

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
June 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
				(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-Jun-18	236.6	17	11	6	4,897	1.59	3.6	34.7	16.1	6.91	20	80		
2-Jun-18	188.7	20	13	9	4,283	2.06	3.6	34.4	15.8	6.93	40	40		
3-Jun-18	202.7	13	13	7	3,891	1.76	3.5	33.9	15.1	6.89	100	90		
4-Jun-18	158.0	14	12	8	3,872	2.44	3.5	33.6	15.6	6.86	10	<10		
5-Jun-18	150.7	15	11	6	4,324	2.78	3.5	33.5	16.0	6.81	50	50		
6-Jun-18	152.7	16	13	7	4,643	3.01	3.5	33.4	16.5	6.77	340	460		
7-Jun-18	147.4	15	16	6	4,570	3.06	3.5	33.3	16.8	6.84	60	50		
8-Jun-18	145.9	16	20	7	4,770	3.98	3.5	33.1	17.6	6.88	100	120		
9-Jun-18	132.5	19	21	8	4,345	4.79	3.5	32.9	17.5	6.83	60	50		
10-Jun-18	133.8	18	17	9	4,348	4.53	3.6	32.6	17.5	6.84	120	150		
11-Jun-18	194.0	28	23	13	5,297	3.55	3.6	32.3	17.3	6.81	60	90		
12-Jun-18	190.5	18	19	10	4,552	2.57	3.5	31.7	17.5	6.77	790	750		
13-Jun-18	149.4	14	12	6	4,273	2.68	3.5	31.4	17.8	6.81	90	170		
14-Jun-18	185.4	71	37	29	4,524	2.70	3.5	31.0	16.6	6.83	30	20		
15-Jun-18	412.5	16	18	6	5,445	0.99	3.4	30.3	16.8	6.89	(260)	(100)		
16-Jun-18	190.0	9	10	5	4,275	2.07	3.3	29.7	16.5	6.86	90	50		
17-Jun-18	159.2	11	10	5	4,361	2.58	3.3	30.1	16.5	6.90	90	110		
18-Jun-18	166.2	14	11	5	4,770	3.03	3.4	30.4	16.6	6.90	40	20		
19-Jun-18	161.4	11	12	5	4,809	3.23	3.5	30.5	16.5	6.83	<10	20		
20-Jun-18	158.0	10	18	6	5,038	3.10	3.5	30.8	17.5	6.75	140	100		
21-Jun-18	149.5	15	18	6	5,247	3.89	3.5	30.9	17.2	6.84	20	20		
22-Jun-18	180.0	22	21	11	6,350	3.81	3.6	31.2	18.0	6.75	10	30		
23-Jun-18	140.6	14	14	6	4,372	2.99	3.6	31.3	18.1	6.72	60	100		
24-Jun-18	136.2	16	14	5	4,983	3.42	3.6	31.7	17.7	6.82	20	20		
25-Jun-18	144.3	15	13	6	5,094	3.96	3.6	31.8	17.3	6.75	<10	20		
26-Jun-18	147.1	42	32	22	5,060	4.77	3.7	31.8	17.5	6.81	40	30		
27-Jun-18	300.3	17	5	2	5,376	1.73	3.6	31.4	18.4	6.77	720	960		
28-Jun-18	151.2	13	10	5	4,309	2.50	3.6	31.5	18.2	6.64	190	130		
29-Jun-18	258.8	33	13	6	5,746	2.46	3.6	31.8	18.6	6.72	560	560		
30-Jun-18	146.1	12	11	5	3,316	2.88	3.7	32.2	18.1	6.73	90	60		
Max:	412.5													
Min:	132.5													
Average:	179.0	19	16	8	4,705	2.96			17.1	6.82				
Total Flow:	5369.5													
Geo.Mean:											61	69		

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