

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

Licence # 2684 RRR	File # 1071.10	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-Jul-15	154.7	10	17	5	3,790	2.85	2.9	26	18	6.88	23	23
2-Jul-15	156.6	10	13	4	3,695	2.63	2.9	26	18	6.88	9	9
3-Jul-15	159.9	15	11	8	3,567	3.19	2.9	26	18	6.90	380	36
4-Jul-15	215.6	46	35	19	3,600	2.35	2.9	26	18	6.96	36	36
5-Jul-15	314.2	10	17	6	2,900	1.38	2.8	25	19	6.87	930	230
6-Jul-15	206.6	12	16	5	3,161	2.07	2.8	25	18	6.97	230	230
7-Jul-15	188.5	8	14	13	3,298	2.38	2.8	26	18	6.94	36	36
8-Jul-15	202.8	14	19	6	3,346	2.50	2.8	26	18	6.89	230	92
9-Jul-15	172.8	9	14	4	3,351	2.87	2.9	26	18	6.95	36	36
10-Jul-15	168.6	15	16	6	3,204	3.08	2.9	26	18	6.85	230	92
11-Jul-15	200.5	26	26	12	3,710	2.30	2.9	25	19	6.88	430	430
12-Jul-15	204.5	10	13	6	2,168	2.62	2.9	25	20	6.70	4,600	4,600
13-Jul-15	170.9	11	12	6	2,580	2.57	2.9	25	19	6.88	92	36
14-Jul-15	159.7	9	14	5	2,922	3.34	2.9	25	19	6.82	430	430
15-Jul-15	157.5	12	20	7	3,827	3.85	3.0	25	19	6.79	430	430
16-Jul-15	214.0	21	26	11	3,852	2.69	3.0	25	19	6.68	(92)	(92)
17-Jul-15	161.0	7	14	5	3,526	3.15	3.0	25	19	6.77	230	230
18-Jul-15	179.8	27	28	11	3,543	2.84	3.0	26	19	6.89	1,500	1,500
19-Jul-15	145.8	11	17	5	2,405	2.91	3.1	26	19	6.91	2,400	2,400
20-Jul-15	145.8	11	26	15	3,411	3.29	3.1	26	19	6.87	140	92
21-Jul-15	148.8	12	16	6	3,646	3.76	3.2	26	19	7.81	23	9
22-Jul-15	148.3	17	17	6	3,959	4.00	3.2	26	19	6.75	230	23
23-Jul-15	176.7	56	51	31	3,905	3.48	3.3	27	19	6.78	<3	<3
24-Jul-15	306.0	14	15	7	3,335	2.27	3.3	26	20	6.68	930	930
25-Jul-15	164.0	16	10	6	2,936	2.68	3.3	27	19	6.77	92	92
26-Jul-15	151.8	15	13	9	3,355	3.26	3.3	27	18	6.86	23	23
27-Jul-15	181.7	14	12	6	2,652	3.17	3.3	27	19	6.70	92	36
28-Jul-15	341.4	49	46	21	3,414	2.13	3.4	27	20	6.62	(>110,000)	(>110,000)
29-Jul-15	223.5	11	11	5	1,661	1.32	3.4	27	20	6.73	36	36
30-Jul-15	210.8	13	15	7	3,310	2.58	3.4	27	19	6.78	230	230
31-Jul-15	172.3	14	14	6	2,240	2.88	3.4	27	20	6.77	46,000	46,000
Max:	341.4											
Min:	145.8											
Average:	190.5	17	19	9	3,234	3			19	7		
Total Flow:	5904.9											
Geo.Mean:											174	118

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