

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
June, 2006**

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)*	(oC)	(units)	MPN/100 mL	
1-Jun-06	194.4	6	11	5	29	5,638	3.65	3.7	2.8	38	33	17.0	7.04	210,000	150,000
2-Jun-06	186.6	5	nr	nr	29	5,411	4.02	3.9	2.9	30	33	17.7	6.95	38,000	38,000
3-Jun-06	171.1	5	nr	nr	28	4,791	3.91	3.6	2.9	33	33	16.0	6.87	93,000	93,000
4-Jun-06	174.9	6	<10	3	29	5,072	4.20	4.0	2.9	34	33	17.7	6.84	230,000	29,000
5-Jun-06	231.8	12	15	7	22	5,100	3.70	3.9	2.9	30	33	19.5	6.90	43,000	15,000
6-Jun-06	259.2	5	21	4	15	3,888	1.49	1.6	2.9	21	33	18.0	6.58	230,000	93,000
7-Jun-06	213.4	ns	ns	ns	ns	ns	ns	ns	2.9	ns	33	18.3	6.81	43,000	2,300
8-Jun-06	191.0	ns	ns	ns	ns	ns	ns	ns	2.9	ns	33	18.0	7.26	43,000	7,500
9-Jun-06	178.1	6	16	5	29	5,165	4.23	3.8	3.0	34	33	18.0	7.40	1,500,000	210,000
10-Jun-06	172.7	6	12	<2	23	3,972	3.73	3.9	3.1	31	33	17.3	6.83	23,000	9,300
11-Jun-06	168.6	9	14	5	21	3,541	3.57	3.6	3.1	39	33	16.5	6.81	23,000	9,300
12-Jun-06	205.8	14	23	7	19	3,910	3.38	3.3	3.1	25	33	18.0	6.72	43,000	4,300
13-Jun-06	210.4	11	20	6	18	3,787	2.81	3.0	3.1	26	33	18.0	6.65	75,000	43,000
14-Jun-06	188.3	10	22	6	27	5,084	3.85	3.8	3.2	36	33	18.0	6.68	2,300	2,300
15-Jun-06	190.3	15	20	7	31	5,899	4.24	3.9	3.2	38	33	18.7	6.80	43,000	15,000
16-Jun-06	213.7	14	25	6	30	6,411	3.86	3.9	3.3	38	34	18.0	6.66	43,000	43,000
17-Jun-06	200.4	18	34	9	38	7,615	4.96	5.2	3.4	48	34	19.3	6.68	150,000	93,000
18-Jun-06	220.6	10	23	7	25	5,515	3.43	3.6	3.4	34	34	19.0	6.79	93,000	43,000
19-Jun-06	197.9	10	26	5	29	5,739	4.12	4.1	3.4	39	34	19.8	6.78	9,300	9,300
20-Jun-06	205.3	10	29	5	32	6,570	4.12	4.3	3.5	45	34	19.0	6.63	9,300	4,300
21-Jun-06	197.2	10	26	5	31	6,113	6.23	6.3	3.6	44	35	19.0	6.76	43,000	7,500
22-Jun-06	192.0	7	25	4	27	5,184	4.79	4.7	3.7	38	35	19.3	6.91	9,300	9,300
23-Jun-06	187.8	7	20	3	26	4,883	4.16	4.1	3.7	36	35	19.3	7.01	75,000	43,000
24-Jun-06	219.9	13	25	6	23	5,058	3.69	3.7	3.7	32	35	20.5	7.08	93,000	93,000
25-Jun-06	181.5	8	21	5	18	3,267	3.06	3.4	3.7	36	35	19.0	6.90	93,000	93,000
26-Jun-06	193.3	9	28	5	22	4,253	3.75	4.0	3.8	39	35	18.9	6.78	93,000	93,000
27-Jun-06	186.4	6	25	4	22	4,101	3.77	4.0	3.8	35	35	19.4	6.70	43,000	23,000
28-Jun-06	186.3	9	26	4	24	4,471	3.78	3.9	3.9	37	36	19.0	6.64	93,000	43,000
29-Jun-06	186.3	7	23	5	25	4,658	4.11	3.8	3.9	36	36	19.0	6.69	93,000	12,000
30-Jun-06	186.4	5	27	4	24	4,474	4.03	4.0	3.9	36	36	20.0	6.63	75,000	23,000
Total:	5892														
Max:	259														
Min:	169														
Average:	196.4	9	18	5	26	4,985	3.88	3.9		35		18.5	6.83		
Geo.Mean:														55,980	23,780

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 2684R.
- (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.