

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
April 2019**

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-19	214.8	22	31	10	4,983	0.60	1.3	39.5	10.7	6.75	70	140		
2-Apr-19	251.1	20	16	10	5,297	0.65	1.2	39.2	9.0	6.99	120	130		
3-Apr-19	186.6	16	21	9	4,981	1.77	1.3	39.0	9.8	6.91	90	100		
4-Apr-19	190.5	22	23	11	5,314	1.95	1.3	38.8	10.5	7.02	70	90		
5-Apr-19	247.7	22	16	10	5,475	1.92	1.3	38.3	9.5	6.91	60	120		
6-Apr-19	213.5	61	35	24	4,334	1.80	1.4	37.5	10.1	6.79	50	50		
7-Apr-19	511.1	67	31	28	4,891	0.93	1.4	36.4	7.2	6.94	(>24,200)	(>24,200)		
8-Apr-19	311.8	24	21	12	4,521	1.14	1.4	35.5	8.3	7.01	50	20		
9-Apr-19	234.5	19	14	10	4,338	1.67	1.5	34.7	8.9	7.02	130	30		
10-Apr-19	194.8	20	17	9	4,636	1.71	1.5	34.1	10.1	6.88	30	30		
11-Apr-19	186.2	20	19	11	4,768	1.66	1.5	33.5	10.6	6.88	60	140		
12-Apr-19	186.9	22	13	12	5,027	1.05	1.6	32.9	10.9	7.01	100	150		
13-Apr-19	176.0	18	20	15	4,944	0.98	1.6	32.7	11.9	6.76	40	30		
14-Apr-19	174.8	14	18	10	4,527	1.39	1.6	32.4	11.1	6.83	30	40		
15-Apr-19	337.6	75	31	19	5,772	1.07	1.7	31.7	9.5	6.88	(>24,200)	(>24,200)		
16-Apr-19	255.7	15	19	8	3,324	0.56	1.7	30.8	9.4	7.05	50	90		
17-Apr-19	211.0	24	17	11	5,064	1.42	1.7	30.4	10.7	6.86	100	140		
18-Apr-19	193.0	28	17	11	4,941	1.51	1.7	30.0	11.5	6.89	150	190		
19-Apr-19	180.7	27	16	12	4,609	1.70	1.8	30.1	12.0	6.80	160	230		
20-Apr-19	171.4	24	18	12	4,456	1.73	1.8	30.3	12.4	6.78	20	40		
21-Apr-19	164.5	23	19	13	4,113	1.99	1.9	30.7	12.2	6.84	50	100		
22-Apr-19	166.9	23	21	15	4,323	2.25	1.9	31.2	12.7	6.80	40	30		
23-Apr-19	167.2	24	18	15	4,765	2.40	2.0	31.8	12.7	6.88	100	120		
24-Apr-19	165.1	20	25	16	4,853	2.21	2.0	32.1	12.8	6.89	470	360		
25-Apr-19	163.1	14	17	13	4,796	2.50	2.1	32.3	12.9	6.81	220	350		
26-Apr-19	168.9	22	14	12	5,403	2.52	2.2	32.6	13.1	6.80	140	110		
27-Apr-19	159.7	18	15	12	5,159	3.97	2.3	33.2	13.1	6.73	40	50		
28-Apr-19	153.2	22	21	16	4,962	3.97	2.5	33.5	12.9	6.71	10	50		
29-Apr-19	157.2	18	14	11	4,669	2.59	2.5	33.8	12.9	6.82	90	150		
30-Apr-19	160.5	22	16	13	5,201	2.79	2.6	34.0	12.7	6.75	50	240		
Max:	511.1													
Min:	153.2													
Average:	208.5	26	20	13	4,815	1.81			11.1	6.87				
Total Flow:	6255.8													
Geo.Mean:											69	89		

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