

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

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-18	134.7	18	33	10	5,187	1.24	2.0	47.4	14.6	6.84	30	100		
2-Mar-18	134.0	20	27	10	4,930	1.39	2.0	47.0	14.4	6.87	40	120		
3-Mar-18	148.4	22	30	10	5,551	1.37	2.0	46.7	14.1	6.73	40	40		
4-Mar-18	143.6	20	24	12	4,739	0.96	2.0	46.4	13.8	6.66	40	40		
5-Mar-18	137.1	19	22	11	4,086	0.95	1.9	45.8	13.5	6.86	50	30		
6-Mar-18	137.3	22	25	11	4,353	1.30	1.9	45.4	13.5	6.91	<10	40		
7-Mar-18	132.5	25	27	12	4,372	1.46	2.0	45.4	13.6	6.72	40	110		
8-Mar-18	135.0	23	33	11	5,021	1.49	2.0	45.2	13.8	7.17	50	70		
9-Mar-18	126.7	27	29	13	4,724	1.72	2.0	45.1	14.0	6.87	40	30		
10-Mar-18	127.9	26	32	15	4,795	1.56	2.0	44.9	14.5	6.81	60	100		
11-Mar-18	137.6	26	33	15	4,817	1.17	2.0	44.7	14.3	6.70	80	110		
12-Mar-18	144.5	21	27	14	4,784	1.35	2.0	44.3	13.5	6.77	50	60		
13-Mar-18	136.3	27	31	13	4,401	1.41	2.0	43.9	13.7	6.83	80	80		
14-Mar-18	147.3	29	31	14	5,361	1.40	2.0	43.9	14.1	6.89	80	120		
15-Mar-18	147.4	22	29	15	5,114	1.27	2.1	43.6	13.4	6.98	100	130		
16-Mar-18	165.0	22	31	13	5,940	1.38	2.1	43.8	13.5	6.70	90	180		
17-Mar-18	167.4	27	28	16	5,623	1.19	2.1	43.7	13.3	6.68	70	90		
18-Mar-18	159.6	17	24	14	4,596	0.72	2.1	43.4	13.0	6.96	40	60		
19-Mar-18	168.0	18	22	11	4,822	0.69	2.0	43.2	12.5	6.81	40	20		
20-Mar-18	152.1	23	30	13	4,320	0.81	2.0	43.0	12.6	6.90	20	10		
21-Mar-18	152.2	22	25	10	4,626	0.85	2.0	42.4	13.3	6.73	50	50		
22-Mar-18	205.0	26	31	14	6,130	0.96	2.0	41.9	13.6	6.77	<10	100		
23-Mar-18	217.6	36	nr	nr	4,766	0.77	2.0	41.5	11.8	6.78	40	60		
24-Mar-18	149.4	12	nr	nr	3,422	0.76	2.0	40.7	11.1	6.91	10	30		
25-Mar-18	130.9	12	nr	nr	4,609	1.00	2.0	40.3	12.4	6.88	<10	10		
26-Mar-18	151.0	23	36	13	4,380	1.22	2.0	39.8	13.4	6.80	30	50		
27-Mar-18	251.4	49	46	26	5,356	1.03	2.0	39.1	12.5	6.81	170	440		
28-Mar-18	300.6	49	39	21	4,629	0.85	2.0	38.0	8.8	7.38	1,450	1,440		
29-Mar-18	152.1	10	19	7	3,558	0.50	1.9	37.3	10.6	7.03	110	100		
30-Mar-18	131.7	12	16	6	3,805	0.74	1.9	36.8	11.9	6.83	220	150		
31-Mar-18	122.4	12	20	7	3,856	0.85	1.9	36.3	12.7	6.89	30	50		
Max:	300.6													
Min:	122.4													
Average:	156.3	23	29	13	4,731	1.11			13.1	6.85				
Total Flow:	4846.5													
Geo.Mean:											46	70		

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