

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
January 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
				(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-Jan-17	126.2	16	25	14	3,697	1.28	2.9	33.6	15.5	6.76	430	430		
2-Jan-17	124.5	21	22	11	3,933	1.42	2.9	34.4	15.1	6.80	4,300	4,300		
3-Jan-17	137.1	17	nr	nr	4,292	1.28	2.8	35.1	13.9	7.06	930	240		
4-Jan-17	124.0	18	25	11	3,944	1.47	2.8	35.9	14.7	6.94	43	15		
5-Jan-17	132.7	15	26	11	4,577	1.63	2.8	36.8	14.8	6.79	240	240		
6-Jan-17	138.4	9	23	10	4,955	1.47	2.8	38.1	14.9	6.92	240	43		
7-Jan-17	125.0	13	22	10	4,339	1.50	2.8	39.0	15.0	7.18	300	150		
8-Jan-17	132.1	11	25	9	4,622	1.05	2.7	39.9	15.0	6.92	150	150		
9-Jan-17	133.3	17	16	7	4,613	1.27	2.6	40.1	13.7	7.12	150	43		
10-Jan-17	145.0	10	23	6	4,929	0.88	2.5	40.7	14.6	6.93	43	43		
11-Jan-17	117.2	10	28	7	3,984	0.93	2.5	41.5	14.2	6.75	150	150		
12-Jan-17	121.6	11	25	7	4,232	1.56	2.4	42.6	9.5	6.96	240	93		
13-Jan-17	133.3	12	20	7	4,918	1.60	2.4	43.6	13.1	7.21	430	430		
14-Jan-17	124.3	11	19	7	4,337	1.54	2.3	44.5	14.9	7.04	240	29		
15-Jan-17	122.5	9	18	6	4,165	1.58	2.2	45.3	14.9	6.89	930	930		
16-Jan-17	133.7	11	16	5	4,680	1.47	2.2	45.9	14.4	6.87	150	74		
17-Jan-17	119.5	10	14	5	4,373	1.54	2.2	46.6	15.3	6.87	930	210		
18-Jan-17	134.5	14	21	8	4,424	1.58	2.2	47.5	15.6	6.97	240	240		
19-Jan-17	128.0	13	22	6	4,709	1.48	2.2	47.9	15.5	6.84	740	740		
20-Jan-17	170.7	29	22	13	4,866	1.14	2.2	48.3	15.9	6.82	430	430		
21-Jan-17	303.5	17	14	7	5,251	0.27	2.1	48.0	11.5	6.79	43	43		
22-Jan-17	239.4	14	14	7	4,501	0.18	2.1	47.8	11.9	6.77	23	9		
23-Jan-17	173.4	8	12	5	3,224	0.27	2.0	47.5	12.4	6.77	240	240		
24-Jan-17	147.0	9	12	5	3,675	0.62	2.0	47.7	14.4	6.79	43	15		
25-Jan-17	143.2	10	21	6	4,081	0.89	1.9	47.9	14.4	6.94	93	93		
26-Jan-17	144.4	16	25	7	5,141	1.25	1.9	48.3	14.9	6.90	23	23		
27-Jan-17	145.8	10	22	7	5,234	1.22	1.9	48.9	13.9	6.79	43	43		
28-Jan-17	128.7	10	23	7	4,620	1.11	1.9	49.5	15.0	6.90	43	23		
29-Jan-17	124.1	12	28	7	4,667	0.95	1.8	50.0	15.4	6.96	93	93		
30-Jan-17	145.2	12	18	6	5,141	1.26	1.8	50.6	14.3	6.90	43	43		
31-Jan-17	124.2	14	16	6	4,918	1.36	1.8	51.4	14.8	7.14	93	43		
Max:	303.5													
Min:	117.2													
Average:	143.3	13	21	8	4,485	1.20			14	6.91				
Total Flow:	4442.3													
Geo.Mean:											166	103		

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