

**City of Winnipeg
Water and Waste Department
West End Water Pollution Control Centre Monitoring Data
December 2012**

Licence 2669 E RR	Raw Sewage	Final Effluent 24 Hour Composite						Final Effluent Grab Sample					
		Date	Daily Flow	TSS	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
			ML	(mg/L)	(mg/L)	(kg NH3-N/day)	(mg/L-P)	(mg/L-P)*	(mg/L-N)*	(°C)	(units)	MPN/100 mL	
1-Dec-12	21.1	7	nr	3.0	0.07	0.2	3	1	8.51	4	4		
2-Dec-12	21.6	10	6	5.0	0.02	0.2	3	1	8.52	<3	<3		
3-Dec-12	21.7	8	6	3.9	<0.01	0.2	3	1	8.52	<3	<3		
4-Dec-12	20.7	9	6	3.5	<0.01	0.2	3	1	8.45	4	4		
5-Dec-12	20.3	8	6	6.9	0.02	0.2	3	1	8.39	9	9		
6-Dec-12	23.2	8	6	7.4	0.15	0.2	3	1	8.37	<3	<3		
7-Dec-12	20.9	8	nr	7.3	0.05	0.2	3	1	8.40	<3	<3		
8-Dec-12	21.3	8	5	7.7	0.02	0.2	3	1	8.26	4	4		
9-Dec-12	21.9	5	5	9.4	0.03	0.2	3	2	8.22	4	4		
10-Dec-12	20.7	7	7	12.2	0.09	0.2	3	2	8.15	4	4		
11-Dec-12	20.1	6	4	9.4	<0.01	0.2	3	2	8.06	4	4		
12-Dec-12	20.0	6	3	11.8	0.01	0.2	3	2	8.00	4	4		
13-Dec-12	20.0	7	4	13.0	<0.01	0.2	3	2	8.07	4	4		
14-Dec-12	20.0	6	4	15.8	0.03	0.2	4	1	7.86	<3	<3		
15-Dec-12	20.9	4	4	18.2	0.03	0.2	4	1	7.66	3	<3		
16-Dec-12	21.5	6	<3	20.6	0.05	0.2	4	3	7.68	4	4		
17-Dec-12	20.3	6	<3	20.7	0.05	0.2	4	2	7.62	<3	<3		
18-Dec-12	20.3	5	nr	20.9	0.05	0.2	4	1	7.61	<3	<3		
19-Dec-12	20.3	6	<3	22.5	0.06	0.2	4	1	7.59	4	4		
20-Dec-12	20.4	4	<3	24.0	0.06	0.2	4	1	7.53	4	4		
21-Dec-12	20.6	5	<3	28.0	0.08	0.2	4	2	7.56	4	4		
22-Dec-12	21.3	4	3	28.1	0.08	0.2	4	1	7.51	4	4		
23-Dec-12	21.3	<4	<3	29.0	0.08	0.2	4	1	7.44	<3	<3		
24-Dec-12	21.4	4	<3	29.7	0.09	0.2	4	2	7.44	9	9		
25-Dec-12	19.3	4	<3	30.2	0.10	0.2	4	1	7.40	23	4		
26-Dec-12	19.6	4	<3	30.4	0.10	0.2	4	1	7.40	9	4		
27-Dec-12	20.1	4	<3	32.0	0.10	0.2	4	1	7.39	<3	<3		
28-Dec-12	19.9	<4	<3	34.8	0.11	0.2	5	1	7.37	23	9		
29-Dec-12	20.0	5	<3	42.4	0.11	0.2	5	1	7.32	4	<3		
30-Dec-12	20.0	4	<3	33.1	0.11	0.2	5	1	7.37	93	15		
31-Dec-12	20.5	4	<3	41.2	0.13	0.2	5	1	7.30	23	23		
Max:	23.2												
Min:	19.3												
Average:	20.69	6	3	19.4	0.06			1	7.84				
Total Flow:	641.3												
Geo.Mean:										4	3		

Notes:

(1) Effluent ammonia load based upon Raw Sewage flows and Final Cell 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) Total Nitrogen results are calculated from TKN and nitrate values