

**City of Winnipeg  
Water and Waste Department  
North End Water Pollution Control Centre Monitoring Data  
April 2013**

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-Apr-13	169.2	14	51	11	3,469	1.03	1.7	36	12	6.86	230	93
2-Apr-13	174.9	18	63	12	4,338	1.30	1.7	36	14	6.90	120	27
3-Apr-13	163.7	15	54	10	3,667	0.90	1.7	36	13	6.85	430	75
4-Apr-13	195.5	22	13	13	4,671	1.12	1.7	35	13	6.91	230	93
5-Apr-13	154.6	ns	ns	ns	ns	ns	1.6	34	11	6.87	93	93
6-Apr-13	187.2	24	nr	nr	5,335	1.21	1.7	34	13	6.88	150	150
7-Apr-13	189.9	25	63	9	4,292	0.81	1.7	34	13	6.89	93	43
8-Apr-13	163.1	16	36	11	3,474	0.86	1.7	34	11	6.85	21	4
9-Apr-13	168.4	24	44	12	4,110	1.22	1.7	33	12	7.00	23	23
10-Apr-13	207.3	29	43	13	5,349	1.17	1.7	33	12	6.97	43	15
11-Apr-13	214.2	27	32	12	4,563	0.81	1.7	33	12	7.20	23	23
12-Apr-13	207.6	29	32	10	4,215	0.82	1.7	32	11	6.90	43	4
13-Apr-13	238.5	32	27	13	4,221	0.72	1.7	32	11	6.96	43	9
14-Apr-13	252.2	30	26	14	3,683	0.75	1.7	31	11	6.90	43	23
15-Apr-13	286.6	29	26	13	4,041	0.70	1.6	31	10	7.04	93	93
16-Apr-13	213.3	18	23	11	3,626	0.80	1.6	30	10	6.98	93	21
17-Apr-13	205.9	25	22	11	4,653	1.13	1.6	30	10	6.87	43	43
18-Apr-13	249.6	27	25	11	4,793	1.32	1.6	29	11	6.92	230	75
19-Apr-13	232.2	23	20	10	4,156	1.35	1.6	29	10	6.89	150	23
20-Apr-13	210.2	21	20	11	4,184	1.51	1.7	28	10	6.93	380	73
21-Apr-13	249.6	27	21	11	4,417	1.30	1.7	28	11	6.96	23	23
22-Apr-13	215.9	19	18	11	3,498	1.16	1.7	27	10	6.84	150	93
23-Apr-13	224.4	26	22	11	4,240	1.66	1.7	27	11	6.86	38	9
24-Apr-13	219.6	22	20	10	4,239	1.59	1.7	27	11	6.92	43	23
25-Apr-13	224.3	21	19	10	4,262	1.66	1.8	27	11	6.92	93	43
26-Apr-13	262.0	21	16	11	4,612	1.57	1.8	26	11	6.86	29	11
27-Apr-13	284.5	15	15	10	4,125	1.22	1.8	26	11	6.96	43	43
28-Apr-13	277.0	19	16	10	3,906	1.15	1.8	26	10	6.96	9	4
29-Apr-13	310.2	34	22	14	4,064	1.25	1.8	26	10	6.93	38	23
30-Apr-13	<b>517.4</b>	112	33	23	3,808	0.63	1.8	25	9	7.03	(>110,000)	(>110,000)
<b>Max:</b>	517.4											
<b>Min:</b>	154.6											
<b>Average:</b>	<b>229.0</b>	<b>26</b>	<b>29</b>	<b>12</b>	<b>4,207</b>	<b>1.13</b>			<b>11</b>	<b>6.93</b>		
<b>Total Flow:</b>	<b>6869.2</b>											
<b>Geo.Mean:</b>											<b>68</b>	<b>29</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