

**City of Winnipeg
Water and Waste Department
West End Water Pollution Control Centre Monitoring Data
September 2013**

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-Sep-13	21.9	8	<3	0.2	0.99	0.8	1	21	9.19	93	93		
2-Sep-13	23.7	6	<3	0.2	1.13	0.8	1	20	9.12	2,300	2,300		
3-Sep-13	28.2	9	<3	5.4	1.23	0.8	1	19	9.11	150	150		
4-Sep-13	22.2	8	<3	0.2	1.25	0.9	1	19	9.19	150	150		
5-Sep-13	27.3	8	<3	0.3	1.29	0.9	1	19	9.04	150	150		
6-Sep-13	23.6	8	<3	0.9	1.21	0.9	1	20	9.03	150	150		
7-Sep-13	23.5	10	<3	0.2	1.23	0.9	1	20	9.08	750	750		
8-Sep-13	23.9	10	<3	0.7	1.30	1.0	1	20	9.04	230	230		
9-Sep-13	23.7	9	<3	0.2	1.37	1.0	1	19	8.96	1,200	1,200		
10-Sep-13	23.0	7	<3	0.2	1.42	1.0	1	19	8.89	930	930		
11-Sep-13	23.1	10	<3	0.2	1.40	1.1	1	20	8.98	1,500	280		
12-Sep-13	22.9	12	<3	1.8	1.36	1.1	1	19	8.84	930	430		
13-Sep-13	23.5	9	nr	0.2	1.41	1.1	1	19	8.84	430	430		
14-Sep-13	24.2	11	<3	0.2	1.44	1.2	1	19	8.85	750	750		
15-Sep-13	23.7	10	3	0.2	1.47	1.2	1	17	8.80	150	9		
16-Sep-13	23.2	11	<3	0.2	1.46	1.2	1	16	8.76	210	150		
17-Sep-13	22.8	12	<3	0.9	1.42	1.2	1	16	8.71	230	230		
18-Sep-13	22.7	10	<3	0.2	1.27	1.3	1	16	8.63	380	380		
19-Sep-13	22.6	15	<3	0.5	1.25	1.3	1	17	8.64	430	430		
20-Sep-13	21.1	17	<3	3.0	1.17	1.3	1	19	8.57	430	430		
21-Sep-13	21.5	20	3	1.9	1.15	1.3	1	14	8.66	430	430		
22-Sep-13	21.5	17	<3	0.6	1.11	1.3	1	13	8.60	230	230		
23-Sep-13	25.7	20	<3	5.4	1.43	1.3	1	14	8.53	930	930		
24-Sep-13	21.9	17	nr	1.7	1.02	1.3	1	16	8.48	750	750		
25-Sep-13	24.2	16	3	0.7	0.97	1.3	1	17	8.54	nr	nr		
26-Sep-13	19.4	20	nr	4.1	0.91	1.3	1	16	8.47	430	430		
27-Sep-13	23.6	21	3	7.8	0.89	1.3	1	15	8.28	640	640		
28-Sep-13	35.4	21	3	4.6	0.87	1.4	1	15	8.28	930	930		
29-Sep-13	26.4	7	nr	4.0	0.87	1.4	1	13	8.12	46,000	3,600		
30-Sep-13	22.8	20	4	3.9	0.86	1.4	1	14	8.08	4,300	4,300		
Max:	35.4												
Min:	19.4												
Average:	23.78	13	<3	1.7	1.21			17	8.74				
Total Flow:	713.3												
Geo.Mean:										539	407		

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