

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
March 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-Mar-13	136.9	17	38	8	3,928	1.45	1.5	39	14	6.96	43	23
2-Mar-13	133.2	15	32	10	3,678	1.45	1.6	40	14	6.86	430	230
3-Mar-13	121.1	21	43	13	2,978	1.39	1.6	40	14	6.83	4,300	930
4-Mar-13	143.6	18	42	11	3,419	1.29	1.6	39	14	6.69	93	43
5-Mar-13	135.5	17	46	11	3,237	1.28	1.7	39	14	7.04	93	15
6-Mar-13	136.8	17	57	12	3,460	1.57	1.7	39	14	6.83	430	430
7-Mar-13	130.0	13	43	11	3,393	1.15	1.7	39	14	6.80	930	930
8-Mar-13	141.8	18	23	8	4,565	1.28	1.8	39	14	6.73	150	43
9-Mar-13	138.7	13	nr	nr	4,550	1.04	1.8	39	14	6.89	430	430
10-Mar-13	140.4	13	22	8	4,705	1.22	1.8	39	14	6.91	430	430
11-Mar-13	140.1	10	21	9	4,443	0.90	1.8	39	14	6.79	93	21
12-Mar-13	140.7	7	17	7	4,515	0.92	1.8	39	14	6.94	43	23
13-Mar-13	135.9	10	19	7	4,078	1.05	1.9	39	14	6.72	23	9
14-Mar-13	156.1	12	21	8	4,853	1.42	1.9	39	14	6.81	93	43
15-Mar-13	140.4	16	nr	nr	3,988	1.01	1.9	39	14	6.87	230	230
16-Mar-13	131.0	10	24	6	3,733	1.14	1.9	39	14	6.83	430	430
17-Mar-13	128.9	12	23	7	3,791	1.27	1.9	39	13	6.93	2,300	930
18-Mar-13	132.8	17	30	8	3,786	1.32	1.9	39	14	6.98	930	930
19-Mar-13	131.7	9	41	11	3,555	1.33	1.9	39	14	6.86	930	930
20-Mar-13	136.3	16	37	8	3,788	1.20	1.9	39	14	6.88	2,300	2,300
21-Mar-13	133.6	9	39	11	3,781	1.28	1.9	39	14	6.87	93	15
22-Mar-13	141.3	12	nr	nr	3,885	1.42	1.9	39	14	6.87	75	38
23-Mar-13	145.5	15	38	7	3,796	0.94	1.9	39	13	6.89	230	93
24-Mar-13	139.7	9	49	7	3,396	1.12	1.9	39	13	6.82	230	230
25-Mar-13	159.7	14	39	10	3,817	1.01	1.9	39	14	6.81	430	150
26-Mar-13	184.5	11	nr	nr	3,984	1.07	1.9	38	14	6.89	9	9
27-Mar-13	180.1	9	36	9	3,944	0.93	1.9	38	14	6.88	93	93
28-Mar-13	187.8	16	37	11	4,169	1.16	1.8	38	14	6.83	43	15
29-Mar-13	202.3	23	38	12	3,803	0.86	1.8	38	14	6.94	230	93
30-Mar-13	238.6	21	34	12	3,507	0.55	1.8	37	12	6.92	4,300	4,300
31-Mar-13	169.8	10	32	8	2,513	0.61	1.8	36	10	6.90	23	23
Max:	238.6											
Min:	121.1											
Average:	148.9	14	34	9	3,840	1.15			14	6.86		
Total Flow:	4614.7											
Geo.Mean:											219	124

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