

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
June 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-Jun-17	159.9	8	16	8	4,798	4.39	3.5	34.6	16.2	6.95	548	1,050		
2-Jun-17	160.6	15	16	7	4,368	3.69	3.6	34.8	17.0	6.87	391	387		
3-Jun-17	162.5	12	nr	nr	5,232	4.22	3.6	34.7	16.7	6.85	172	38		
4-Jun-17	148.5	12	21	9	4,961	4.56	3.7	35.0	16.7	6.87	16	33		
5-Jun-17	153.7	14	17	8	5,179	3.83	3.7	35.2	17.3	6.90	1,300	129		
6-Jun-17	155.2	14	20	9	5,137	4.08	3.8	35.5	17.6	6.91	1,730	1,410		
7-Jun-17	153.4	12	nr	nr	5,077	3.72	3.9	35.9	17.7	6.86	579	687		
8-Jun-17	152.5	14	21	8	5,505	4.18	4.0	36.5	17.8	6.88	>2,420	>2,420		
9-Jun-17	186.9	40	51	24	6,035	4.93	4.1	36.7	18.1	6.92	435	276		
10-Jun-17	224.6	15	28	10	4,088	2.31	4.1	36.2	17.8	6.70	>2,420	1,200		
11-Jun-17	145.6	14	15	7	4,192	3.30	4.1	36.1	17.6	6.77	55	89		
12-Jun-17	147.9	18	<3	8	4,806	4.19	4.2	36.2	17.4	6.97	36	62		
13-Jun-17	150.8	48	34	28	4,659	4.14	4.2	36.1	17.4	6.94	47	62		
14-Jun-17	441.2	24	39	10	5,427	1.20	4.2	35.3	17.1	6.94	(>2,420)	(>2,420)		
15-Jun-17	207.3	10	13	6	4,063	1.79	4.1	35.1	17.8	7.00	36	23		
16-Jun-17	169.1	12	14	6	4,313	3.14	4.1	35.2	17.5	6.94	102	82		
17-Jun-17	154.1	11	15	6	4,162	3.38	4.2	35.4	17.7	6.88	52	52		
18-Jun-17	156.3	15	19	9	4,330	3.76	4.2	35.7	17.3	6.92	61	79		
19-Jun-17	165.7	13	18	7	4,474	4.04	4.2	36.1	17.5	6.91	225	117		
20-Jun-17	162.2	14	nr	nr	4,736	4.24	4.3	36.7	17.7	6.88	33	34		
21-Jun-17	296.4	55	47	26	6,609	3.00	4.4	37.2	17.7	6.83	(326)	(326)		
22-Jun-17	202.4	15	14	7	3,764	1.84	4.4	37.2	17.3	6.92	46	47		
23-Jun-17	206.2	14	14	7	5,030	2.67	4.4	37.3	17.4	6.89	11	13		
24-Jun-17	182.2	18	14	8	4,374	2.78	4.4	37.4	17.2	6.95	32	68		
25-Jun-17	166.1	13	13	6	4,120	2.91	4.4	37.5	17.1	6.86	10	16		
26-Jun-17	159.0	12	14	nr	4,389	3.32	4.4	37.5	17.5	6.86	25	10		
27-Jun-17	158.6	17	15	7	4,757	3.73	4.5	37.8	17.7	6.97	66	80		
28-Jun-17	163.5	18	18	10	5,119	3.72	4.5	38.2	18.1	6.80	22	71		
29-Jun-17	165.2	18	24	10	4,806	3.41	4.5	38.3	18.1	6.73	435	548		
30-Jun-17	152.7	16	18	8	4,367	3.28	4.5	38.0	18.4	6.78	25	12		
Max:	441.2													
Min:	145.6													
Average:	180.3	18	20	10	4,763	3.46			17	6.88				
Total Flow:	5410.2													
Geo.Mean:											109	101		

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