18.0	6.86	2,300	2,300
24-Oct-05	146.4	7	33	7	25	3,660	3.60	3.9	3.7	34	32	18.0	6.80	21,000	21,000
25-Oct-05	146.7	ns	ns	ns	ns	nr	ns	ns	ns	ns	ns	18.0	6.86	23,000	9,300
26-Oct-05	144.6	8	26	7	33	4,770	4.02	3.9	3.7	nr	nr	18.0	6.83	93,000	23,000
27-Oct-05	184.0	7	29	7	36	6,620	4.27	4.0	3.7	41	32	18.0	6.92	23,000	9,300
28-Oct-05	169.1	9	39	10	32	5,410	3.94	3.7	3.7	37	33	18.0	6.81	93,000	15,000
29-Oct-05	183.6	9	31	8	30	5,510	3.83	3.7	3.7	35	33	19.0	6.82	43,000	43,000
30-Oct-05	170.4	14	27	10	29	4,940	3.96	3.8	3.7	34	33	18.5	6.84	75,000	38,000
31-Oct-05	226.7	7	39	10	20	4,530	3.06	3.2	3.7	28	33	16.5	6.96	430,000	430,000
Total:	5670														
Max:	391.8														
Min:	133.7														
Average:	182.9	13	34	9	24	4,400	3.26	3.6		33		17.8	6.83		
Geo.Mean:														21,000	13,000

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