

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
July 2018**

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-Jul-18	150.9	14	11	6	3,636	3.37	3.8	32.6	17.9	6.77	80	80		
2-Jul-18	166.9	12	11	4	3,021	2.78	3.8	32.6	17.7	6.84	40	10		
3-Jul-18	148.5	15	13	6	3,639	3.46	3.9	33.0	18.1	6.76	30	20		
4-Jul-18	271.1	18	23	10	4,419	2.03	3.8	32.9	18.5	6.72	370	340		
5-Jul-18	163.6	13	9	6	3,385	2.43	3.8	32.9	18.5	6.73	60	100		
6-Jul-18	153.1	18	11	5	4,211	3.38	3.8	33.0	19.0	6.71	100	120		
7-Jul-18	142.1	17	13	6	3,752	3.41	3.9	33.1	18.7	6.83	30	40		
8-Jul-18	132.8	17	14	7	3,399	3.62	3.9	33.2	18.6	6.66	50	10		
9-Jul-18	140.2	19	12	6	3,674	3.60	3.8	33.3	18.4	6.75	20	20		
10-Jul-18	158.8	19	12	6	3,716	3.51	3.8	33.3	18.9	6.70	50	40		
11-Jul-18	170.2	20	15	7	3,846	3.13	3.8	33.4	19.2	6.76	400	370		
12-Jul-18	148.0	18	16	8	3,758	3.53	3.9	33.7	19.2	6.68	260	350		
13-Jul-18	146.3	21	17	8	4,550	4.26	4.0	34.2	19.8	6.64	80	130		
14-Jul-18	135.2	18	17	8	3,934	4.26	4.0	34.8	19.6	6.61	40	40		
15-Jul-18	124.0	14	17	8	3,458	3.91	4.2	35.7	19.2	6.67	30	60		
16-Jul-18	139.4	16	14	7	3,500	3.82	4.2	36.2	18.9	6.65	170	130		
17-Jul-18	137.4	15	14	7	3,448	4.09	4.3	36.9	19.5	6.66	60	50		
18-Jul-18	139.7	19	19	7	4,148	4.70	4.4	37.5	20.0	6.71	80	160		
19-Jul-18	233.6	53	66	30	6,097	3.75	4.5	37.8	20.1	6.60	10	50		
20-Jul-18	214.0	15	12	6	3,060	1.89	4.4	37.4	19.8	6.59	100	100		
21-Jul-18	136.9	19	10	5	2,958	3.14	4.4	37.4	19.7	6.65	60	60		
22-Jul-18	214.6	43	41	21	4,185	2.97	4.4	37.4	19.3	6.64	100	160		
23-Jul-18	177.3	16	9	5	2,359	2.00	4.4	37.0	20.2	6.54	80	60		
24-Jul-18	144.7	16	11	8	3,762	1.99	4.3	37.0	19.4	6.68	20	20		
25-Jul-18	197.5	36	26	16	5,490	3.12	4.3	37.2	19.3	6.63	50	40		
26-Jul-18	146.4	17	11	7	3,235	2.77	4.3	37.2	18.9	6.66	110	100		
27-Jul-18	139.9	18	12	7	3,876	3.52	4.3	37.8	19.2	6.65	50	50		
28-Jul-18	139.9	21	13	7	3,595	3.65	4.4	38.0	19.3	6.64	50	60		
29-Jul-18	130.2	26	16	8	3,178	3.64	4.4	38.3	19.6	6.60	80	40		
30-Jul-18	149.7	23	15	8	3,010	3.40	4.5	38.5	19.4	6.57	30	30		
31-Jul-18	142.2	24	15	9	3,413	4.14	4.5	38.8	19.5	6.69	10	30		
Max:	271.1													
Min:	124.0													
Average:	159.2	20	17	8	3,733	3.33			19.1	6.68				
Total Flow:	4935.0													
Geo.Mean:											59	61		

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