

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
January 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-Jan-18	109.8	11	16	10	3,855	1.88	2.9	46.1	14.6	6.76	<10	5,170		
2-Jan-18	132.3	10	17	10	4,855	1.90	2.9	46.2	14.1	6.82	10	20		
3-Jan-18	127.4	12	17	10	4,970	1.75	2.9	46.4	14.9	6.78	10	10		
4-Jan-18	134.0	13	19	9	5,776	1.89	2.9	46.7	14.3	6.86	40	130		
5-Jan-18	128.0	12	17	9	5,377	1.73	2.8	46.8	14.1	6.78	80	60		
6-Jan-18	125.2	14	19	8	5,035	1.41	2.8	47.0	14.6	6.86	130	160		
7-Jan-18	124.5	13	17	8	4,830	1.17	2.7	47.1	14.7	6.73	30	130		
8-Jan-18	129.0	12	14	6	4,891	1.04	2.7	47.1	14.9	6.76	80	90		
9-Jan-18	128.4	11	13	7	5,162	1.10	2.6	47.1	15.4	6.73	110	190		
10-Jan-18	129.1	12	nr	nr	5,178	1.30	2.6	47.4	15.5	6.78	1,330	1,720		
11-Jan-18	126.2	11	17	7	5,428	1.41	2.6	47.7	15.3	6.67	50	60		
12-Jan-18	122.0	11	15	7	4,561	1.24	2.5	47.6	14.9	6.73	50	100		
13-Jan-18	127.8	12	17	7	4,423	1.37	2.5	47.6	14.2	6.79	30	60		
14-Jan-18	123.3	9	18	7	4,132	1.17	2.4	47.4	14.4	6.77	40	40		
15-Jan-18	124.9	11	19	7	4,035	1.17	2.4	47.3	14.3	6.67	40	30		
16-Jan-18	132.2	12	15	6	4,732	1.44	2.3	47.4	14.4	6.96	1,550	2,280		
17-Jan-18	130.6	13	18	7	4,859	1.61	2.3	47.7	14.7	6.67	2,190	1,470		
18-Jan-18	122.6	13	17	8	4,241	1.79	2.3	47.8	15.2	6.72	30	50		
19-Jan-18	140.0	17	18	8	5,249	1.52	2.3	47.7	15.5	6.82	20	20		
20-Jan-18	131.6	13	20	7	4,896	1.54	2.3	47.5	15.1	6.70	40	90		
21-Jan-18	125.4	13	22	8	4,842	1.29	2.2	47.6	15.2	6.73	20	20		
22-Jan-18	130.2	12	20	7	4,713	1.35	2.2	47.7	15.3	6.79	960	1,040		
23-Jan-18	127.6	12	19	6	4,630	1.40	2.1	48.0	14.9	6.94	790	1,050		
24-Jan-18	125.3	17	21	8	4,887	1.63	2.1	48.3	15.0	6.71	1,130	1,020		
25-Jan-18	129.4	17	25	8	4,789	1.72	2.1	48.5	15.3	6.81	10	110		
26-Jan-18	124.2	17	21	8	4,433	1.60	2.1	48.8	15.4	6.78	1,860	2,140		
27-Jan-18	121.2	18	31	9	4,389	1.79	2.1	48.8	15.0	6.77	60	170		
28-Jan-18	117.9	17	28	9	4,056	1.73	2.1	48.8	14.7	6.79	130	130		
29-Jan-18	121.0	10	nr	nr	4,150	1.68	2.1	48.7	14.2	6.77	430	310		
30-Jan-18	123.8	18	19	9	4,619	1.69	2.1	48.6	14.4	6.82	430	650		
31-Jan-18	126.1	18	25	12	4,617	1.59	2.1	48.8	14.3	6.92	3,870	5,790		
Max:	140.0													
Min:	109.8													
Average:	126.5	13	19	8	4,729	1.51			14.8	6.78				
Total Flow:	3921.3													
Geo.Mean:											109	194		

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 samples from January 1st to the 22nd were analyzed past hold time due to an instrument breakdown.