

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
August 2017**

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-Aug-17	148.9	8	13	7	4,064	3.39	3.9	37.0	20.0	6.85	152	47		
2-Aug-17	142.7	17	23	12	4,052	4.02	3.8	36.9	19.9	6.78	236	135		
3-Aug-17	140.2	20	23	12	4,163	3.83	3.8	36.7	19.9	6.83	>2,420	1,410		
4-Aug-17	220.4	27	38	13	5,202	3.18	3.8	36.4	19.9	6.75	(>2,420)	461		
5-Aug-17	148.9	11	11	6	2,666	1.38	3.7	35.5	20.3	6.76	1,050	1,550		
6-Aug-17	121.0	15	14	7	3,230	3.02	3.6	34.6	19.8	6.79	548	345		
7-Aug-17	129.5	13	17	6	3,392	3.55	3.6	33.8	19.9	6.86	214	127		
8-Aug-17	142.6	16	17	6	3,792	3.88	3.6	33.2	19.8	6.74	40	32		
9-Aug-17	214.6	21	23	10	4,999	3.55	3.5	33.0	19.8	6.72	>2,420	2,420		
10-Aug-17	149.3	10	11	5	3,136	2.09	3.5	33.0	19.7	6.71	687	1,120		
11-Aug-17	144.6	12	13	8	4,033	3.45	3.6	33.9	20.1	6.80	26	19		
12-Aug-17	135.1	14	nr	nr	3,634	3.87	3.6	34.4	20.4	6.73	119	172		
13-Aug-17	127.4	12	nr	nr	3,553	4.31	3.7	34.9	20.3	6.75	179	166		
14-Aug-17	144.2	13	nr	nr	3,518	4.26	3.8	35.4	20.2	6.72	90	38		
15-Aug-17	143.7	14	14	6	4,398	4.82	3.8	35.5	20.5	6.71	140	179		
16-Aug-17	196.0	18	27	9	5,937	4.17	3.8	35.8	20.3	6.81	1,730	2,420		
17-Aug-17	157.4	16	17	8	5,067	3.65	3.9	36.2	20.7	6.75	143	127		
18-Aug-17	167.6	19	20	8	6,302	4.07	3.9	36.9	20.8	6.85	60	64		
19-Aug-17	129.0	16	20	10	4,168	4.14	4.0	37.0	21.0	6.68	30	47		
20-Aug-17	130.3	21	nr	nr	3,961	5.04	4.0	37.2	20.9	6.74	86	69		
21-Aug-17	144.4	40	19	11	4,143	4.12	4.1	37.9	20.6	6.58	29	31		
22-Aug-17	152.0	19	14	9	4,241	5.35	4.2	38.6	20.3	6.71	113	41		
23-Aug-17	165.8	21	16	10	4,857	5.48	4.3	39.1	20.2	6.66	96	55		
24-Aug-17	138.8	20	14	8	3,719	4.56	4.4	39.5	20.2	6.68	249	291		
25-Aug-17	138.3	23	14	8	4,135	4.99	4.4	40.0	20.6	6.72	57	63		
26-Aug-17	127.4	17	13	7	3,772	5.29	4.5	40.5	20.6	6.68	44	49		
27-Aug-17	125.1	19	14	7	3,428	5.30	4.5	40.4	20.7	6.68	70	46		
28-Aug-17	145.2	18	15	8	3,993	4.53	4.6	40.4	20.8	6.65	143	91		
29-Aug-17	132.4	18	15	8	3,494	4.97	4.7	40.4	21.0	6.64	31	38		
30-Aug-17	139.4	21	17	nr	4,113	5.07	4.7	40.4	20.8	6.68	326	326		
31-Aug-17	134.7	19	20	10	3,582	4.63	4.8	40.5	20.7	6.82	187	152		
Max:	220.4													
Min:	121.0													
Average:	147.6	18	17	8	4,089	4.13			20.3	6.74				
Total Flow:	4576.5													
Geo.Mean:											157	139		

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