

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
April 2017**

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-Apr-17	312.6	17	13	10	3,782	1.26	2.1	29.2	9.9	7.26	43	23		
2-Apr-17	305.1	16	14	10	4,027	1.29	2.1	28.5	10.5	7.12	(23)	(23)		
3-Apr-17	295.5	13	14	9	4,403	1.53	2.1	28.0	10.2	7.45	93	43		
4-Apr-17	277.8	12	15	9	4,361	1.73	2.1	27.6	10.5	7.14	15	15		
5-Apr-17	242.6	13	17	10	4,198	1.79	2.1	27.7	11.2	7.10	7	7		
6-Apr-17	227.8	14	18	9	4,488	2.01	2.2	27.8	11.5	7.14	10	20		
7-Apr-17	229.2	14	18	9	4,745	2.12	2.2	27.8	11.9	7.05	10	30		
8-Apr-17	219.4	12	20	9	4,453	2.05	2.3	27.7	13.2	7.11	<10	20		
9-Apr-17	206.4	10	19	11	4,273	2.16	2.3	27.6	11.9	7.10	20	10		
10-Apr-17	191.9	11	17	8	4,414	2.31	2.3	27.5	12.3	6.92	<10	20		
11-Apr-17	187.2	11	20	7	4,754	2.62	2.4	27.5	12.9	7.45	40	50		
12-Apr-17	185.3	11	19	9	4,632	2.60	2.4	27.5	13.5	7.04	20	10		
13-Apr-17	182.0	13	22	10	4,496	2.76	2.4	27.2	13.6	7.07	<10	<10		
14-Apr-17	208.7	10	19	10	4,153	2.29	2.5	26.6	13.2	6.94	10	10		
15-Apr-17	242.2	85	48	34	3,415	1.64	2.5	26.2	12.9	6.99	10	20		
16-Apr-17	632.7	49	36	19	4,264	0.60	2.5	25.9	9.7	7.13	(>24,200)	(>24,200)		
17-Apr-17	345.3	11	12	7	4,075	1.35	2.5	25.4	10.4	7.24	40	<10		
18-Apr-17	275.2	12	11	7	4,292	2.08	2.5	25.1	11.5	7.16	10	10		
19-Apr-17	241.7	11	12	7	4,253	1.97	2.5	25.3	12.0	7.27	20	10		
20-Apr-17	233.0	13	14	7	4,567	2.29	2.6	25.5	12.5	7.20	30	10		
21-Apr-17	217.5	12	16	10	4,568	2.44	2.6	25.4	13.0	7.32	136	28		
22-Apr-17	367.3	51	31	25	4,664	1.41	2.6	25.2	10.6	7.24	(>2,420)	(>2,420)		
23-Apr-17	251.2	14	17	10	3,743	1.20	2.5	25.1	10.7	7.14	12	24		
24-Apr-17	289.8	29	21	14	4,492	1.75	2.5	25.3	11.7	7.13	5	25		
25-Apr-17	244.4	12	nr	nr	4,277	1.81	2.5	25.7	10.9	7.26	34	35		
26-Apr-17	226.0	10	16	8	4,994	2.26	2.6	26.0	12.0	7.18	17	45		
27-Apr-17	218.4	9	19	7	5,241	2.51	2.6	26.4	12.3	7.07	14	35		
28-Apr-17	201.2	22	nr	12	4,789	2.33	2.6	26.9	12.7	7.11	35	37		
29-Apr-17	192.3	13	9	6	4,847	2.82	2.6	27.7	12.9	7.07	5	5		
30-Apr-17	188.4	12	10	7	4,654	2.74	2.7	28.3	13.3	6.92	2	8		
Max:	632.7													
Min:	182.0													
Average:	254.6	18	18	11	4,411	1.99			12	7.14				
Total Flow:	7638.1													
Geo.Mean:											15	17		

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 results are calculated from TKN and nitrate values