

**City of Winnipeg  
Water and Waste Department  
North End Water Pollution Control Centre Monitoring Data  
June 2019**

Licence 2684 RRR	File # 1071.10	Final Effluent 24 Hour Composite							Final Effluent Grab Sample			
		TSS	BOD5	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
1-Jun-19	147.3	14	19	9	5,199	4.12	3.3	43.6	15.0	6.78	120	140
2-Jun-19	147.4	19	21	11	4,672	3.75	3.3	43.8	15.0	6.81	30	40
3-Jun-19	198.8	28	30	18	5,666	3.75	3.4	43.9	15.3	6.81	40	90
4-Jun-19	153.7	20	22	10	4,381	3.08	3.4	43.6	15.1	6.87	640	710
5-Jun-19	148.0	21	20	13	5,017	3.73	3.5	43.5	16.0	6.78	30	30
6-Jun-19	151.9	21	23	13	5,088	4.04	3.5	43.3	16.2	6.76	110	120
7-Jun-19	149.1	18	18	13	4,755	4.38	3.5	43.0	16.6	6.94	5,790	4,610
8-Jun-19	223.0	32	27	17	5,730	3.15	3.5	42.4	16.0	6.88	2,610	3,280
9-Jun-19	180.4	20	15	11	3,500	2.31	3.5	41.5	15.9	6.74	120	140
10-Jun-19	174.7	18	15	11	4,402	3.22	3.5	41.1	15.7	6.82	310	240
11-Jun-19	157.4	19	18	8	4,739	3.82	3.6	41.3	16.1	6.77	200	110
12-Jun-19	152.7	15	19	13	5,055	4.14	3.6	41.5	16.3	6.81	90	100
13-Jun-19	152.5	15	18	9	4,909	4.09	3.7	41.4	17.2	6.97	60	700
14-Jun-19	148.0	12	20	8	4,913	4.20	3.7	41.6	17.0	6.76	80	30
15-Jun-19	134.6	20	19	8	4,375	4.35	3.8	42.2	16.9	6.83	2,190	1,440
16-Jun-19	153.3	24	30	18	4,323	3.93	3.9	42.4	17.0	6.84	1,220	930
17-Jun-19	265.5	18	23	12	4,486	2.23	4.0	41.7	15.6	6.73	4,880	3,650
18-Jun-19	150.1	14	15	9	3,797	2.90	4.0	41.4	16.8	6.71	490	190
19-Jun-19	149.5	17	13	8	4,770	2.51	4.0	41.2	17.3	6.77	90	170
20-Jun-19	148.0	12	13	8	4,811	2.32	4.0	41.1	17.5	6.81	30	40
21-Jun-19	146.9	15	14	8	4,861	2.32	3.9	40.7	17.6	6.85	90	90
22-Jun-19	201.7	14	15	6	5,525	1.42	3.9	40.0	16.7	6.78	80	50
23-Jun-19	146.1	11	12	5	4,003	1.38	3.9	39.6	17.1	6.86	10	30
24-Jun-19	153.1	8	13	6	4,577	1.94	3.9	39.8	18.4	6.86	30	20
25-Jun-19	152.6	6	12	5	5,446	2.24	3.9	39.8	18.1	6.79	<10	<10
26-Jun-19	148.8	8	15	8	5,475	2.15	3.9	39.9	18.1	6.83	30	30
27-Jun-19	141.2	8	17	5	5,381	2.50	3.8	40.0	18.4	6.83	10	10
28-Jun-19	141.1	7	13	6	5,078	2.36	3.8	40.1	18.3	6.76	30	10
29-Jun-19	141.8	8	16	5	5,188	2.51	3.7	40.0	18.3	6.80	40	20
30-Jun-19	129.8	11	21	6	4,505	2.73	3.6	39.8	18.4	6.82	10	20
<b>Max:</b>	265.5											
<b>Min:</b>	129.8											
<b>Average:</b>	<b>159.6</b>	<b>16</b>	<b>18</b>	<b>10</b>	<b>4,821</b>	<b>3.05</b>			<b>16.8</b>	<b>6.81</b>		
<b>Total Flow:</b>	<b>4788.7</b>											
<b>Geo.Mean:</b>											<b>108</b>	<b>110</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