

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
September 2012**

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-Sep-12	138.8	10	19	9	3,858	3.52	3.4	32	22	6.88	23	9
2-Sep-12	135.4	7	17	9	3,587	3.66	3.4	32	21	6.94	210	9
3-Sep-12	141.3	11	28	8	3,349	3.87	3.5	33	20	6.92	43	15
4-Sep-12	154.3	11	21	8	3,473	3.80	3.6	33	21	6.80	24,000	9,300
5-Sep-12	153.2	11	22	9	3,830	3.74	3.6	33	21	6.79	230	230
6-Sep-12	160.2	13	35	9	3,988	2.83	3.6	33	21	6.79	93	15
7-Sep-12	147.9	11	26	8	4,008	2.21	3.5	33	21	6.77	43	43
8-Sep-12	142.4	12	24	11	3,901	3.55	3.5	33	21	6.88	150	21
9-Sep-12	144.0	15	29	12	4,334	4.17	3.5	33	21	6.88	930	930
10-Sep-12	144.6	13	30	11	4,047	4.00	3.5	33	21	6.78	930	930
11-Sep-12	150.5	17	27	13	4,107	3.94	3.5	33	21	6.81	43	15
12-Sep-12	146.3	19	29	12	3,950	3.24	3.6	34	21	6.81	4,300	2,300
13-Sep-12	143.6	12	18	9	4,179	3.30	3.5	34	21	6.79	930	750
14-Sep-12	143.0	10	18	7	4,375	3.95	3.6	34	21	6.83	930	930
15-Sep-12	139.4	9	21	7	4,251	4.24	3.7	35	21	6.89	430	150
16-Sep-12	133.5	11	24	9	3,978	4.21	3.7	35	20	6.84	930	75
17-Sep-12	135.1	12	nr	nr	3,768	4.27	3.8	35	20	6.78	230	21
18-Sep-12	142.8	11	nr	nr	4,356	4.42	3.8	35	20	6.77	230	43
19-Sep-12	150.2	10	nr	nr	6,098	5.02	3.9	36	20	6.88	290	290
20-Sep-12	145.0	11	nr	nr	4,944	4.62	3.9	36	20	6.97	380	230
21-Sep-12	150.7	11	nr	nr	5,653	5.14	4.0	36	20	6.89	230	93
22-Sep-12	138.7	8	nr	nr	4,604	4.96	4.0	37	20	6.90	1500	1500
23-Sep-12	143.0	10	15	5	4,347	4.67	4.1	37	20	6.89	930	930
24-Sep-12	147.9	10	17	8	4,556	4.36	4.2	37	20	6.84	430	93
25-Sep-12	152.5	8	14	5	5,337	5.06	4.3	37	20	6.74	43	15
26-Sep-12	138.9	8	18	5	4,820	5.05	4.3	37	20	6.87	23	15
27-Sep-12	148.1	8	15	5	5,109	4.84	4.4	38	20	6.83	93	9
28-Sep-12	146.8	13	25	8	4,873	4.56	4.4	38	20	6.91	23	<3
29-Sep-12	148.4	8	17	6	4,839	4.73	4.5	38	20	6.92	43	9
30-Sep-12	141.2	8	22	6	4,392	4.14	4.5	39	20	6.93	230	29
Max:	160.2											
Min:	133.5											
Average:	144.9	11	22	8	4,364	4.14			20	6.85		
Total Flow:	4347.4											
Geo.Mean:											247	84

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