

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
February 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-Feb-18	125.5	18	23	11	4,607	1.36	2.1	48.8	14.3	6.98	1,850	2,910		
2-Feb-18	125.7	19	22	9	4,626	1.46	2.1	48.8	14.3	6.82	160	300		
3-Feb-18	121.4	20	23	10	4,578	1.41	2.1	48.7	14.1	6.84	910	880		
4-Feb-18	120.8	16	22	9	4,203	1.24	2.1	48.6	14.1	6.83	880	1,220		
5-Feb-18	125.3	18	20	9	4,473	1.24	2.1	48.4	14.1	6.70	500	510		
6-Feb-18	129.3	18	22	9	4,409	1.30	2.1	48.3	14.2	6.73	630	570		
7-Feb-18	nr	17	28	11	nr	1.50	2.1	48.2	14.2	6.92	1,050	1,270		
8-Feb-18	125.9	16	23	11	4,707	1.36	2.2	48.2	14.5	6.80	70	100		
9-Feb-18	127.0	20	23	10	4,494	1.20	2.2	48.2	14.2	6.82	240	290		
10-Feb-18	124.8	18	25	9	4,531	1.21	2.2	48.1	14.1	6.74	550	460		
11-Feb-18	129.1	15	27	10	4,519	1.18	2.2	48.2	14.2	6.82	200	260		
12-Feb-18	125.1	24	18	10	4,192	1.00	2.2	48.1	14.2	6.80	20	40		
13-Feb-18	128.9	19	16	7	4,512	1.04	2.2	48.2	14.1	6.85	100	20		
14-Feb-18	131.3	18	17	10	4,556	1.14	2.2	48.0	14.6	6.71	40	60		
15-Feb-18	130.1	20	19	10	4,997	1.17	2.2	47.8	14.0	6.71	40	30		
16-Feb-18	130.5	20	16	10	4,632	1.16	2.2	47.6	14.5	6.71	20	10		
17-Feb-18	124.8	18	19	9	4,181	1.10	2.1	47.3	14.1	6.80	<10	10		
18-Feb-18	121.0	18	19	9	3,982	1.03	2.1	47.1	13.8	6.65	10	<10		
19-Feb-18	123.1	18	17	9	4,036	1.02	2.1	47.2	13.4	6.68	<10	10		
20-Feb-18	125.0	18	25	9	4,348	1.00	2.1	47.2	13.5	6.64	10	20		
21-Feb-18	128.6	ns	ns	ns	ns	ns	2.1	47.2	13.7	6.64	20	20		
22-Feb-18	127.7	19	nr	nr	4,777	1.20	2.1	47.2	14.1	6.81	<10	30		
23-Feb-18	125.8	18	23	8	4,554	1.25	2.1	47.1	14.1	6.68	560	930		
24-Feb-18	124.0	20	29	10	4,488	1.32	2.1	47.0	14.1	6.70	280	440		
25-Feb-18	125.3	16	34	10	4,935	1.17	2.1	46.9	14.1	6.81	60	60		
26-Feb-18	126.6	15	nr	nr	4,759	1.05	2.1	47.2	14.5	6.78	<10	<10		
27-Feb-18	129.8	15	24	8	5,061	1.12	2.0	47.2	14.6	6.82	<10	20		
28-Feb-18	131.4	16	28	9	5,163	1.23	2.0	47.3	14.7	6.69	<10	20		
Max:	131.4													
Min:	120.8													
Average:	126.4	18	22	9	4,551	1.20			14.2	6.77				
Total Flow:	3413.6													
Geo.Mean:											69	90		

- 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