

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

December 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-Dec-19	56.8	10	29	21	23	8	11	2,090	3.69	4.0	43.4	14.6	6.87	30
2-Dec-19	58.2	8	29	11	23	8	11	1,926	3.44	4.0	43.6	13.9	6.84	60
3-Dec-19	54.2	5	28	16	22	5	11	2,049	3.30	4.1	44.0	15.0	6.65	10
4-Dec-19	55.9	4	28	15	22	5	11	2,001	3.44	4.1	44.4	15.0	6.65	10
5-Dec-19	51.5	7	28	20	22	5	10	1,988	3.84	4.2	45.0	14.9	6.65	40
6-Dec-19	53.4	6	28	19	21	5	10	2,003	3.81	4.2	45.6	14.8	6.66	<10
7-Dec-19	52.3	7	28	13	20	6	10	2,076	4.10	4.3	46.1	14.7	6.75	10
8-Dec-19	53.7	7	28	13	20	7	11	1,982	3.81	4.3	46.7	14.3	6.66	20
9-Dec-19	56.1	5	28	20	19	6	11	2,059	3.66	4.4	47.1	14.6	6.62	30
10-Dec-19	51.5	9	25	17	20	7	11	1,766	3.09	4.3	47.4	14.1	6.64	220
11-Dec-19	54.2	10	25	19	20	8	11	2,282	3.28	4.3	47.4	14.1	6.74	120
12-Dec-19	52.2	7	24	25	20	8	11	1,958	3.67	4.3	47.3	13.9	6.79	20
13-Dec-19	50.7	12	24	23	20	8	11	1,952	3.44	4.3	47.4	14.1	6.63	110
14-Dec-19	51.9	11	24	30	21	10	11	2,045	3.89	4.4	47.6	13.6	6.80	90
15-Dec-19	52.4	10	24	25	21	11	11	2,133	3.90	4.4	47.6	13.8	6.72	110
16-Dec-19	50.7	10	23	24	21	9	11	1,830	3.29	4.3	47.4	14.2	6.73	200
17-Dec-19	49.6	8	19	19	20	6	10	1,845	3.08	4.2	47.7	14.0	6.61	160
18-Dec-19	50.0	6	19	21	20	6	10	1,925	3.58	4.2	47.9	14.1	6.64	100
19-Dec-19	49.8	5	19	22	21	5	10	1,942	3.93	4.2	47.9	14.3	6.62	20
20-Dec-19	51.0	7	19	21	21	5	9	1,887	3.97	4.3	47.9	14.0	6.65	20
21-Dec-19	50.5	7	19	13	21	4	9	1,954	4.32	4.3	47.9	14.0	6.68	30
22-Dec-19	49.6	6	19	13	21	5	10	1,865	4.25	4.3	47.8	14.1	6.67	<10
23-Dec-19	49.9	8	15	5	19	3	8	1,861	3.85	4.2	47.7	14.5	6.60	10
24-Dec-19	51.6	7	13	13	18	4	7	1,811	3.89	4.2	47.6	14.3	6.69	<10
25-Dec-19	45.5	6	8	30	18	5	7	1,747	4.00	4.1	48.0	14.2	6.67	40
26-Dec-19	46.0	7	8	28	19	5	7	1,868	4.54	4.2	48.7	14.4	6.67	<10
27-Dec-19	48.4	6	8	21	19	5	6	2,139	4.25	4.3	49.1	14.2	6.62	<10
28-Dec-19	48.1	8	7	24	19	6	6	1,914	3.99	4.3	49.3	14.3	6.63	<10
29-Dec-19	47.3	8	7	28	19	6	6	1,935	4.40	4.3	49.8	14.1	6.74	<10
30-Dec-19	47.9	10	7	24	20	7	6	1,820	4.01	4.4	50.3	14.2	6.65	<10
31-Dec-19	49.5	9	7	29	20	8	6	1,841	3.73	4.4	50.7	14.1	6.65	20
Max:	58.2													
Min:	45.5													
Average:	51.3	8		20		6		1,951	3.79			14.3	6.68	
Total Flow:	1,590.4													
Geo.Mean:														23

- 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