

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

October 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-Oct-11	22.2	26	7	0.03	1	1.03	1.4	0.7	2	1	12	9.19	43	43
2-Oct-11	23.2	19	6	0.10	2	1.11	1.4	0.7	2	1	12	9.17	43	43
3-Oct-11	22.2	19	6	0.18	4	1.13	1.4	0.7	1	1	13	9.17	75	75
4-Oct-11	21.7	16	6	0.24	5	1.16	1.4	0.8	2	1	13	9.06	23	23
5-Oct-11	21.8	18	4	0.33	7	1.28	1.5	0.8	2	1	14	9.00	150	150
6-Oct-11	22.0	17	4	0.39	9	1.35	1.6	0.8	2	1	11	8.88	230	230
7-Oct-11	21.5	36	3	0.47	10	1.46	1.7	0.9	2	1	12	8.78	150	150
8-Oct-11	22.0	17	3	0.60	13	1.43	1.7	0.9	2	1	15	8.64	640	640
9-Oct-11	21.4	12	2	0.70	15	1.45	1.7	0.9	2	1	13	8.51	430	430
10-Oct-11	23.9	14	2	0.85	20	1.44	1.7	1.0	2	1	13	8.41	230	230
11-Oct-11	21.9	14	<2	0.89	20	1.47	1.7	1.1	2	1	13	8.35	430	430
12-Oct-11	24.0	14	<2	0.95	23	1.51	1.7	1.1	2	1	13	8.27	75	75
13-Oct-11	34.9	19	nr	0.93	32	1.49	1.6	1.2	2	1	13	8.09	230	230
14-Oct-11	23.6	18	<2	1.00	24	1.49	1.6	1.2	3	1	11	8.31	2,300	2,300
15-Oct-11	23.5	15	3	0.93	22	1.49	1.6	1.3	3	2	10	8.26	430	430
16-Oct-11	23.8	21	2	0.93	22	1.40	1.5	1.3	2	2	9	8.26	930	930
17-Oct-11	22.6	20	3	0.76	17	1.33	1.5	1.3	2	2	7	8.32	750	750
18-Oct-11	22.1	16	3	0.72	16	1.26	1.5	1.3	2	2	6	8.20	1,500	1,500
19-Oct-11	21.7	15	3	0.86	19	1.25	1.5	1.4	2	2	5	8.34	430	430
20-Oct-11	21.8	14	3	0.65	14	1.14	1.4	1.4	3	2	4	8.23	430	430
21-Oct-11	21.9	16	nr	0.43	9	1.13	1.3	1.4	3	2	5	8.35	430	430
22-Oct-11	23.5	18	5	0.29	7	1.05	1.3	1.4	2	2	5	8.38	750	750
23-Oct-11	24.5	19	5	0.10	2	0.97	1.3	1.4	3	2	6	8.50	230	230
24-Oct-11	22.1	25	6	<0.02	<1	0.89	1.2	1.4	2	2	6	8.75	230	230
25-Oct-11	21.7	26	7	0.06	1	0.82	1.2	1.4	2	2	6	8.95	430	430
26-Oct-11	21.7	26	9	0.26	6	0.78	1.1	1.4	2	2	6	9.16	9	9
27-Oct-11	21.6	26	11	0.28	6	0.75	1.1	1.4	2	2	5	9.13	43	43
28-Oct-11	21.7	34	10	0.07	2	0.72	1.1	1.4	2	2	5	9.29	9	9
29-Oct-11	22.5	24	9	0.03	1	0.69	1.0	1.4	2	2	4	9.40	4	4
30-Oct-11	22.9	25	10	<0.02	<1	0.69	1.1	1.4	2	2	4	9.41	15	15
31-Oct-11	21.5	27	10	<0.02	<1	0.68	1.1	1.4	2	2	4	9.29	9	9
<b>Max:</b>	34.9													
<b>Min:</b>	21.4													
<b>Average:</b>	<b>22.8</b>	<b>20</b>	<b>5</b>	<b>0.45</b>	<b>11</b>	<b>1.16</b>	<b>1.4</b>		<b>2</b>		<b>9</b>	<b>8.71</b>		
<b>Geo.Mean:</b>													<b>148</b>	<b>148</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.