

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
April 2015**

Licence # 2684 RRR	File # 1071.10	Final Effluent 24 Hour Composite							Final Effluent Grab Sample					
		Date	Raw Sewage Daily Flow	TSS	BOD5	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
			ML**	(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-Apr-15	160.4	15	20	15	4,187	3.23	2.6	32	12	6.85	43	43		
2-Apr-15	172.7	10	nr	nr	4,507	3.60	2.7	32	12	6.89	380	230		
3-Apr-15	137.0	11	nr	nr	3,439	3.37	2.7	31	12	6.95	1,500	1,500		
4-Apr-15	132.1	19	18	12	3,487	3.84	2.7	31	12	6.92	2,300	2,300		
5-Apr-15	137.4	20	19	15	3,765	4.12	2.8	31	12	6.95	2,300	2,300		
6-Apr-15	142.0	15	22	13	4,075	3.63	2.9	31	13	6.99	2,300	2,300		
7-Apr-15	137.1	10	nr	nr	4,139	4.11	2.9	31	13	6.82	150	75		
8-Apr-15	134.1	14	20	10	3,903	3.90	3.0	31	13	6.79	93	93		
9-Apr-15	140.3	12	22	10	4,124	4.21	3.1	31	13	6.84	93	93		
10-Apr-15	138.9	22	19	10	3,959	3.91	3.2	31	14	6.80	23	4		
11-Apr-15	135.8	21	18	11	3,883	4.30	3.3	31	14	6.92	93	43		
12-Apr-15	141.7	20	nr	12	4,011	4.10	3.4	32	14	6.90	4,300	4,300		
13-Apr-15	147.3	18	19	14	4,037	3.52	3.5	32	13	6.96	43	43		
14-Apr-15	141.1	21	19	10	3,923	3.89	3.6	33	13	6.90	43	43		
15-Apr-15	142.9	18	21	11	4,173	4.01	3.7	33	14	6.94	<3	<3		
16-Apr-15	141.9	17	21	9	4,186	3.96	3.8	33	14	6.89	750	750		
17-Apr-15	144.7	12	nr	nr	3,878	3.73	3.8	33	14	7.00	4,300	2,300		
18-Apr-15	137.9	19	7	9	3,929	4.38	3.9	33	14	7.01	4,300	1,500		
19-Apr-15	309.7	47	38	23	5,575	2.85	3.9	33	14	6.75	93	43		
20-Apr-15	198.5	12	15	6	3,255	2.30	3.8	32	11	7.08	23	9		
21-Apr-15	164.4	13	12	7	4,423	3.68	3.8	32	12	7.07	23	23		
22-Apr-15	157.4	7	15	7	4,407	3.84	3.9	32	13	6.94	23	23		
23-Apr-15	155.2	6	18	7	4,920	4.07	3.9	32	13	7.00	23	23		
24-Apr-15	154.2	10	16	7	4,501	4.30	4.0	33	13	6.99	21	21		
25-Apr-15	146.2	15	18	7	4,399	4.48	4.1	33	14	7.01	43	43		
26-Apr-15	143.4	4	19	9	4,187	4.50	4.1	34	14	6.97	150	93		
27-Apr-15	153.5	12	18	7	4,482	4.26	4.2	34	14	6.93	9	9		
28-Apr-15	157.9	13	18	6	4,295	4.28	4.3	34	14	6.96	230	230		
29-Apr-15	147.8	17	24	7	4,227	4.50	4.3	34	14	6.90	23	23		
30-Apr-15	168.5	36	22	13	4,229	4.35	4.4	34	14	6.90	93	93		
Max:	309.7													
Min:	132.1													
Average:	154.1	16	19	10	4,150	3.91			13	6.93				
Total Flow:	4621.8													
Geo.Mean:											129	100		

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