

**City of Winnipeg  
Water and Waste Department  
West End Water Pollution Control Centre Monitoring Data  
August 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-Aug-11	27.9	19	5	0.06	2	0.33	0.5	1.0	1	1	22	9.74	23	9
2-Aug-11	28.8	22	5	0.04	1	0.29	0.6	1.0	1	1	22	9.75	23	23
3-Aug-11	27.8	21	6	0.14	4	0.26	0.6	1.0	3	1	23	9.85	9	9
4-Aug-11	27.5	24	7	0.05	1	0.25	0.6	0.9	2	1	23	9.80	4	4
5-Aug-11	27.5	23	6	0.04	1	0.23	0.6	0.9	2	1	23	9.83	21	21
6-Aug-11	26.9	20	6	<0.02	<1	0.25	0.6	0.9	1	1	23	9.83	43	15
7-Aug-11	27.3	18	6	0.03	1	0.26	0.6	0.9	1	1	22	9.80	9	9
8-Aug-11	29.7	18	5	<0.02	<1	0.30	0.7	0.8	2	1	22	9.72	29	7
9-Aug-11	29.2	15	4	0.07	2	0.35	0.7	0.8	1	1	20	9.67	150	23
10-Aug-11	27.7	12	3	0.10	3	0.39	0.7	0.8	1	1	20	9.67	43	43
11-Aug-11	27.5	12	3	0.14	4	0.41	0.7	0.8	2	1	20	9.63	15	7
12-Aug-11	27.4	10	3	0.26	7	0.45	0.7	0.8	1	1	22	9.62	93	93
13-Aug-11	26.7	11	3	0.21	6	0.47	0.7	0.8	2	1	21	9.58	93	93
14-Aug-11	27.0	11	nr	0.10	3	0.44	0.6	0.7	1	1	21	9.60	43	43
15-Aug-11	27.6	11	3	0.14	4	0.43	0.6	0.7	1	1	22	9.58	43	43
16-Aug-11	27.1	13	3	0.17	5	0.48	0.7	0.7	1	1	22	9.59	150	75
17-Aug-11	26.8	11	3	0.13	3	0.48	0.7	0.7	1	1	20	9.63	93	93
18-Aug-11	27.6	14	4	0.19	5	0.47	0.7	0.7	1	1	20	9.60	43	43
19-Aug-11	32.0	13	4	<0.02	<1	0.43	0.7	0.7	1	1	20	9.65	93	93
20-Aug-11	25.8	14	4	<0.02	<1	0.44	0.6	0.7	1	1	19	9.65	43	43
21-Aug-11	25.5	16	4	<0.02	<1	0.40	0.6	0.7	1	1	19	9.69	15	15
22-Aug-11	26.1	25	4	<0.02	<1	0.38	0.6	0.7	1	1	19	9.64	9	9
23-Aug-11	26.2	14	4	0.09	2	0.40	0.6	0.7	1	1	21	9.67	75	nr
24-Aug-11	26.1	15	5	0.03	1	0.38	0.6	0.7	1	1	20	9.71	43	43
25-Aug-11	25.7	15	4	<0.02	<1	0.37	0.6	0.7	1	1	20	9.77	43	43
26-Aug-11	26.1	18	5	0.09	2	0.40	0.6	0.7	1	1	21	9.70	43	43
27-Aug-11	25.8	ns	ns	ns	<1	ns	ns	0.7	ns	1	20	9.66	4	4
28-Aug-11	25.8	13	nr	0.06	2	0.39	0.6	0.7	1	1	20	9.73	73	73
29-Aug-11	26.2	15	4	<0.02	<1	0.39	0.6	0.7	1	1	21	9.70	93	93
30-Aug-11	25.6	15	5	0.07	2	0.37	0.6	0.7	1	1	20	9.72	93	93
31-Aug-11	25.7	16	3	0.20	5	0.40	0.6	0.7	1	1	20	9.65	15,000	430
<b>Max:</b>	32.0													
<b>Min:</b>	25.5													
<b>Average:</b>	<b>27.1</b>	<b>16</b>	<b>4</b>	<b>0.08</b>	<b>2</b>	<b>0.38</b>	<b>0.6</b>		<b>1</b>		<b>21</b>	<b>9.69</b>		
<b>Geo.Mean:</b>													<b>43</b>	<b>30</b>

**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.