

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

Licence 2669 E RR	Raw Sewage	Final Effluent 24 Hour Composite						Final Effluent Grab Sample			
		TSS	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
1-Dec-13	20.8	20	16	162.6	0.07	0.4	9	0	8.38	<3	<3
2-Dec-13	20.3	8	14	159.3	0.06	0.4	9	1	8.36	<3	<3
3-Dec-13	19.8	11	nr	154.7	0.05	0.4	9	1	8.25	<3	<3
4-Dec-13	19.8	19	12	156.7	0.07	0.4	10	1	8.39	<3	<3
5-Dec-13	20.0	19	12	157.4	0.07	0.4	10	0	8.30	7	4
6-Dec-13	20.0	17	11	162.8	0.08	0.4	10	1	8.27	4	<3
7-Dec-13	20.9	ns	ns	ns	ns	0.4	10	0	8.21	6	3
8-Dec-13	21.6	ns	ns	ns	ns	0.4	10	0	8.57	<3	<3
9-Dec-13	20.5	39	17	154.1	0.03	0.4	10	0	8.23	<3	<3
10-Dec-13	20.1	17	nr	170.0	0.11	0.4	10	1	8.23	<3	<3
11-Dec-13	20.2	16	nr	175.9	0.13	0.4	10	0	8.10	4	<3
12-Dec-13	20.0	11	14	162.3	0.12	0.4	10	1	8.01	<3	<3
13-Dec-13	20.0	22	13	173.0	0.12	0.4	11	0	8.08	4	4
14-Dec-13	20.7	21	12	175.8	0.12	0.5	11	0	7.86	9	9
15-Dec-13	20.4	13	11	174.1	0.14	0.5	11	0	7.95	<3	<3
16-Dec-13	20.9	12	11	164.9	0.13	0.5	11	1	7.84	4	4
17-Dec-13	19.8	15	10	169.1	0.14	0.4	11	1	7.95	9	4
18-Dec-13	19.8	16	10	177.5	0.21	0.4	11	0	7.84	4	4
19-Dec-13	19.7	15	11	148.1	0.13	0.4	12	0	7.87	<3	<3
20-Dec-13	19.9	15	10	154.4	0.14	0.4	12	0	7.78	<3	<3
21-Dec-13	20.4	14	9	157.6	0.17	0.4	12	0	7.62	4	4
22-Dec-13	20.5	14	9	151.3	0.14	0.4	12	0	7.55	4	4
23-Dec-13	19.8	11	9	148.7	0.16	0.4	12	0	7.57	9	9
24-Dec-13	20.8	11	9	152.2	0.16	0.4	12	0	7.70	15	4
25-Dec-13	18.6	13	9	134.0	0.19	0.4	12	0	7.56	9	9
26-Dec-13	18.9	12	8	137.0	0.18	0.4	12	0	7.39	4	<3
27-Dec-13	19.4	12	8	137.4	0.20	0.4	12	2	7.63	9	9
28-Dec-13	19.2	7	8	127.1	0.19	0.4	12	0	7.54	15	9
29-Dec-13	19.3	10	7	130.9	0.21	0.4	11	0	7.43	15	4
30-Dec-13	19.6	9	7	129.0	0.22	0.4	11	1	7.49	7	4
31-Dec-13	19.7	13	7	133.3	0.37	0.4	11	1	7.48	15	15
<b>Max:</b>	21.6										
<b>Min:</b>	18.6										
<b>Average:</b>	<b>20.04</b>	<b>15</b>	<b>11</b>	<b>155</b>	<b>0.14</b>			<b>0</b>	<b>7.92</b>		
<b>Total Flow:</b>	<b>621.3</b>										
<b>Geo.Mean:</b>										<b>4</b>	<b>3</b>

**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