

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
January 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-Jan-13	123.5	4	30	5	3,422	1.42	2.9	35	15	6.96	93	93
2-Jan-13	131.4	9	31	4	3,588	1.27	2.9	35	15	6.91	93	21
3-Jan-13	137.2	9	32	5	3,841	1.23	2.8	35	15	6.86	23	9
4-Jan-13	135.5	9	29	5	3,806	1.32	2.7	35	15	6.82	43	43
5-Jan-13	131.3	11	33	5	3,388	1.32	2.7	35	15	6.93	43	23
6-Jan-13	131.3	12	24	6	3,531	1.04	2.6	35	15	6.93	93	93
7-Jan-13	141.3	13	36	6	3,900	1.15	2.5	35	15	6.78	38	38
8-Jan-13	138.8	11	33	6	4,288	1.32	2.4	35	15	6.89	43	43
9-Jan-13	141.0	10	37	6	4,246	1.32	2.4	36	15	6.77	43	15
10-Jan-13	140.4	10	33	6	4,100	1.40	2.3	36	15	6.75	4	4
11-Jan-13	139.0	13	34	6	4,517	1.63	2.3	36	15	6.85	9	9
12-Jan-13	140.9	11	34	7	3,972	1.51	2.3	36	15	6.99	93	15
13-Jan-13	138.1	14	34	7	3,923	1.21	2.3	37	14	6.92	23	23
14-Jan-13	143.6	13	39	9	4,481	1.03	2.2	37	15	nr	64	38
15-Jan-13	137.7	12	36	6	4,463	1.36	2.2	37	15	6.93	230	15
16-Jan-13	140.1	14	31	7	3,993	1.51	2.2	37	15	6.89	11	4
17-Jan-13	139.8	11	32	7	4,054	1.44	2.2	37	15	6.87	15	7
18-Jan-13	138.5	12	26	7	3,890	1.62	2.2	37	15	6.83	23	9
19-Jan-13	135.7	9	33	7	3,706	1.69	2.1	37	15	6.90	230	230
20-Jan-13	132.4	10	26	7	3,735	1.38	2.1	38	15	7.02	150	75
21-Jan-13	135.2	10	28	6	3,503	1.37	2.1	38	15	6.76	<3	<3
22-Jan-13	143.3	13	nr	nr	3,913	1.23	2.1	38	15	7.07	1500	750
23-Jan-13	138.6	13	30	6	3,867	1.08	2.0	38	15	6.95	210	210
24-Jan-13	136.1	10	34	6	4,491	1.24	1.9	38	14	6.95	23	23
25-Jan-13	138.1	9	30	6	4,322	1.20	1.8	38	15	6.85	93	93
26-Jan-13	142.6	11	26	7	3,950	1.27	1.8	38	15	6.94	1200	1200
27-Jan-13	134.9	13	25	7	3,520	1.00	1.7	38	14	6.92	640	640
28-Jan-13	140.7	10	42	6	3,505	0.84	1.7	38	14	6.80	2300	2300
29-Jan-13	143.5	10	41	7	3,300	0.89	1.7	38	15	6.80	93	93
30-Jan-13	142.5	11	38	5	3,519	0.96	1.7	38	14	6.91	1500	1500
31-Jan-13	133.3	11	45	6	3,533	0.87	1.7	38	14	7.14	430	430
Max:	143.6											
Min:	123.5											
Average:	137.6	11	33	6	3,880	1.26			15	6.90		
Total Flow:	4266.4											
Geo.Mean:											78	51

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