

**City of Winnipeg
Water and Waste Department
West End Water Pollution Control Centre Monitoring Data
March 2016**

Licence # 2669 E RR	File # 53.10	Final Effluent 24 Hour Composite						Final Effluent Grab Sample					
		Date	Raw Sewage Daily Flow	TSS	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
			ML	(mg/L)	(mg/L)	(kg NH3-N/day)	(mg/L-P)	(mg/L-P)*	(mg/L-N)*	(°C)	(units)	MPN/100 mL	
1-Mar-16	19.2	16	36	728	2.62	3.0	42.4	0.6	7.34	>110,000	>110,000		
2-Mar-16	19.3	14	39	726	2.61	3.0	42.4	0.8	7.34	>110,000	>110,000		
3-Mar-16	19.0	13	33	727	2.56	3.0	42.5	0.7	7.24	>110,000	>110,000		
4-Mar-16	18.8	12	38	719	2.61	3.0	42.5	1.0	7.25	>110,000	>110,000		
5-Mar-16	19.4	9	31	740	2.55	3.0	42.6	0.5	7.29	>110,000	>110,000		
6-Mar-16	22.8	13	33	870	2.53	3.0	42.7	0.7	7.29	>110,000	>110,000		
7-Mar-16	28.0	11	28	979	2.47	3.0	42.8	1.0	7.26	>110,000	>110,000		
8-Mar-16	33.5	13	31	1231	2.30	3.0	42.9	1.2	7.28	>110,000	>110,000		
9-Mar-16	22.9	10	27	846	2.30	3.0	43.0	1.0	7.33	>110,000	>110,000		
10-Mar-16	21.3	10	27	772	2.24	3.0	42.9	1.2	7.34	>110,000	>110,000		
11-Mar-16	28.3	12	nr	1001	2.07	3.0	42.9	1.4	7.35	110,000	110,000		
12-Mar-16	40.7	16	24	1392	2.07	3.0	42.8	1.7	7.40	110,000	110,000		
13-Mar-16	54.4	12	20	1832	1.87	3.0	42.8	1.8	7.22	>110,000	>110,000		
14-Mar-16	51.9	13	19	1338	1.74	2.9	42.5	1.5	7.29	24,000	24,000		
15-Mar-16	69.3	12	16	2100	1.54	2.9	42.1	1.6	7.32	110,000	110,000		
16-Mar-16	56.6	10	nr	1528	1.32	2.8	41.7	1.5	7.31	46,000	46,000		
17-Mar-16	39.8	8	15	1078	1.29	2.8	41.3	1.7	7.61	46,000	46,000		
18-Mar-16	36.5	5	13	982	1.17	2.7	40.8	1.7	7.37	>110,000	>110,000		
19-Mar-16	34.5	10	23	900	1.10	2.7	40.6	1.8	7.45	46,000	46,000		
20-Mar-16	32.8	9	10	852	1.21	2.6	40.1	1.8	7.38	46,000	46,000		
21-Mar-16	29.9	14	12	748	1.16	2.6	39.6	2.1	7.51	24,000	24,000		
22-Mar-16	27.9	9	10	678	1.02	2.5	39.1	2.0	7.33	110,000	110,000		
23-Mar-16	26.5	7	9	690	0.90	2.4	38.6	2.1	7.34	46,000	46,000		
24-Mar-16	26.3	8	nr	655	0.94	2.4	38.1	2.5	7.34	110,000	110,000		
25-Mar-16	26.9	4	9	648	0.91	2.3	37.5	2.0	7.40	15,000	15,000		
26-Mar-16	25.4	9	9	577	0.80	2.3	36.8	2.2	7.56	110,000	110,000		
27-Mar-16	25.6	9	9	580	0.73	2.2	36.2	2.8	7.54	24,000	24,000		
28-Mar-16	25.4	10	8	543	0.59	2.1	35.5	2.6	7.33	7,500	7,500		
29-Mar-16	24.8	13	11	508	0.67	2.0	35.0	3.9	7.46	24,000	4,300		
30-Mar-16	25.0	17	14	487	0.53	2.0	34.3	4.2	7.56	740	740		
31-Mar-16	25.1	25	16	472	0.41	1.9	33.7	4.7	7.81	930	930		
Max:	69.3												
Min:	18.8												
Average:	30.9	11	20	901	1.58			1.8	7.38				
Total Flow:	957.6												
Geo.Mean:										49,265	46,606		

Notes:

- (1) Effluent ammonia load based upon Raw Sewage flows and Final Cell 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) Total Nitrogen results are calculated from TKN and nitrate values