

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

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-May-19	155.7	17	21	13	5,403	2.58	2.7	34.3	13.0	6.74	60	680		
2-May-19	151.2	15	16	12	5,066	2.69	2.7	34.6	13.4	6.67	40	60		
3-May-19	287.0	57	38	28	6,715	2.01	2.8	34.6	11.6	6.83	24,200	>24,200		
4-May-19	169.1	16	16	9	4,093	1.59	2.8	34.5	12.3	6.84	20	20		
5-May-19	152.7	13	17	9	4,565	2.19	2.8	34.8	12.9	6.76	20	30		
6-May-19	158.1	13	17	9	4,776	2.64	2.8	35.3	13.1	6.70	10	20		
7-May-19	142.3	14	20	11	4,923	3.14	2.9	36.3	13.3	6.86	60	40		
8-May-19	166.3	15	23	10	6,054	2.98	2.9	37.2	13.6	6.82	60	30		
9-May-19	151.0	12	16	14	5,435	2.98	3.0	38.2	13.7	6.78	<10	20		
10-May-19	151.5	10	13	7	5,529	3.13	3.0	39.0	13.8	6.83	80	100		
11-May-19	160.1	16	17	9	5,506	3.09	3.1	39.7	14.0	6.80	10	10		
12-May-19	180.5	16	11	7	4,602	2.15	3.1	39.8	13.6	6.73	40	30		
13-May-19	151.6	6	11	6	5,260	2.83	3.1	39.8	14.1	6.77	20	30		
14-May-19	147.9	11	14	6	5,339	3.46	3.2	40.1	14.0	6.85	10	2		
15-May-19	266.7	72	45	33	7,521	2.66	3.2	40.4	14.2	6.79	40	30		
16-May-19	243.4	16	15	7	4,357	0.82	3.2	40.5	12.7	7.02	50	70		
17-May-19	162.9	10	13	5	5,051	1.89	3.2	40.6	13.6	6.77	90	50		
18-May-19	143.9	9	13	6	4,879	2.49	3.2	40.8	13.5	6.90	100	70		
19-May-19	138.1	9	15	6	4,530	2.80	3.2	41.0	14.0	6.87	20	40		
20-May-19	135.9	8	16	5	4,595	2.99	3.3	41.2	14.6	6.84	10	30		
21-May-19	146.6	10	18	6	4,851	3.38	3.3	41.6	14.0	6.78	40	30		
22-May-19	170.8	10	21	9	6,183	3.50	3.3	42.2	14.1	6.89	60	100		
23-May-19	149.1	10	19	6	4,787	2.49	3.3	42.4	14.6	6.82	280	380		
24-May-19	250.2	42	43	19	7,456	2.71	3.3	42.5	14.4	6.81	170	280		
25-May-19	166.7	10	16	7	3,967	1.54	3.2	42.3	13.9	6.81	60	110		
26-May-19	152.8	12	11	6	4,706	2.78	3.2	42.3	14.3	6.84	30	60		
27-May-19	147.9	11	14	6	4,732	3.16	3.2	42.2	14.4	6.85	20	10		
28-May-19	150.1	14	19	9	5,209	3.39	3.1	42.3	14.6	6.87	40	50		
29-May-19	157.5	15	21	10	6,505	4.03	3.2	42.7	15.2	6.75	10	20		
30-May-19	156.2	15	29	8	6,874	4.08	3.2	43.1	15.9	6.95	20	40		
31-May-19	151.7	17	21	8	5,660	3.80	3.2	43.5	15.6	6.90	10	40		
Max:	287.0													
Min:	135.9													
Average:	168.2	17	19	10	5,327	2.77			13.9	6.82				
Total Flow:	5215.6													
Geo.Mean:											40	52		

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