

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
January 2015**

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-Jan-15	113.6	33	32	23	3,509	3.54	5.2	40	14	7.03	4,300	4,300		
2-Jan-15	122.5	47	34	26	3,723	3.86	5.2	40	13	6.90	930	150		
3-Jan-15	124.6	54	45	23	3,886	4.50	5.2	40	13	7.09	430	230		
4-Jan-15	131.9	53	52	33	4,221	4.64	5.3	40	13	6.78	750	750		
5-Jan-15	142.2	44	34	32	4,195	3.80	5.2	40	13	7.06	930	930		
6-Jan-15	119.0	44	46	25	3,832	4.31	5.3	41	14	6.79	93	93		
7-Jan-15	143.0	72	38	32	4,204	4.10	5.3	41	13	6.92	93	93		
8-Jan-15	128.0	50	28	26	3,840	4.04	5.3	41	14	6.97	9,300	9,300		
9-Jan-15	122.0	50	24	24	3,599	4.30	5.3	41	14	6.89	93	43		
10-Jan-15	122.0	63	60	33	4,026	0.92	5.2	41	14	6.94	930	230		
11-Jan-15	130.0	88	>78	>40	4,537	1.70	5.2	42	13	6.96	>110,000	>110,000		
12-Jan-15	139.5	35	51	42	4,588	2.47	5.2	42	13	7.03	11,000	11,000		
13-Jan-15	129.1	21	25	8	3,641	2.37	5.1	42	13	6.89	1,500	1,500		
14-Jan-15	133.5	19	32	17	3,912	2.09	5.0	42	14	7.05	4,300	4,300		
15-Jan-15	134.2	12	29	15	4,255	2.13	4.9	42	14	6.97	430	230		
16-Jan-15	133.0	22	28	17	4,069	2.02	4.9	42	14	6.95	430	93		
17-Jan-15	128.4	31	34	20	3,889	2.09	4.8	42	14	6.77	2,300	2,300		
18-Jan-15	127.5	21	29	7	4,055	1.82	4.7	42	14	6.77	9,300	9,300		
19-Jan-15	128.0	30	29	18	4,058	1.72	4.6	42	14	6.74	930	930		
20-Jan-15	130.0	26	35	14	4,108	2.26	4.5	42	14	6.52	930	430		
21-Jan-15	135.0	22	38	14	4,091	2.09	4.5	42	14	6.81	93	93		
22-Jan-15	133.0	21	31	15	4,057	2.41	4.4	42	14	6.86	200	200		
23-Jan-15	160.0	21	25	18	4,704	2.77	4.4	43	14	6.81	230	93		
24-Jan-15	128.8	14	37	10	3,464	2.20	4.3	42	13	6.85	2,300	2,300		
25-Jan-15	129.1	19	61	13	3,692	1.87	4.3	43	14	6.77	4,300	4,300		
26-Jan-15	128.0	23	28	16	3,713	1.84	4.2	42	14	6.79	430	430		
27-Jan-15	135.1	19	31	14	4,081	2.87	4.1	42	14	6.89	93	93		
28-Jan-15	127.4	21	24	13	4,205	2.93	4.0	42	14	6.75	930	930		
29-Jan-15	126.1	16	30	11	3,859	2.80	4.0	42	14	6.81	430	430		
30-Jan-15	138.4	23	32	12	4,125	3.06	3.9	42	14	6.75	75	75		
31-Jan-15	128.6	24	39	7	3,497	2.43	3.8	42	14	6.76	380	93		
Max:	160.0													
Min:	113.6													
Average:	130.7	33	37	20	3,988	2.77			14	6.87				
Total Flow:	4051.3													
Geo.Mean:											839	610		

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.
- (8) Total Nitrogen results are calculated from TKN and nitrate values