

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
May 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-May-13	115.1	ns	16	ns	25	ns	10	ns	ns	3.3	32	10	7.09	(4300)
2-May-13	86.6	ns	16	ns	24	ns	10	ns	ns	3.2	30	11	6.97	9
3-May-13	77.7	12	16	20	24	10	10	1,515	2.22	3.1	30	11	7.15	93
4-May-13	73.0	12	16	20	23	9	10	1,408	1.87	3.1	29	12	6.92	230
5-May-13	71.5	17	16	27	23	11	10	1,387	1.54	3.0	29	12	6.82	43
6-May-13	72.6	17	17	38	24	11	10	1,264	1.62	2.9	29	12	6.76	230
7-May-13	68.6	14	16	32	24	8	10	1,427	1.72	2.9	28	13	6.86	150
8-May-13	67.4	11	16	27	24	7	10	1,563	1.85	2.8	28	12	6.79	230
9-May-13	65.8	18	17	38	24	11	10	1,632	2.08	2.7	28	13	6.81	43
10-May-13	66.1	22	17	42	25	14	10	1,533	1.43	2.6	27	13	6.84	230
11-May-13	63.5	9	16	29	26	7	10	1,472	1.16	2.5	27	12	6.74	24,000
12-May-13	63.4	11	16	26	26	7	10	1,516	1.37	2.5	27	13	6.76	43
13-May-13	63.8	8	16	15	27	<4	9	1,481	1.54	2.4	27	13	6.72	93
14-May-13	62.4	20	16	24	27	18	9	1,534	2.38	2.4	27	13	6.70	43
15-May-13	60.1	ns	16	ns	26	ns	9	ns	ns	2.3	26	13	6.52	93
16-May-13	59.0	6	16	17	25	<4	9	1,547	2.40	2.3	26	13	6.73	93
17-May-13	60.1	5	16	12	24	<3	9	1,568	2.52	2.2	26	14	6.66	230
18-May-13	58.6	6	14	10	25	<2	9	1,501	2.47	2.3	27	14	6.68	43
19-May-13	66.5	8	14	15	24	<4	8	1,482	2.11	2.3	27	14	6.70	43
20-May-13	94.9	25	15	31	25	17	9	1,642	1.56	2.3	26	13	6.75	4
21-May-13	104.6	8	14	nr	24	nr	9	1,474	1.03	2.2	26	12	6.91	(93)
22-May-13	75.2	8	14	19	23	5	8	1,527	2.11	2.1	26	14	6.89	15
23-May-13	70.2	10	14	28	23	6	8	1,559	2.09	2.1	26	13	6.83	43
24-May-13	65.5	4	14	36	23	5	8	1,559	2.15	2.1	25	14	6.85	7
25-May-13	60.9	10	14	37	23	5	8	1,443	2.17	2.0	25	13	6.81	4
26-May-13	60.7	8	13	>26	22	4	8	1,517	2.32	2.0	26	13	6.80	23
27-May-13	61.6	7	12	<37	21	5	7	1,447	2.46	2.0	26	14	6.72	23
28-May-13	68.9	8	11	<33	20	8	7	1,626	2.54	2.1	26	14	6.71	23
29-May-13	63.1	11	10	<22	20	7	6	1,370	1.87	2.0	26	14	6.77	43
30-May-13	89.7	22	11	20	20	15	7	2,162	1.77	2.1	27	15	6.81	23
31-May-13	171.7	50	12	62	22	32	8	1,889	1.47	2.2	28	14	7.28	(110000)
Max:	171.7													
Min:	58.6													
Average:	74.5	13		26		9		1,537	1.92			13	6.82	
Total Flow:														
Geo.Mean:														56

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