

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
June 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-Jun-14	173.3	12	nr	nr	3,881	2.85	2.8	27	15	6.94	200	93
2-Jun-14	223.2	18	32	15	4,620	2.88	2.8	28	15	6.87	75	75
3-Jun-14	177.0	12	28	12	3,557	2.71	2.9	28	15	6.79	110,000	46,000
4-Jun-14	185.5	34	36	21	4,711	3.02	2.9	28	15	6.99	380	150
5-Jun-14	272.2	11	22	11	4,655	2.04	2.9	28	15	6.83	430	230
6-Jun-14	181.7	11	18	11	3,961	2.93	2.9	28	15	6.99	430	150
7-Jun-14	168.7	14	29	9	4,082	2.79	2.9	28	15	6.96	430	230
8-Jun-14	187.1	15	28	9	4,602	3.02	2.9	28	15	7.04	93	43
9-Jun-14	205.2	9	19	9	4,145	2.64	2.9	28	15	6.87	120	120
10-Jun-14	173.6	6	11	7	4,322	3.30	2.9	28	15	6.95	93	75
11-Jun-14	173.5	7	10	7	4,371	3.50	3.0	28	16	6.93	150	150
12-Jun-14	167.8	8	10	7	4,396	3.76	3.0	29	16	6.91	93	93
13-Jun-14	162.0	10	11	7	4,260	3.03	3.0	29	17	7.00	75	43
14-Jun-14	347.3	107	47	27	4,203	1.21	3.0	28	16	7.02	230	230
15-Jun-14	749.0	ns	ns	ns	ns	ns	3.0	27	13	7.02	(>110,000)	(>110,000)
16-Jun-14	657.4	70	30	23	3,320	0.64	2.9	27	14	7.26	(>110,000)	(>110,000)
17-Jun-14	382.4	19	10	8	3,660	1.42	2.9	27	14	7.18	(230)	(230)
18-Jun-14	312.0	13	8	6	4,180	1.78	2.9	26	15	7.21	93	23
19-Jun-14	368.0	56	22	12	3,791	1.51	2.8	26	15	7.04	23	9
20-Jun-14	584.8	29	nr	nr	3,965	0.92	2.8	26	16	7.20	(>110,000)	(>110,000)
21-Jun-14	392.8	30	15	12	3,598	1.16	2.7	26	16	7.13	(1,500)	(1,500)
22-Jun-14	402.8	13	10	6	3,846	1.27	2.7	25	16	7.15	(230)	(230)
23-Jun-14	361.9	24	21	14	4,090	1.33	2.7	25	16	6.98	(380)	(93)
24-Jun-14	329.4	12	11	7	4,084	1.34	2.7	25	17	7.07	430	430
25-Jun-14	285.8	9	11	6	4,030	1.67	2.7	25	16	7.04	230	43
26-Jun-14	262.8	8	10	5	3,784	1.96	2.7	25	16	7.10	230	230
27-Jun-14	323.2	52	22	16	3,749	1.63	2.6	24	17	7.09	230	90
28-Jun-14	532.4	82	nr	nr	2,784	0.83	2.6	23	18	6.85	(4,300)	(1,500)
29-Jun-14	626.1	102	nr	nr	2,367	0.61	2.5	23	18	7.09	(21,000)	(15,000)
30-Jun-14	655.2	40	nr	nr	2,857	0.69	2.4	22	16	7.24	(>110,000)	(11,000)
Max:	749.0											
Min:	162.0											
Average:	334.1	29	20	11	3,927	2.02			16	7.02		
Total Flow:	10023.9										228	129
Geo.Mean:												

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