

**City of Winnipeg  
Water and Waste Department  
North End Water Pollution Control Centre Monitoring Data  
October 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-Oct-18	166.4	10	8	4	3,677	4.51	3.9	34.7	17.5	6.67	10	<10		
2-Oct-18	159.7	10	9	5	3,720	4.52	3.9	34.4	17.7	6.82	10	10		
3-Oct-18	297.8	56	45	21	6,343	3.61	3.9	34.5	17.6	6.72	(1,540)	(1,670)		
4-Oct-18	200.7	9	10	5	3,231	1.99	3.9	34.7	13.5	6.83	40	50		
5-Oct-18	290.2	41	nr	nr	4,672	2.40	3.9	34.3	16.1	6.67	30	40		
6-Oct-18	218.1	10	nr	nr	2,617	1.50	3.8	33.9	12.9	6.75	60	30		
7-Oct-18	164.6	9	8	5	2,930	2.57	3.7	33.3	15.7	6.64	20	20		
8-Oct-18	164.3	10	9	5	3,252	3.65	3.6	33.2	16.5	6.69	20	20		
9-Oct-18	165.4	9	11	5	3,391	3.72	3.7	33.3	16.7	6.77	<10	30		
10-Oct-18	161.2	6	13	5	3,934	4.14	3.7	33.4	16.7	6.72	10	<10		
11-Oct-18	153.1	11	17	6	3,813	4.52	3.7	33.5	16.9	6.71	<10	10		
12-Oct-18	144.0	11	nr	nr	3,601	4.19	3.7	33.6	17.2	6.81	20	10		
13-Oct-18	226.5	13	nr	nr	4,304	3.28	3.8	34.2	15.7	6.80	12,000	13,000		
14-Oct-18	149.0	9	25	6	2,756	3.08	3.8	34.3	15.5	6.72	20	20		
15-Oct-18	152.5	14	10	5	3,141	3.51	3.9	34.4	16.5	6.71	<10	10		
16-Oct-18	160.5	13	9	5	3,949	4.15	3.9	34.4	16.6	6.54	20	10		
17-Oct-18	144.8	12	nr	nr	3,939	4.42	3.9	34.5	17.0	6.75	20	30		
18-Oct-18	146.0	12	nr	nr	3,855	4.20	3.9	34.5	17.6	7.03	10	10		
19-Oct-18	150.5	13	nr	nr	4,092	4.57	3.9	34.4	17.5	6.96	40	60		
20-Oct-18	138.7	14	nr	nr	3,815	4.30	3.9	34.4	17.1	6.71	20	20		
21-Oct-18	136.4	10	nr	nr	3,968	4.49	4.0	35.1	17.5	6.69	10	<10		
22-Oct-18	137.5	9	13	7	4,069	4.84	4.0	35.3	17.4	6.84	50	60		
23-Oct-18	140.4	14	13	5	4,353	5.01	4.1	35.6	17.2	6.72	170	200		
24-Oct-18	139.2	14	16	6	4,440	5.17	4.2	35.9	17.5	6.75	150	160		
25-Oct-18	135.7	15	15	6	4,397	5.01	4.2	36.0	17.5	6.78	20	50		
26-Oct-18	163.9	17	14	7	5,325	5.09	4.3	36.3	17.9	6.78	60	10		
27-Oct-18	134.0	13	14	6	3,926	4.92	4.4	36.8	17.0	6.75	40	140		
28-Oct-18	132.2	14	14	7	4,507	4.93	4.5	37.4	17.3	6.72	20	10		
29-Oct-18	145.7	59	44	30	4,166	4.33	4.5	37.7	17.5	6.70	<10	20		
30-Oct-18	283.2	16	18	9	4,305	2.00	4.5	37.3	12.2	6.91	260	280		
31-Oct-18	156.2	9	11	5	3,842	2.67	4.4	37.3	15.1	6.78	70	40		
<b>Max:</b>	297.8													
<b>Min:</b>	132.2													
<b>Average:</b>	<b>169.6</b>	<b>15</b>	<b>16</b>	<b>7</b>	<b>3,946</b>	<b>3.91</b>			<b>16.5</b>	<b>6.76</b>				
<b>Total Flow:</b>	<b>5258.1</b>													
<b>Geo.Mean:</b>											<b>29</b>	<b>30</b>		

**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