

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

September 2019

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-Sep-19	81.4	15	7	15	17	6	3	1,832	2.07	3.5	44.1	17.6	6.73	100
2-Sep-19	65.9	9	7	13	17	4	3	1,687	2.06	3.4	44.0	17.4	6.80	10
3-Sep-19	72.5	7	7	17	17	<4	3	1,878	2.16	3.4	44.1	18.1	6.78	40
4-Sep-19	61.7	17	7	16	17	7	3	1,808	2.39	3.4	44.1	18.0	6.70	10
5-Sep-19	60.3	10	7	11	17	6	3	1,996	2.98	3.3	44.0	17.9	6.70	10
6-Sep-19	57.8	12	8	11	16	4	3	1,861	3.32	3.4	43.8	18.0	6.67	80
7-Sep-19	55.6	8	7	15	16	5	3	1,935	3.63	3.4	43.8	17.6	6.75	160
8-Sep-19	56.2	12	8	14	16	5	3	1,961	3.74	3.4	43.8	17.6	6.77	10
9-Sep-19	56.7	14	8	17	16	7	3	1,894	3.44	3.4	43.8	17.9	6.61	<10
10-Sep-19	87.9	12	8	21	16	6	3	1,951	2.20	3.5	43.4	16.9	6.84	60
11-Sep-19	61.9	8	8	10	16	<4	3	1,789	2.09	3.4	43.0	17.4	6.74	60
12-Sep-19	61.9	9	8	19	16	4	3	1,937	2.91	3.5	42.7	17.7	6.69	40
13-Sep-19	91.9	21	9	25	16	12	4	2,086	2.24	3.4	42.0	17.3	6.69	(110)
14-Sep-19	73.6	15	9	20	16	9	4	1,788	2.76	3.4	41.3	16.8	6.83	<10
15-Sep-19	64.8	36	10	46	17	36	5	1,814	4.05	3.5	40.9	17.5	7.03	610
16-Sep-19	62.0	31	11	40	18	24	6	1,736	3.31	3.5	40.8	17.8	6.94	>24,200
17-Sep-19	59.9	15	11	37	18	7	6	1,701	0.70	3.4	40.5	17.3	6.50	1,070
18-Sep-19	58.2	10	11	19	18	6	6	1,787	2.01	3.3	40.4	18.6	6.68	80
19-Sep-19	55.3	11	12	26	19	5	6	1,908	3.06	3.3	40.3	18.4	6.70	140
20-Sep-19	129.6	80	14	58	20	38	8	1,918	1.52	3.3	39.6	17.7	6.95	(>24,200)
21-Sep-19	153.0	23	15	20	21	13	8	1,989	1.30	3.2	38.5	16.7	7.51	(610)
22-Sep-19	122.3	28	16	35	21	17	9	1,773	1.76	3.2	37.5	16.9	7.30	(300)
23-Sep-19	94.7	13	16	35	22	7	9	1,686	1.51	3.1	36.4	17.3	7.03	120
24-Sep-19	80.2	10	16	27	22	<4	9	1,716	1.50	3.1	36.2	17.6	6.94	100
25-Sep-19	77.1	8	16	13	21	<4	8	1,912	2.15	3.0	36.1	17.5	6.84	100
26-Sep-19	87.6	25	16	30	22	18	9	1,848	2.20	3.1	35.9	17.5	6.86	10
27-Sep-19	131.0	18	17	18	22	10	9	1,742	1.56	3.1	35.5	16.3	7.13	(360)
28-Sep-19	83.2	9	17	16	22	10	9	1,839	2.10	3.1	35.2	16.6	7.04	150
29-Sep-19	96.4	27	17	33	23	>22	10	1,995	2.22	3.0	34.7	17.0	6.93	80
30-Sep-19	141.0	47	19	>37	24	>22	11	1,932	1.38	3.0	34.3	16.0	7.11	(120)
Max:	153.0													
Min:	55.3													
Average:	81.4	19		24		11		1,857	2.34			17.4	6.86	
Total Flow:	2441.6													
Geo.Mean:														66

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