

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

August 2015

Licence # 2684 RRR	File # 1071.10	Final Effluent 24 Hour Composite							Final Effluent Grab Sample					
		Date	Raw Sewage Daily Flow ML**	TSS	BOD5	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
				(mg/L)	(mg/L)	(mg/L)	(kg NH3-N/day)	(mg/L-P)	(mg/L-P)*	(mg/L-N)*	(°C)	(units)	MPN/100 mL	
1-Aug-15	152.7	13	18	5	2,763	4.45	3.4	27	20	6.72	74	36		
2-Aug-15	139.0	14	15	6	1,668	3.63	3.4	27	19	6.83	230	230		
3-Aug-15	137.2	12	16	5	1,770	3.87	3.5	27	19	6.75	92	36		
4-Aug-15	148.7	13	17	NR	2,142	4.03	3.5	28	19	6.60	11,000	4,600		
5-Aug-15	272.6	57	52	28	3,216	1.11	3.6	28	19	6.66	36	36		
6-Aug-15	485.3	23	NR	11	1,941	1.01	3.5	27	18	6.66	(110,000)	(110,000)		
7-Aug-15	322.3	20	18	10	1,756	1.41	3.5	27	19	6.77	430	430		
8-Aug-15	218.9	11	7	4	972	1.78	3.4	26	19	6.74	430	430		
9-Aug-15	179.0	9	6	5	1,362	2.74	3.4	26	19	6.88	92	92		
10-Aug-15	176.1	8	9	5	1,569	2.96	3.4	26	19	6.71	92	92		
11-Aug-15	169.9	10	10	6	1,936	3.40	3.4	26	19	6.68	92	36		
12-Aug-15	254.7	33	40	21	3,209	2.69	3.4	26	20	6.73	11,000	4,600		
13-Aug-15	182.8	11	10	6	1,356	2.09	3.3	26	20	6.57	92	92		
14-Aug-15	164.7	15	8	5	2,092	1.80	3.3	26	20	6.65	92	92		
15-Aug-15	175.7	15	9	7	2,513	3.32	3.3	26	20	6.76	92	92		
16-Aug-15	145.0	10	10	5	1,464	3.26	3.3	26	20	6.75	230	92		
17-Aug-15	147.6	10	9	6	1,875	3.52	3.3	25	20	6.58	30	23		
18-Aug-15	155.5	10	11	7	2,364	3.80	3.3	25	20	6.72	150	74		
19-Aug-15	151.6	25	24	10	2,516	3.48	3.3	25	20	6.77	230	230		
20-Aug-15	149.9	15	11	8	2,144	3.76	3.3	25	20	6.69	92	92		
21-Aug-15	152.8	33	21	16	2,795	3.65	3.3	25	19	6.72	740	740		
22-Aug-15	466.5	51	NR	NR	2,192	0.97	3.2	24	20	6.70	(1,500)	(1,500)		
23-Aug-15	604.3	32	NR	NR	1,783	0.59	3.1	24	18	6.97	(>110,000)	(>110,000)		
24-Aug-15	310.0	11	NR	NR	1,901	1.16	3.1	24	18	7.18	150	150		
25-Aug-15	225.0	11	NR	NR	1,829	1.74	3.0	23	19	6.90	430	93		
26-Aug-15	201.5	13	17	7	2,035	2.02	3.0	23	19	6.91	4,300	930		
27-Aug-15	185.8	11	12	7	2,026	2.42	3.0	23	19	6.84	300	240		
28-Aug-15	203.8	15	13	9	2,833	3.13	3.0	24	20	6.73	46,000	46,000		
29-Aug-15	165.5	15	10	8	2,217	2.73	3.0	24	20	6.84	430	430		
30-Aug-15	157.7	13	10	7	1,719	2.97	3.0	23	20	6.87	430	430		
31-Aug-15	206.3	16	19	11	2,208	2.58	3.0	23	20	6.60	93	93		
Max:	604.3													
Min:	137.2													
Average:	219.6	18	15	9	2,070	2.65			19	6.76				
Total Flow:	6808.2													
Geo.Mean:											289	206		

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