

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

Licence # 2716RR	File # 1069.10	Final Effluent 24 Hour Composite										Final Effluent Grab Sample		
		TSS		BOD5		cBOD5		Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	E.Coli
		(mg/L)	(mg/L)*	(mg/L)	(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-16	43.7	13	9	26	20	19	9	1,673	4.43	4.4	45.0	14.4	6.58	430
2-Mar-16	42.1	17	10	28	20	18	10	1,684	4.35	4.4	45.2	13.9	6.70	>110,000
3-Mar-16	44.0	12	10	25	20	13	10	1,749	4.28	4.4	45.3	14.5	6.55	430
4-Mar-16	44.1	20	10	23	21	15	10	1,681	4.13	4.4	45.3	14.5	6.61	240
5-Mar-16	46.3	9	10	16	21	8	10	1,805	3.60	4.4	45.2	14.3	6.59	2,400
6-Mar-16	54.0	9	11	16	21	10	10	2,067	3.40	4.4	45.2	14.5	6.65	93
7-Mar-16	61.3	19	11	35	22	27	11	1,924	3.76	4.4	45.0	13.7	6.59	240
8-Mar-16	70.9	11	11	29	23	22	12	1,821	2.53	4.4	44.3	12.5	6.68	4
9-Mar-16	51.0	9	11	22	23	13	12	1,520	2.66	4.3	44.0	13.0	6.63	4,300
10-Mar-16	49.6	7	11	14	23	5	12	1,656	2.74	4.3	43.7	14.0	6.58	4
11-Mar-16	78.7	29	12	nr	22	nr	11	2,030	2.75	4.2	43.1	14.3	6.59	9
12-Mar-16	89.1	21	12	14	22	10	11	1,792	1.67	4.1	42.3	11.5	6.87	43
13-Mar-16	98.4	21	13	25	22	21	12	1,752	1.61	4.1	41.9	11.5	6.91	43
14-Mar-16	100.2	18	13	24	22	19	12	1,843	1.80	4.0	41.2	11.5	6.88	(23)
15-Mar-16	167.1	42	14	30	23	29	13	1,872	1.13	3.9	40.1	11.4	7.24	(>110,000)
16-Mar-16	122.7	8	14	nr	22	nr	12	1,866	1.31	3.9	39.3	11.6	7.14	(240)
17-Mar-16	97.4	4	14	9	21	6	12	1,763	1.57	3.8	38.5	11.1	7.22	23
18-Mar-16	92.5	20	14	17	21	10	12	1,776	1.62	3.7	37.7	11.5	6.95	74
19-Mar-16	82.5	6	14	22	21	7	12	1,773	1.81	3.6	36.9	11.2	6.98	93
20-Mar-16	78.5	10	14	14	20	6	12	1,734	1.93	3.5	36.1	11.9	6.80	9
21-Mar-16	74.3	6	14	13	20	5	12	1,673	1.74	3.4	35.4	12.2	6.84	21
22-Mar-16	68.1	7	14	17	20	6	12	1,757	2.06	3.3	34.9	12.1	6.82	15
23-Mar-16	63.1	5	14	17	20	7	12	1,753	2.44	3.3	34.4	12.6	6.81	14
24-Mar-16	61.1	7	13	nr	19	nr	11	1,766	2.60	3.2	34.0	13.1	6.85	(930)
25-Mar-16	63.0	3	13	15	19	6	11	1,846	2.62	3.2	33.9	13.2	6.84	4
26-Mar-16	58.8	7	13	18	19	9	11	1,670	2.43	3.2	33.9	13.1	6.84	9
27-Mar-16	58.6	4	13	16	18	5	11	1,724	2.52	3.2	33.4	13.5	6.92	15
28-Mar-16	58.8	5	12	13	18	4	11	1,806	2.70	3.2	33.1	13.4	6.73	nr
29-Mar-16	62.1	5	12	7	18	5	11	1,907	2.81	3.1	33.0	13.6	6.77	7
30-Mar-16	60.0	3	12	22	18	5	10	1,775	2.61	3.1	32.5	13.8	6.77	14
31-Mar-16	59.1	5	12	19	17	4	10	1,815	2.77	3.0	32.1	13.7	6.76	4
Max:	167.1													
Min:	42.1													
Average:	71.0	12		20		11		1,783	2.59			12.9	6.80	
Total Flow:	2201.0													
Geo.Mean:														52

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 98.6 ML/D per clause 27 of Licence 2716RR
- (6) Bracketed Coliform results not used in the Geometric Mean calculation
- (7) Raw wastewater flows in excess of 100 ML/D will by-pass the secondary process
- (8) Total Nitrogen results are calculated from TKN and nitrate values