

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
September 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
			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-Sep-18	124.1	15	15	6	3,723	3.69	4.6	43.5	19.6	6.69	10	10		
2-Sep-18	117.7	17	16	7	3,826	3.51	4.6	43.5	20.2	6.73	40	30		
3-Sep-18	126.7	32	30	16	3,852	3.68	4.6	43.6	20.0	6.70	60	60		
4-Sep-18	255.5	20	18	9	3,986	1.77	4.6	43.8	19.2	6.63	140	120		
5-Sep-18	142.8	23	11	6	3,741	2.99	4.6	44.2	19.1	6.57	50	60		
6-Sep-18	134.8	8	12	5	3,989	4.01	4.6	43.8	19.9	6.79	20	80		
7-Sep-18	133.6	16	11	5	4,088	4.37	4.6	43.8	19.9	6.70	30	10		
8-Sep-18	173.1	20	14	7	4,761	4.31	4.6	43.7	19.8	6.53	60	130		
9-Sep-18	179.3	12	nr	nr	3,712	2.69	4.6	43.2	19.1	6.68	150	130		
10-Sep-18	138.0	15	nr	nr	3,077	3.41	4.6	42.7	19.5	6.72	40	10		
11-Sep-18	208.8	22	17	8	4,678	3.39	4.5	42.2	19.0	6.69	160	120		
12-Sep-18	174.9	128	129	>36	4,443	3.70	4.5	41.9	19.1	6.70	10	20		
13-Sep-18	512.8	64	26	12	5,102	0.79	4.4	40.8	16.8	6.82	(680)	(840)		
14-Sep-18	213.3	12	7	4	3,882	1.52	4.3	40.1	18.1	6.72	30	30		
15-Sep-18	180.2	11	5	3	3,856	2.75	4.2	39.5	18.6	6.63	20	10		
16-Sep-18	166.2	8	7	4	3,589	3.42	4.2	39.1	19.0	6.80	20	40		
17-Sep-18	165.6	13	7	4	3,411	3.91	4.2	38.7	18.9	6.67	60	30		
18-Sep-18	155.7	12	9	5	3,566	4.68	4.2	38.6	19.2	6.55	90	90		
19-Sep-18	152.0	14	nr	nr	3,649	4.83	4.2	38.5	19.1	6.59	1,300	1,270		
20-Sep-18	178.4	73	71	34	4,013	4.21	4.2	38.3	19.2	6.69	20	50		
21-Sep-18	263.3	14	12	7	2,288	1.75	4.1	37.2	15.3	6.83	40	50		
22-Sep-18	218.5	ns	ns	ns	ns	ns	4.1	36.8	17.3	6.85	30	40		
23-Sep-18	188.2	13	9	6	2,993	2.06	4.0	36.2	15.1	6.71	30	50		
24-Sep-18	164.9	12	10	5	3,066	3.23	3.9	35.7	17.0	6.59	14,100	19,900		
25-Sep-18	182.9	20	13	7	4,389	4.46	3.9	35.9	18.0	6.63	1,610	24,200		
26-Sep-18	198.6	17	15	8	3,674	3.07	4.0	36.4	17.3	6.76	60	60		
27-Sep-18	274.4	34	28	14	4,609	2.27	3.9	35.9	16.3	6.80	(>24,200)	(>24,200)		
28-Sep-18	176.9	10	6	4	2,919	2.50	3.9	35.8	16.1	6.70	40	60		
29-Sep-18	168.1	11	7	4	3,597	3.80	3.9	35.6	17.3	6.64	330	450		
30-Sep-18	161.8	11	9	4	3,446	3.87	3.9	35.3	17.5	6.76	10	<10		
Max:	512.8													
Min:	117.7													
Average:	187.7	23	20	9	3,790	3.26			18.4	6.70				
Total Flow:	5630.9													
Geo.Mean:											65	75		

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