

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
June 2014**

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-Jun-14	56.5	9	7	nr	9	nr	7	1,662	3.21	3.3	34	14	6.62	9
2-Jun-14	65.1	8	7	11	9	10	7	1,778	2.93	3.3	34	14	6.70	15
3-Jun-14	58.9	6	7	10	8	8	7	1,367	2.98	3.3	34	15	6.67	2,300
4-Jun-14	56.9	8	7	9	8	7	7	1,581	3.15	3.3	34	15	6.75	230
5-Jun-14	66.5	4	7	7	8	6	7	1,670	2.78	3.3	34	14	6.67	43
6-Jun-14	57.4	6	7	7	8	5	7	1,595	3.30	3.3	34	14	6.68	2,300
7-Jun-14	54.0	8	7	8	8	5	7	1,583	3.49	3.3	34	15	6.69	23
8-Jun-14	57.9	13	7	11	8	6	7	1,696	3.45	3.3	34	14	6.70	11
9-Jun-14	59.5	7	7	9	8	5	7	1,613	3.11	3.3	34	15	6.70	93
10-Jun-14	55.2	5	7	8	8	5	7	1,655	3.47	3.4	34	15	6.68	15
11-Jun-14	54.5	6	7	10	8	5	7	1,673	3.62	3.4	34	15	6.65	9
12-Jun-14	53.9	4	7	7	8	4	6	1,675	3.71	3.4	34	15	6.67	23
13-Jun-14	53.3	10	8	8	8	5	6	1,625	3.69	3.4	35	16	6.73	23
14-Jun-14	59.8	23	8	18	9	13	7	1,530	3.03	3.4	35	15	6.64	15
15-Jun-14	176.1	45	9	nr	9	nr	7	1,678	1.09	3.4	34	13	6.90	(43)
16-Jun-14	165.5	15	10	13	9	12	7	1,871	1.22	3.3	34	13	7.26	(930)
17-Jun-14	89.0	8	10	6	9	4	7	1,620	1.95	3.2	33	14	7.11	75
18-Jun-14	76.7	5	9	6	9	4	7	1,503	2.16	3.2	33	14	6.96	7
19-Jun-14	87.5	23	10	18	9	17	7	1,636	2.10	3.2	33	15	6.82	15
20-Jun-14	140.8	18	10	nr	9	nr	7	1,830	1.52	3.2	32	15	7.16	(15,000)
21-Jun-14	94.1	9	10	9	9	6	7	1,572	1.86	3.1	32	14	7.01	43
22-Jun-14	86.1	8	10	8	9	6	7	1,619	2.02	3.1	32	15	6.98	23
23-Jun-14	84.8	8	10	10	9	7	7	1,661	2.19	3.0	31	15	6.80	15
24-Jun-14	78.6	6	10	6	9	4	7	1,620	2.36	3.0	31	15	6.94	9
25-Jun-14	72.9	6	10	8	9	4	7	1,575	2.46	3.0	31	15	6.85	4
26-Jun-14	69.8	<3	10	7	9	5	6	1,634	2.72	3.0	31	16	6.81	9
27-Jun-14	73.0	12	10	12	9	7	7	1,606	2.89	3.0	31	16	6.84	<30
28-Jun-14	120.4	53	12	nr	9	nr	7	1,373	1.63	3.0	30	16	6.75	(23)
29-Jun-14	147.2	28	12	nr	9	nr	7	1,372	1.06	2.9	30	15	7.06	(9)
30-Jun-14	161.3	15	13	nr	9	nr	7	1,405	1.02	2.8	29	14	7.39	(46,000)
Max:	176.1													
Min:	53.3													
Average:	84.4	13		9		7		1,609	2.54			15	6.84	
Total Flow:	2533.4													
Geo.Mean:														29

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