

**City of Winnipeg
Water and Waste Department
West End Water Pollution Control Centre Monitoring Data**

July 2011

Date	Raw Sewage	Final Effluent 24 Hour Composite									Final Effluent Grab Sample			
	Daily Flow	TSS	cBOD5	Ammonia		Ortho Phosphorus	Total Phosphorus		Total Nitrogen		Temp.	pH	Fecal Coliform	E.Coli
	ML	(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-Jul-11	33.0	8	4	0.39	13	1.23	1.4	1.7	2	4	22	8.88	4	4
2-Jul-11	30.8	10	4	0.12	4	1.23	1.4	1.7	2	4	22	8.88	<3	<3
3-Jul-11	31.5	9	3	0.21	7	1.22	1.4	1.7	2	4	23	8.89	23	23
4-Jul-11	34.0	11	<2	0.04	1	1.19	1.5	1.7	2	4	23	8.88	4	4
5-Jul-11	31.9	11	3	0.04	1	1.25	1.4	1.7	2	4	23	8.95	9	4
6-Jul-11	31.7	7	4	<0.02	<1	1.18	1.4	1.7	2	4	23	9.02	15	7
7-Jul-11	32.0	9	3	<0.02	<1	1.26	1.3	1.6	1	4	23	9.08	43	43
8-Jul-11	31.5	11	3	0.24	8	1.14	1.3	1.6	4	4	24	9.10	23	23
9-Jul-11	31.7	12	4	0.21	7	1.09	1.3	1.6	2	3	22	9.16	93	93
10-Jul-11	31.1	14	6	0.22	7	1.05	1.3	1.6	1	3	23	9.17	9	9
11-Jul-11	31.0	15	3	<0.02	<1	0.99	1.3	1.6	1	3	23	9.18	15	15
12-Jul-11	28.5	17	3	0.13	4	0.89	1.2	1.6	1	3	22	9.01	23	23
13-Jul-11	28.8	15	4	<0.02	<1	0.96	1.2	1.5	1	3	21	9.32	14	14
14-Jul-11	28.8	15	nr	<0.02	<1	0.96	1.1	1.5	1	3	22	9.28	7	7
15-Jul-11	29.5	14	5	<0.02	<1	0.91	1.1	1.5	1	3	22	9.28	9	9
16-Jul-11	28.9	10	5	<0.02	<1	0.66	1.0	1.5	1	3	23	9.37	4	4
17-Jul-11	29.0	10	5	<0.02	<1	0.84	1.0	1.4	1	2	25	9.35	9	4
18-Jul-11	28.0	9	4	0.20	6	0.73	0.9	1.4	1	2	25	9.37	16	9
19-Jul-11	29.5	12	4	0.02	1	0.70	0.9	1.4	1	2	25	9.37	<3	<3
20-Jul-11	29.6	12	5	0.03	1	0.69	0.9	1.3	1	2	27	9.39	15	15
21-Jul-11	29.2	15	5	0.07	2	0.73	0.9	1.3	1	2	24	9.40	140	140
22-Jul-11	28.4	18	5	0.40	11	0.70	0.8	1.3	1	2	23	9.43	23	9
23-Jul-11	27.8	19	6	<0.02	<1	0.57	0.8	1.3	1	2	20	9.45	38	23
24-Jul-11	28.6	14	6	0.05	1	0.54	0.7	1.2	1	2	20	9.48	21	21
25-Jul-11	28.7	11	6	<0.02	<1	0.52	0.7	1.2	1	2	21	9.53	43	43
26-Jul-11	28.1	10	4	<0.02	<1	0.50	0.7	1.2	1	2	21	9.60	20	11
27-Jul-11	28.1	8	4	0.06	2	0.47	0.7	1.1	1	1	21	9.57	9	9
28-Jul-11	28.1	29	7	0.11	3	0.49	0.8	1.1	1	1	22	9.55	230	230
29-Jul-11	28.1	22	5	0.07	2	0.42	0.7	1.1	1	1	22	9.60	43	43
30-Jul-11	26.7	20	5	0.06	2	0.41	0.7	1.1	1	1	22	9.70	93	21
31-Jul-11	26.0	16	5	0.09	2	0.35	0.5	1.0	2	1	22	9.65	23	23
Max:	34.0													
Min:	26.0													
Average:	29.6	13	4	0.1	4	0.83	1.0		1		23	9.29		
Geo.Mean:													17	14

Notes:

(1) * = 30 day rolling average

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

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

(4) Final Effluent flow data unavailable

(5) Where < values are reported 50% of the MDL is used for calculated results

(6) Licence No. 2669 E RR

(7) Total Nitrogen results are calculated from TKN and nitrate values.