

**City of Winnipeg  
Water and Waste Department  
North End Water Pollution Control Centre Monitoring Data  
March 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-Mar-15	130.4	22	23	21	4,160	0.80	2.4	37	13	6.80	930	930		
2-Mar-15	130.7	28	23	19	3,921	1.01	2.4	37	13	6.80	210	150		
3-Mar-15	129.7	30	24	18	4,176	1.45	2.4	37	13	6.78	93	93		
4-Mar-15	130.3	25	21	18	4,195	1.54	2.4	37	13	6.88	230	93		
5-Mar-15	136.3	30	24	17	4,771	1.69	2.4	37	13	6.87	2,300	930		
6-Mar-15	136.7	42	29	22	4,676	1.49	2.4	37	13	6.84	430	43		
7-Mar-15	128.8	35	31	20	4,197	1.64	2.3	37	13	6.76	93	93		
8-Mar-15	160.4	46	46	28	4,972	0.70	2.3	37	13	6.81	4,300	4,300		
9-Mar-15	195.7	60	35	29	4,559	0.97	2.3	36	12	6.91	430	430		
10-Mar-15	294.0	78	40	37	5,527	0.55	2.3	35	12	6.91	430	93		
11-Mar-15	211.0	35	27	20	3,925	0.54	2.2	35	10	7.66	150	150		
12-Mar-15	231.0	37	22	21	5,105	0.96	2.2	34	11	6.87	93	93		
13-Mar-15	279.5	32	22	18	4,696	0.90	2.1	34	10	6.90	430	430		
14-Mar-15	267.7	41	24	22	4,175	0.94	2.1	33	9	6.89	43	43		
15-Mar-15	299.2	29	18	15	3,741	0.90	2.1	32	9	6.80	430	230		
16-Mar-15	186.0	14	14	9	3,013	1.17	2.0	32	10	6.95	230	93		
17-Mar-15	151.5	19	16	10	4,031	1.99	2.1	32	11	6.91	93	93		
18-Mar-15	147.1	15	18	12	5,061	2.63	2.1	33	12	6.87	93	43		
19-Mar-15	147.7	15	23	15	4,548	3.10	2.1	33	13	6.84	150	43		
20-Mar-15	145.8	14	19	15	4,724	3.43	2.1	33	13	6.69	43	43		
21-Mar-15	153.5	23	23	19	4,835	3.54	2.2	33	13	6.90	210	210		
22-Mar-15	165.0	15	27	22	4,571	3.15	2.3	32	12	6.78	230	93		
23-Mar-15	186.0	27	25	23	4,539	2.76	2.3	32	11	6.87	230	230		
24-Mar-15	222.0	62	47	40	4,951	2.63	2.4	32	11	6.87	43	43		
25-Mar-15	<b>403.6</b>	71	38	34	4,924	1.30	2.4	31	8	7.06	(1500)	(750)		
26-Mar-15	196.5	19	20	18	3,125	1.59	2.4	32	9	6.90	430	150		
27-Mar-15	196.5	13	19	13	4,559	2.35	2.4	32	10	7.00	430	230		
28-Mar-15	148.4	18	21	17	4,111	2.23	2.4	32	12	6.91	430	430		
29-Mar-15	170.5	20	22	17	4,382	2.10	2.4	31	12	6.91	380	380		
30-Mar-15	160.2	15	18	13	4,006	2.48	2.5	31	12	6.61	430	430		
31-Mar-15	158.1	15	18	13	3,809	3.07	2.6	31	12	7.11	230	230		
<b>Max:</b>	403.6													
<b>Min:</b>	128.8													
<b>Average:</b>	<b>187.1</b>	<b>30</b>	<b>25</b>	<b>20</b>	<b>4,387</b>	<b>1.79</b>			<b>11</b>	<b>6.89</b>				
<b>Total Flow:</b>	<b>5799.8</b>													
<b>Geo.Mean:</b>											<b>247</b>	<b>165</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.
- (8) Total Nitrogen results are calculated from TKN and nitrate values