

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
October 2014**

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-Oct-14	186.9	12	14	9	3,683	3.49	3.5	26	18	6.81	750	270
2-Oct-14	152.9	14	15	8	3,821	3.94	3.5	27	19	6.85	93	43
3-Oct-14	182.4	14	14	8	4,413	3.84	3.6	27	19	6.83	430	93
4-Oct-14	146.6	13	13	7	3,270	3.96	3.6	28	18	6.88	23	4
5-Oct-14	143.0	14	19	8	3,376	4.25	3.7	29	18	6.90	2,300	2,300
6-Oct-14	146.2	11	16	9	3,231	3.96	3.8	29	18	6.98	43	43
7-Oct-14	148.4	14	18	10	3,251	4.19	3.9	30	18	6.86	9	4
8-Oct-14	149.4	17	16	9	3,556	4.21	3.9	30	18	6.88	43	43
9-Oct-14	145.0	16	18	10	3,914	4.48	4.0	30	18	6.74	93	93
10-Oct-14	145.7	16	17	8	3,702	4.42	4.0	31	18	6.89	38	4
11-Oct-14	141.1	15	18	10	3,400	4.62	4.1	31	18	6.86	930	150
12-Oct-14	137.8	16	19	10	3,210	4.37	4.1	31	18	6.84	93	93
13-Oct-14	137.2	14	16	11	3,430	4.50	4.1	32	18	6.80	23	23
14-Oct-14	140.8	19	15	11	3,983	4.43	4.2	32	18	6.76	93	15
15-Oct-14	141.3	21	16	13	4,393	4.82	4.2	32	18	6.90	23	23
16-Oct-14	140.3	23	nr	nr	4,393	4.91	4.3	33	18	6.83	93	93
17-Oct-14	137.4	22	17	12	3,999	4.80	4.4	33	18	6.88	75	7
18-Oct-14	133.1	23	23	15	3,981	5.02	4.4	33	18	7.03	430	230
19-Oct-14	132.4	22	22	15	3,905	4.91	4.5	34	18	6.87	4,300	750
20-Oct-14	137.3	32	27	17	4,476	4.73	4.6	34	18	6.84	43	9
21-Oct-14	138.3	35	30	19	4,676	5.33	4.7	35	19	6.91	43	23
22-Oct-14	162.9	48	35	28	5,489	5.35	4.9	36	19	6.93	2,300	930
23-Oct-14	140.4	41	27	25	4,337	4.15	4.9	36	18	6.84	24,000	24,000
24-Oct-14	137.8	23	16	16	4,699	3.91	5.0	36	19	6.94	1,500	930
25-Oct-14	132.5	31	16	12	4,810	4.66	5.0	37	19	7.02	4,300	930
26-Oct-14	128.9	34	30	15	4,963	4.94	5.0	37	19	6.85	9,300	2,100
27-Oct-14	135.3	36	19	14	4,967	4.74	5.1	38	18	6.75	93	43
28-Oct-14	134.2	30	24	16	4,723	4.92	5.2	38	18	6.85	230	43
29-Oct-14	136.6	30	22	17	5,244	4.87	5.3	39	18	6.73	430	430
30-Oct-14	134.9	31	20	16	5,154	4.65	5.3	40	18	6.95	930	430
31-Oct-14	134.7	36	22	17	4,741	4.73	5.4	40	18	6.85	430	230
Max:	186.9											
Min:	128.9											
Average:	143.3	23	20	13	4,167	4.52			18	6.87		
Total Flow:	4441.7											
Geo.Mean:											245	103

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