

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
March 2019**

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-Mar-19	142.8	21	14	10	5,627	1.23	2.3	51.5	12.5	6.87	20	20		
2-Mar-19	143.5	18	16	9	5,554	1.29	2.3	51.2	12.7	6.93	80	50		
3-Mar-19	139.5	22	16	10	5,246	1.30	2.3	50.6	12.1	6.71	<10	40		
4-Mar-19	132.7	15	17	9	4,659	0.74	2.2	50.1	12.1	6.84	10	<10		
5-Mar-19	139.9	19	13	8	5,261	0.78	2.2	49.7	11.7	6.90	20	40		
6-Mar-19	143.9	17	13	7	5,872	0.52	2.1	49.8	12.4	6.80	40	50		
7-Mar-19	148.2	20	19	11	6,329	0.47	2.1	49.6	12.5	6.97	1,550	1,660		
8-Mar-19	146.9	19	15	8	6,344	0.46	2.0	49.5	12.7	6.96	20	20		
9-Mar-19	135.2	20	15	10	5,476	0.48	2.0	49.3	13.1	6.82	40	90		
10-Mar-19	125.4	17	22	12	4,789	0.37	1.9	49.1	12.9	6.81	20	70		
11-Mar-19	146.3	21	21	14	5,529	0.42	1.9	48.7	12.6	6.90	150	120		
12-Mar-19	143.8	21	20	13	5,307	0.35	1.8	48.3	12.5	6.92	200	330		
13-Mar-19	148.0	18	24	11	5,107	0.40	1.8	48.1	12.7	6.76	60	30		
14-Mar-19	163.4	18	31	12	5,443	0.30	1.8	47.9	12.3	6.89	110	110		
15-Mar-19	164.3	14	25	13	5,602	0.43	1.7	47.6	12.0	6.78	40	40		
16-Mar-19	139.0	17	30	11	4,809	0.52	1.7	47.3	12.4	6.83	60	60		
17-Mar-19	153.6	21	45	11	5,300	0.57	1.7	47.1	12.9	6.74	10	<10		
18-Mar-19	179.1	21	28	13	5,463	0.40	1.6	46.9	11.8	6.76	<10	10		
19-Mar-19	193.8	29	24	14	6,473	0.51	1.6	46.8	12.0	6.85	40	60		
20-Mar-19	269.7	57	33	23	6,661	0.50	1.6	46.4	11.2	6.87	100	120		
21-Mar-19	339.8	82	30	27	6,320	0.34	1.5	45.8	9.8	6.87	10	20		
22-Mar-19	314.7	49	37	21	5,256	0.47	1.5	45.0	9.0	6.85	50	50		
23-Mar-19	317.2	54	36	22	5,107	0.89	1.5	44.1	13.7	6.83	nr	nr		
24-Mar-19	226.5	24	19	12	3,602	0.43	1.5	43.2	8.8	6.85	30	70		
25-Mar-19	196.8	25	19	12	4,507	0.58	1.4	42.6	9.8	6.80	<10	10		
26-Mar-19	179.8	40	11	9	4,910	0.64	1.4	42.2	10.2	6.91	10	60		
27-Mar-19	322.2	66	34	29	6,541	0.81	1.4	41.9	10.3	6.83	30	80		
28-Mar-19	277.5	24	27	14	4,301	0.58	1.4	41.3	8.1	6.95	30	30		
29-Mar-19	221.5	20	20	10	4,696	0.79	1.3	40.7	9.4	6.86	40	70		
30-Mar-19	182.3	24	18	11	4,229	0.92	1.3	40.2	9.8	6.72	110	80		
31-Mar-19	187.7	23	20	11	4,767	0.83	1.3	39.8	10.8	6.74	40	60		
Max:	339.8													
Min:	125.4													
Average:	189.2	28	23	13	5,325	0.62			11.5	6.84				
Total Flow:	5865.2										35	48		
Geo.Mean:														

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