

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
April 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-Apr-18	124.9	12	22	8	4,045	1.21	1.9	36.2	12.9	6.87	40	10		
2-Apr-18	127.4	12	20	7	4,280	1.40	1.8	36.3	13.0	6.84	30	40		
3-Apr-18	130.4	12	24	7	4,471	1.88	1.9	36.5	13.7	6.99	30	40		
4-Apr-18	135.0	11	22	10	4,956	1.59	1.9	36.9	14.0	6.81	30	40		
5-Apr-18	134.2	14	26	9	4,737	1.77	1.9	37.2	13.7	6.91	640	80		
6-Apr-18	130.3	11	21	9	4,846	1.63	1.9	37.2	13.3	6.91	20	40		
7-Apr-18	126.1	12	24	10	5,108	2.33	1.9	37.4	13.4	6.77	30	10		
8-Apr-18	134.0	14	33	13	5,117	2.91	1.9	37.3	13.5	6.85	140	160		
9-Apr-18	142.5	18	28	14	4,959	3.01	2.0	37.1	13.3	6.86	80	60		
10-Apr-18	150.4	19	27	14	4,466	3.00	2.0	36.8	12.9	6.86	350	320		
11-Apr-18	163.3	21	25	12	4,816	2.84	2.1	36.6	12.7	6.89	340	230		
12-Apr-18	153.2	20	24	13	3,921	2.43	2.1	36.2	12.1	6.90	360	360		
13-Apr-18	135.8	6	21	11	3,667	2.73	2.1	35.9	12.5	6.88	350	400		
14-Apr-18	134.4	20	27	14	4,475	3.35	2.2	35.8	13.2	6.83	210	190		
15-Apr-18	150.5	23	31	14	4,755	3.19	2.3	35.6	13.3	6.79	280	240		
16-Apr-18	155.6	21	30	16	4,606	2.88	2.3	35.5	12.9	6.84	230	410		
17-Apr-18	157.7	20	nr	15	6,071	3.31	2.4	35.8	13.2	6.90	670	960		
18-Apr-18	165.5	27	32	14	6,353	3.00	2.5	36.2	13.5	6.81	100	120		
19-Apr-18	165.6	28	33	14	5,167	2.80	2.6	36.3	13.8	6.76	<10	30		
20-Apr-18	174.0	20	29	13	4,960	2.54	2.7	36.1	13.3	6.80	70	60		
21-Apr-18	177.0	27	30	16	5,116	2.50	2.7	36.1	13.1	6.75	10	30		
22-Apr-18	178.1	25	33	16	4,791	2.16	2.8	36.1	12.3	6.80	40	30		
23-Apr-18	176.5	21	nr	nr	4,678	2.45	2.8	36.2	12.1	6.94	50	10		
24-Apr-18	169.3	18	nr	nr	4,979	2.76	2.9	35.9	12.3	6.79	10	20		
25-Apr-18	170.8	16	26	11	5,021	2.90	2.9	35.8	12.8	6.98	10	<10		
26-Apr-18	160.6	15	25	9	4,562	3.00	3.0	36.0	12.9	6.87	20	20		
27-Apr-18	155.4	13	27	8	4,632	2.85	3.1	36.5	13.2	6.90	20	60		
28-Apr-18	149.8	14	32	8	4,689	2.89	3.2	36.7	13.8	6.93	220	220		
29-Apr-18	141.4	13	36	8	3,987	2.67	3.2	36.6	13.8	6.84	150	210		
30-Apr-18	152.9	13	25	7	4,419	2.59	3.3	36.6	13.8	6.81	60	110		
Max:	178.1													
Min:	124.9													
Average:	150.7	17	27	11	4,755	2.55			13.1	6.86				
Total Flow:	4522.5													
Geo.Mean:											71	72		

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