

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
January 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-Jan-16	41.8	10	11	31	23	12	9	1,665	4.23	4.6	45.4	15.4	6.71	15
2-Jan-16	42.8	12	11	28	24	12	9	1,715	4.30	4.6	45.6	15.5	6.61	4
3-Jan-16	44.9	15	11	35	24	12	9	1,848	4.27	4.6	45.5	15.2	6.65	23
4-Jan-16	44.8	12	11	31	25	13	9	1,600	3.87	4.6	45.6	15.3	6.63	240
5-Jan-16	43.8	10	11	33	25	12	10	1,683	3.87	4.6	45.7	15.5	6.64	150
6-Jan-16	43.9	11	12	35	26	9	10	1,687	4.02	4.6	45.8	15.5	6.61	43
7-Jan-16	44.6	9	12	31	26	9	10	1,781	4.16	4.7	46.1	15.0	6.64	43
8-Jan-16	43.9	8	12	23	26	9	10	1,747	4.31	4.7	46.3	15.2	6.63	23
9-Jan-16	44.6	16	12	24	26	10	10	1,736	3.94	4.7	46.6	14.6	6.77	4
10-Jan-16	45.2	12	12	23	26	10	10	1,674	3.85	4.7	46.6	14.4	6.65	150
11-Jan-16	47.0	12	12	20	26	10	10	1,810	3.77	4.7	46.7	14.9	6.71	43
12-Jan-16	44.2	9	12	nr	26	nr	10	1,616	3.83	4.7	46.8	14.3	6.73	430
13-Jan-16	43.4	12	12	26	26	13	10	1,670	4.13	4.7	46.9	14.0	6.69	300
14-Jan-16	43.9	6	12	9	26	7	10	1,676	3.72	4.7	46.8	14.8	6.58	430
15-Jan-16	44.1	6	12	19	26	7	10	1,611	3.94	4.7	47.0	14.7	6.73	200
16-Jan-16	44.6	8	12	20	26	nr	10	1,673	3.87	4.7	47.0	13.9	6.78	43
17-Jan-16	45.7	8	12	20	26	8	10	1,711	4.10	4.7	47.0	13.7	6.59	23
18-Jan-16	46.5	10	12	26	26	16	11	1,724	3.96	4.7	47.0	15.0	6.63	23
19-Jan-16	43.7	10	12	21	26	13	11	1,611	3.74	4.7	47.0	15.1	6.61	72
20-Jan-16	42.8	11	12	19	26	nr	10	1,679	3.86	4.6	47.2	15.4	6.64	9
21-Jan-16	43.4	8	12	16	25	9	10	1,712	4.35	4.6	47.1	15.5	6.63	93
22-Jan-16	43.6	7	12	20	25	12	10	1,759	4.23	4.6	47.2	15.3	6.69	15
23-Jan-16	43.8	8	11	11	25	6	10	1,732	4.17	4.6	47.3	15.5	6.67	23
24-Jan-16	44.5	10	11	13	24	7	10	1,859	4.26	4.6	47.3	15.4	6.63	23
25-Jan-16	43.6	9	11	19	24	14	10	1,725	4.29	4.6	47.1	15.3	6.59	43
26-Jan-16	43.1	8	10	15	23	10	10	1,724	4.20	4.6	47.0	15.7	6.68	15
27-Jan-16	43.9	6	10	16	23	8	10	1,758	4.21	4.5	47.1	15.6	6.66	4
28-Jan-16	44.4	8	10	16	23	10	10	1,723	4.29	4.5	47.0	15.5	6.62	9
29-Jan-16	44.2	9	9	17	22	7	9	1,694	3.92	4.5	47.0	15.5	6.61	15
30-Jan-16	44.7	4	9	6	21	5	9	1,755	3.99	4.5	46.9	15.4	6.68	3
31-Jan-16	45.4	8	9	17	20	8	9	1,775	4.03	4.5	47.1	15.1	6.64	9
Min:	41.8													
Average:	44.2	9		21		10		1,714	4.05			15	6.66	
Total Flow:	1370.9													
Geo.Mean:														32

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