

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
May 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-May-15	221.0	6	13	6	4,023	2.54	4.4	34	14	6.89	43	43		
2-May-15	145.6	8	11	5	3,568	3.12	4.4	33	14	6.97	2,300	930		
3-May-15	134.7	6	11	5	3,692	3.34	4.4	33	14	6.91	93	93		
4-May-15	143.4	8	6	4	3,885	3.24	4.4	33	14	6.89	23	23		
5-May-15	148.1	9	11	5	4,147	3.18	4.3	33	14	6.85	4	<3		
6-May-15	178.4	23	17	11	4,387	2.69	4.3	33	14	6.88	23	23		
7-May-15	316.8	12	17	6	4,182	1.27	4.2	33	14	6.86	93	23		
8-May-15	174.5	3	10	4	3,403	1.71	4.1	32	14	6.98	930	930		
9-May-15	179.4	8	11	4	4,144	1.99	4.1	32	14	6.95	23	23		
10-May-15	176.9	8	8	4	3,839	2.15	4.0	32	13	6.92	38	38		
11-May-15	160.6	8	9	3	3,983	2.73	3.9	32	13	6.97	93	11		
12-May-15	155.9	5	12	4	4,318	3.43	3.9	32	14	6.96	430	150		
13-May-15	152.4	6	12	4	4,587	3.65	3.9	32	14	6.94	93	93		
14-May-15	402.4	69	36	26	5,311	2.01	3.8	31	14	6.72	(110,000)	(110,000)		
15-May-15	271.2	11	13	4	3,309	1.37	3.7	31	13	6.99	93	43		
16-May-15	193.5	43	22	nr	2,457	1.77	3.7	30	13	7.11	730	380		
17-May-15	601.8	71	nr	nr	2,624	0.62	3.6	29	12	6.99	(>110,000)	(>110,000)		
18-May-15	523.6	19	nr	nr	2,801	0.65	3.4	29	9	7.36	(46,000)	(46,000)		
19-May-15	356.0	12	nr	nr	3,471	1.15	3.4	28	11	7.41	43	9		
20-May-15	316.0	6	nr	nr	3,603	1.42	3.3	28	11	7.13	230	230		
21-May-15	288.1	4	nr	nr	4,206	1.84	3.2	28	12	7.11	120	64		
22-May-15	254.2	8	7	<3	3,864	1.81	3.2	27	12	7.10	43	23		
23-May-15	215.8	8	7	<3	3,366	2.05	3.1	27	13	7.12	75	43		
24-May-15	192.7	5	10	4	3,006	2.18	3.0	26	14	7.08	150	7		
25-May-15	196.2	7	9	<3	3,688	2.39	2.9	26	14	7.13	93	15		
26-May-15	204.2	6	6	<3	4,043	2.60	2.8	25	14	7.40	23	23		
27-May-15	184.8	18	13	5	4,305	2.80	2.8	25	14	7.02	<30	<30		
28-May-15	300.9	50	13	<3	5,146	2.00	2.7	24	14	6.92	(>110,000)	(110,000)		
29-May-15	187.7	8	6	<3	3,641	2.18	2.6	24	14	6.94	230	93		
30-May-15	166.9	14	8	6	3,972	2.84	2.6	24	14	7.02	43	23		
31-May-15	162.6	17	17	8	4,000	3.04	2.6	24	15	6.99	230	43		
Max:	601.8													
Min:	134.7													
Average:	235.7	16	12	5	3,838	2.25			13	7.02				
Total Flow:	7306.2													
Geo.Mean:											86	42		

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