

**City of Winnipeg
Water and Waste Department
West End Water Pollution Control Centre Monitoring Data
September 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-Sep-11	31.7	20	3	0.26	8	0.43	0.6	0.7	1	1	20	9.60	430	430
2-Sep-11	26.3	17	nr	0.24	6	0.45	0.7	0.6	1	1	20	9.51	380	380
3-Sep-11	36.8	20	nr	0.17	6	0.45	nr	0.6	1	1	19	9.53	1,500	1,500
4-Sep-11	26.3	16	4	0.13	3	0.46	nr	0.6	1	1	18	9.51	930	930
5-Sep-11	27.0	19	10	0.13	4	0.47	0.7	0.6	1	1	17	9.50	430	430
6-Sep-11	26.8	15	5	0.07	2	0.46	0.7	0.6	2	1	18	9.52	430	430
7-Sep-11	26.0	11	4	0.06	2	0.50	0.7	0.6	1	1	19	9.56	93	93
8-Sep-11	26.1	17	4	0.15	4	0.51	0.8	0.7	1	1	20	9.51	93	93
9-Sep-11	25.3	ns	ns	ns	ns	ns	ns	0.7	ns	1	20	9.55	75	75
10-Sep-11	25.3	ns	ns	ns	ns	ns	ns	0.6	ns	1	21	9.53	430	430
11-Sep-11	26.0	ns	ns	ns	ns	ns	ns	0.6	ns	1	21	9.46	2,300	2,300
12-Sep-11	24.9	ns	ns	ns	ns	ns	ns	0.6	ns	1	19	9.42	150	150
13-Sep-11	23.8	ns	ns	ns	ns	ns	ns	0.6	ns	1	18	9.41	1,500	1,500
14-Sep-11	23.6	ns	ns	ns	ns	ns	ns	0.6	ns	1	15	9.44	430	430
15-Sep-11	23.1	ns	ns	ns	ns	ns	ns	0.6	ns	1	13	9.31	230	230
16-Sep-11	21.6	17	4	0.20	4	0.63	0.9	0.7	2	1	12	9.31	430	430
17-Sep-11	22.1	16	4	0.11	2	0.58	0.8	0.7	1	1	11	9.34	430	430
18-Sep-11	23.0	18	4	0.11	3	0.57	0.9	0.7	1	1	12	9.31	640	640
19-Sep-11	22.0	16	5	0.06	1	0.56	0.9	0.7	1	1	13	9.41	430	430
20-Sep-11	37.3	20	4	<0.02	<1	0.58	0.9	0.7	1	1	13	9.44	930	930
21-Sep-11	38.6	16	4	0.04	2	0.62	0.8	0.7	1	1	12	9.32	4,300	4,300
22-Sep-11	21.5	18	5	<0.02	<1	0.60	0.9	0.7	1	1	11	9.32	230	230
23-Sep-11	23.8	16	5	0.04	1	0.62	0.9	0.7	1	1	11	9.29	230	230
24-Sep-11	23.3	14	3	0.05	1	0.65	0.9	0.8	1	1	11	9.30	230	230
25-Sep-11	23.6	17	6	0.09	2	0.62	1.0	0.8	1	1	12	9.32	430	430
26-Sep-11	22.9	17	5	0.06	1	0.67	1.0	0.8	1	1	13	9.30	43	43
27-Sep-11	22.2	18	5	<0.02	<1	0.76	1.1	0.8	2	1	13	9.28	230	230
28-Sep-11	22.0	14	5	0.02	<1	0.89	1.2	0.8	2	1	15	9.25	150	150
29-Sep-11	21.9	18	6	0.09	2	0.88	1.1	0.9	2	1	15	9.24	380	380
30-Sep-11	21.6	22	6	0.23	5	0.97	1.2	0.9	2	1	13	9.22	23	23
Max:	38.6													
Min:	21.5													
Average:	25.5	17	5	0.10	3	0.61	0.9		1		15	9.40		
Geo.Mean:													339	339

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.