

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
August 2018**

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-Aug-18	134.9	39	25	12	3,925	4.52	4.6	39.3	19.4	6.73	90	110		
2-Aug-18	136.6	36	19	10	4,031	4.11	4.6	39.6	19.4	6.69	190	370		
3-Aug-18	136.9	46	20	14	3,996	4.31	4.7	40.3	20.0	6.68	110	120		
4-Aug-18	254.0	74	36	24	4,902	2.31	4.7	40.2	19.6	6.67	200	170		
5-Aug-18	220.7	27	nr	nr	2,670	1.29	4.7	39.6	18.8	6.52	90	100		
6-Aug-18	137.2	23	10	6	2,415	2.56	4.7	39.4	19.0	6.59	10	40		
7-Aug-18	149.4	24	11	6	3,540	3.42	4.6	39.6	19.8	6.62	<10	30		
8-Aug-18	149.7	25	15	9	3,833	3.40	4.7	40.0	20.1	6.65	70	90		
9-Aug-18	149.7	31	16	11	3,876	3.31	4.6	40.4	20.4	6.66	60	40		
10-Aug-18	145.9	36	17	11	3,793	3.69	4.7	41.0	20.8	6.63	20	50		
11-Aug-18	136.5	39	17	11	3,698	3.76	4.6	41.6	19.6	6.62	120	100		
12-Aug-18	131.4	24	15	nr	3,509	3.95	4.6	41.7	20.3	6.62	60	60		
13-Aug-18	136.9	22	18	11	3,285	3.82	4.6	41.9	20.3	6.68	10	40		
14-Aug-18	134.0	26	17	12	3,351	4.13	4.6	42.0	20.0	6.65	190	230		
15-Aug-18	137.3	28	21	11	4,021	4.07	4.6	42.4	20.4	6.76	50	60		
16-Aug-18	138.9	23	22	10	3,928	4.04	4.6	42.4	20.1	6.73	110	230		
17-Aug-18	140.0	19	18	9	4,229	4.28	4.5	42.3	20.3	6.73	100	160		
18-Aug-18	130.5	19	16	nr	3,994	4.24	4.5	42.5	16.9	6.73	120	120		
19-Aug-18	126.0	22	17	10	3,805	3.91	4.6	43.0	20.2	6.69	50	40		
20-Aug-18	134.3	18	nr	nr	3,801	4.04	4.6	43.0	20.3	6.58	80	30		
21-Aug-18	139.7	20	18	10	4,429	4.38	4.6	43.3	20.0	6.70	60	60		
22-Aug-18	139.6	24	20	10	4,759	4.36	4.7	44.1	20.1	6.74	260	310		
23-Aug-18	143.1	21	18	9	5,052	4.37	4.8	44.4	20.6	6.67	590	540		
24-Aug-18	141.8	23	18	8	4,608	4.32	4.8	44.5	20.6	6.73	30	100		
25-Aug-18	125.1	21	15	7	4,190	4.39	4.8	44.9	19.8	6.68	150	90		
26-Aug-18	142.7	59	nr	nr	4,168	4.02	4.8	44.7	20.1	6.65	10	50		
27-Aug-18	234.5	17	14	7	3,752	1.85	4.8	43.9	18.4	6.65	210	150		
28-Aug-18	139.7	28	19	9	4,695	3.82	4.7	43.9	19.2	6.68	40	60		
29-Aug-18	179.6	19	15	8	4,365	3.11	4.7	43.6	19.0	6.61	80	90		
30-Aug-18	137.1	15	13	7	4,237	3.47	4.7	43.4	19.9	6.68	230	230		
31-Aug-18	135.2	15	14	6	4,624	3.94	4.6	43.3	20.3	6.73	20	20		
Max:	254.0													
Min:	125.1													
Average:	149.0	28	18	10	3,983	3.72			19.8	6.67				
Total Flow:	4618.9													
Geo.Mean:											68	91		

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