

**City of Winnipeg  
Water and Waste Department  
North End Water Pollution Control Centre Monitoring Data  
August 2014**

Licence 2684 RRR	Raw Sewage	Final Effluent 24 Hour Composite							Final Effluent Grab Sample			
		TSS	BOD5	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
1-Aug-14	163.1	9	13	7	2,969	2.66	2.4	26	20	6.80	230	15
2-Aug-14	168.2	10	16	7	2,371	2.53	2.5	26	19	6.85	93	9
3-Aug-14	143.2	9	12	5	1,690	2.59	2.5	26	19	6.71	430	430
4-Aug-14	142.1	8	15	5	1,889	2.87	2.6	26	19	6.78	93	93
5-Aug-14	160.3	12	12	6	2,789	3.12	2.6	27	19	6.68	230	93
6-Aug-14	158.8	13	20	7	2,763	3.45	2.7	27	19	6.73	23	9
7-Aug-14	159.9	13	10	6	2,766	3.48	2.7	27	19	6.72	23	23
8-Aug-14	271.6	34	27	18	3,042	2.29	2.7	27	20	6.82	23	9
9-Aug-14	182.8	21	13	9	2,266	1.84	2.7	27	20	6.68	930	150
10-Aug-14	243.6	11	<5	5	2,280	1.41	2.7	27	20	6.78	24,000	4,300
11-Aug-14	155.3	12	9	5	1,879	2.37	2.7	27	19	6.60	43	43
12-Aug-14	159.1	12	17	8	2,816	3.17	2.8	27	20	6.69	230	93
13-Aug-14	152.5	17	12	9	2,760	3.61	2.9	28	20	6.67	230	21
14-Aug-14	159.7	16	12	7	2,891	3.69	2.9	28	20	6.75	93	93
15-Aug-14	161.6	17	16	8	2,940	4.06	3.0	28	20	6.70	93	23
16-Aug-14	148.1	20	13	7	2,621	3.92	3.0	28	20	6.84	930	430
17-Aug-14	139.9	60	52	nr	2,308	3.55	3.1	28	20	6.80	4,300	930
18-Aug-14	335.6	21	20	15	1,806	1.48	3.1	28	20	6.49	430	430
19-Aug-14	196.6	18	13	9	3,440	2.30	3.1	28	20	6.57	150	21
20-Aug-14	165.9	16	13	9	3,799	3.10	3.1	29	20	6.73	930	210
21-Aug-14	264.4	47	33	22	4,626	2.94	3.2	29	20	6.81	93	93
22-Aug-14	342.0	19	12	8	2,606	1.64	3.1	28	20	6.68	230	230
23-Aug-14	231.1	45	30	15	2,212	2.11	3.1	28	20	6.67	430	23
24-Aug-14	<b>518.9</b>	29	19	11	1,531	1.13	3.1	27	19	6.67	(>110,000)	(110,000)
25-Aug-14	306.5	14	nr	nr	1,462	1.34	3.1	27	19	6.75	93	93
26-Aug-14	234.4	10	10	6	1,615	1.92	3.1	27	19	6.69	38	38
27-Aug-14	205.9	10	9	6	2,079	2.79	3.1	26	19	6.75	23	23
28-Aug-14	194.8	10	12	6	2,298	3.19	3.1	26	19	6.89	43	23
29-Aug-14	308.0	26	23	19	2,236	2.63	3.2	25	20	6.84	38	14
30-Aug-14	207.8	10	nr	nr	711	2.04	3.2	25	19	6.67	150	43
31-Aug-14	<b>380.4</b>	40	23	18	1,069	1.53	3.1	24	19	6.66	(230)	(93)
<b>Max:</b>	518.9											
<b>Min:</b>	139.9											
<b>Average:</b>	<b>218.1</b>	<b>20</b>	<b>17</b>	<b>9</b>	<b>2,404</b>	<b>2.60</b>			<b>19</b>	<b>6.72</b>		
<b>Total Flow:</b>	<b>6761.8</b>											
<b>Geo.Mean:</b>											<b>170</b>	<b>65</b>

**Notes:**

- (1) Effluent ammonia load based upon Raw Sewage flows and Final 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)\*\* Flow, highlighted in bold, in excess of 380 ML/D per clause 26 of Licence 2684RRR
- (6) Bracketed Coliform results not used in the Geometric Mean calculation
- (7) Raw wastewater flows in excess of 400 ML/D will by-pass the secondary process and flows in excess of 675 ML/D will cause raw sewage to by-pass the plant
- (8) Total Nitrogen results are calculated from TKN and nitrate values