

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
August 2013**

Licence 2716RR	Raw Sewage	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-Aug-13	49.9	18	13	nr	12	nr	6	1,404	3.50	3.6	35	19	6.92	1,400
2-Aug-13	49.6	12	13	nr	12	nr	6	1,206	3.01	3.6	35	18	6.66	75
3-Aug-13	46.2	11	12	35	13	7	6	1,127	3.43	3.6	35	18	6.72	43
4-Aug-13	48.0	9	12	35	14	23	7	1,081	3.32	3.6	35	18	6.69	93
5-Aug-13	52.0	7	12	73	17	11	7	889	2.92	3.6	34	18	6.73	43
6-Aug-13	51.6	7	12	63	19	10	7	996	3.13	3.6	34	18	6.64	150
7-Aug-13	48.7	19	12	51	20	10	8	1,173	3.14	3.6	34	18	6.58	7
8-Aug-13	49.3	5	12	17	20	6	8	1,361	3.14	3.6	34	18	6.62	23
9-Aug-13	48.2	10	12	20	20	6	8	1,334	3.42	3.6	34	18	6.63	4
10-Aug-13	46.3	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	19	6.56	93
11-Aug-13	48.9	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	19	6.62	15
12-Aug-13	49.9	9	11	27	21	6	8	1,322	3.45	3.5	32	18	6.52	93
13-Aug-13	48.8	8	11	31	21	6	8	1,390	3.64	3.5	32	18	6.59	9
14-Aug-13	47.8	9	11	21	22	7	8	1,343	3.67	3.6	32	19	6.67	36
15-Aug-13	49.4	8	12	27	22	6	8	1,403	3.84	3.6	33	19	6.65	<3
16-Aug-13	49.5	9	12	16	23	6	8	1,377	3.67	3.7	33	19	6.62	23
17-Aug-13	45.8	9	12	24	22	5	8	1,228	3.83	3.7	33	19	6.58	<3
18-Aug-13	59.6	15	12	20	23	10	8	1,406	3.20	3.7	33	19	6.57	4
19-Aug-13	57.9	7	12	17	23	5	8	1,234	2.77	3.7	33	19	6.53	9
20-Aug-13	52.0	4	11	9	22	4	8	1,326	3.02	3.6	32	19	6.60	4
21-Aug-13	49.9	12	12	53	22	11	8	1,423	3.70	3.7	32	19	6.56	4
22-Aug-13	49.5	9	12	36	22	8	8	1,456	3.96	3.7	32	20	6.59	<3
23-Aug-13	49.1	14	12	25	22	7	8	1,439	4.05	3.8	32	19	6.60	4
24-Aug-13	48.2	12	12	19	21	9	8	955	2.74	3.8	32	19	6.53	<3
25-Aug-13	48.2	16	12	24	21	10	8	925	2.41	3.9	33	19	6.54	<3
26-Aug-13	50.3	15	12	23	22	11	8	966	2.48	3.9	33	19	6.56	4
27-Aug-13	50.3	14	12	24	23	10	8	986	2.39	3.8	32	20	6.59	9
28-Aug-13	49.8	11	11	21	24	10	8	1,453	3.71	3.8	32	20	6.50	4,300
29-Aug-13	49.6	16	11	46	25	10	8	992	2.38	3.8	32	20	6.57	<3
30-Aug-13	49.7	11	10	21	26	11	8	1,456	3.78	3.8	32	20	6.58	15
31-Aug-13	46.1	16	10	49	28	11	8	1,282	3.73	3.8	32	19	6.57	15
Max:	59.6													
Min:	45.8													
Average:	49.7	11		31		9		1,239	3.29			19	6.61	
Total Flow:														
Geo.Mean:														15

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