

**City of Winnipeg  
Water and Waste Department  
North End Water Pollution Control Centre Monitoring Data  
May 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-May-17	201.0	16	12	8	4,844	2.86	2.7	28.9	13.8	7.12	248	126		
2-May-17	196.9	8	10	7	5,434	2.52	2.8	29.6	14.0	7.07	9	25		
3-May-17	208.2	ns	ns	ns	ns	ns	2.8	29.9	14.3	7.15	36	35		
4-May-17	181.0	11	11	7	5,648	2.40	2.8	30.8	14.7	7.04	35	32		
5-May-17	206.6	17	11	8	6,218	2.87	2.8	31.3	14.7	7.02	(20)	(35)		
6-May-17	177.1	9	9	8	5,649	2.60	2.8	31.7	14.5	7.01	11	nr		
7-May-17	182.5	9	10	6	6,279	2.63	2.8	32.1	14.1	7.01	10	15		
8-May-17	226.4	15	14	10	6,385	2.75	2.8	32.3	14.0	7.05	187	124		
9-May-17	187.5	11	11	6	5,137	2.54	2.8	32.5	13.9	7.10	10	15		
10-May-17	201.3	11	10	6	5,536	2.54	2.9	32.6	14.2	6.99	196	138		
11-May-17	185.5	ns	ns	ns	ns	ns	2.8	32.4	14.6	6.87	4	9		
12-May-17	181.6	12	11	9	4,812	2.43	2.9	32.5	14.4	6.94	28	41		
13-May-17	169.1	10	9	6	4,717	2.26	2.9	32.7	14.5	6.87	20	40		
14-May-17	162.5	7	13	5	4,761	2.71	2.9	33.1	14.5	6.83	13	12		
15-May-17	178.5	10	13	6	4,961	2.98	2.9	33.7	14.9	6.98	6	12		
16-May-17	191.8	7	15	6	4,988	2.80	3.1	34.5	15.1	6.94	<10	21		
17-May-17	164.7	10	22	5	4,216	2.27	3.1	34.9	14.9	7.04	48	69		
18-May-17	163.9	6	24	6	4,409	2.76	3.2	35.2	15.2	7.01	71	64		
19-May-17	153.1	8	25	6	4,469	2.87	3.2	35.3	15.3	6.77	20	22		
20-May-17	150.8	10	24	6	4,283	2.91	3.3	35.4	15.4	6.90	10	13		
21-May-17	354.1	36	31	18	5,914	1.84	3.3	35.0	13.0	6.92	(>2420)	(>2420)		
22-May-17	257.5	12	15	5	3,295	1.38	3.3	34.7	12.7	6.97	40	49		
23-May-17	185.1	3	10	4	4,090	1.92	3.3	34.6	14.2	7.11	13	23		
24-May-17	178.8	8	12	5	4,935	2.82	3.3	34.7	15.4	7.09	58	56		
25-May-17	173.2	9	17	4	5,403	3.17	3.3	34.9	15.6	7.04	58	43		
26-May-17	169.7	6	nr	nr	4,973	2.97	3.4	34.7	15.5	7.07	83	71		
27-May-17	161.0	8	13	4	4,764	2.80	3.4	34.6	15.6	6.99	20	19		
28-May-17	184.1	10	19	6	5,173	3.02	3.4	34.5	15.6	6.93	1	5		
29-May-17	189.4	11	15	5	3,978	2.11	3.4	34.1	15.0	7.01	4	16		
30-May-17	162.0	8	14	5	4,261	3.25	3.4	34.1	15.1	7.01	109	172		
31-May-17	159.9	10	16	6	4,606	3.97	3.5	34.4	15.7	6.96	248	517		
<b>Max:</b>	354.1													
<b>Min:</b>	150.8													
<b>Average:</b>	<b>188.5</b>	<b>11</b>	<b>15</b>	<b>7</b>	<b>4,970</b>	<b>2.65</b>			<b>15</b>	<b>6.99</b>				
<b>Total Flow:</b>	<b>5844.7</b>													
<b>Geo.Mean:</b>											<b>25</b>	<b>35</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