

**City of Winnipeg  
Water and Waste Department  
North End Water Pollution Control Centre Monitoring Data  
May 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-May-13	<b>433.0</b>	30	15	11	3,875	0.74	1.8	25	9	7.12	(110000)	(110000)
2-May-13	305.4	20	12	8	3,879	1.16	1.9	24	9	7.01	93	43
3-May-13	264.5	10	11	5	3,782	1.33	1.9	24	9	7.17	230	93
4-May-13	235.0	12	11	6	3,548	1.37	1.8	23	10	6.99	43	43
5-May-13	229.9	9	10	6	3,471	1.20	1.9	24	11	7.04	23	23
6-May-13	235.4	11	12	6	3,484	1.51	1.9	23	11	6.96	23	9
7-May-13	213.3	8	11	5	3,669	1.66	1.9	23	11	6.94	9	9
8-May-13	211.9	7	10	5	4,259	1.76	1.9	23	11	6.96	20	20
9-May-13	201.9	6	10	5	4,522	1.92	1.9	23	13	6.84	43	43
10-May-13	217.9	7	14	7	5,056	1.90	1.9	23	13	6.92	93	93
11-May-13	183.9	8	12	6	4,247	1.85	1.9	23	12	6.97	93	93
12-May-13	176.5	9	11	5	4,130	2.01	2.0	23	13	6.93	38	14
13-May-13	179.0	8	10	5	4,135	2.11	2.0	23	13	6.96	38	23
14-May-13	178.7	8	12	6	4,414	2.29	2.0	23	13	6.98	43	9
15-May-13	174.8	10	12	7	4,264	2.13	2.1	24	13	6.60	43	15
16-May-13	171.3	13	12	7	4,538	2.44	2.1	24	14	6.94	23	9
17-May-13	191.4	22	15	11	5,148	1.64	2.2	24	14	6.93	93	15
18-May-13	240.7	85	45	33	5,367	0.13	2.1	24	14	6.87	1430	720
19-May-13	283.6	55	31	26	4,311	0.79	2.1	24	13	6.92	930	930
20-May-13	<b>386.8</b>	33	24	21	3,825	0.78	2.1	24	13	6.98	(43)	(43)
21-May-13	319.0	14	nr	nr	4,116	0.92	2.0	24	12	6.89	230	21
22-May-13	203.2	8	10	7	4,735	1.79	2.0	24	13	7.24	230	29
23-May-13	188.7	8	11	8	4,549	2.07	2.1	24	14	7.02	93	21
24-May-13	182.8	11	12	8	4,715	2.29	2.1	24	14	7.02	43	9
25-May-13	170.9	9	13	9	4,444	2.33	2.1	25	14	7.03	23	4
26-May-13	169.1	13	15	9	4,583	2.51	2.1	25	14	7.02	75	75
27-May-13	172.3	9	16	8	4,411	2.70	2.1	26	14	6.98	93	43
28-May-13	240.3	36	34	24	5,624	2.70	2.2	26	15	6.94	43	23
29-May-13	181.5	9	12	8	4,120	2.25	2.2	26	15	6.89	93	43
30-May-13	376.1	90	46	33	6,282	1.71	2.3	27	15	6.93	93	93
31-May-13	<b>613.8</b>	86	32	24	3,358	0.56	2.3	27	15	7.02	(>110000)	(>110000)
<b>Max:</b>	613.8											
<b>Min:</b>	169.1											
<b>Average:</b>	<b>243.0</b>	<b>21</b>	<b>17</b>	<b>11</b>	<b>4,350</b>	<b>1.70</b>			<b>13</b>	<b>6.97</b>		
<b>Total Flow:</b>	<b>7532.7</b>											
<b>Geo.Mean:</b>											<b>69</b>	<b>32</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