

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
November 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-Nov-13	48.2	7	9	15	15	6	6	1,806	4.33	4.0	41	18	6.61	43
2-Nov-13	47.4	10	9	14	15	5	6	1,688	4.28	4.1	41	18	6.63	<3
3-Nov-13	48.8	13	9	22	15	8	6	1,748	4.81	4.1	41	18	6.50	<3
4-Nov-13	45.8	6	9	16	15	6	6	1,567	3.99	4.1	41	18	6.48	4
5-Nov-13	48.2	15	9	23	15	10	6	1,644	3.56	4.1	41	18	6.57	43
6-Nov-13	46.9	10	9	17	15	6	6	1,664	3.30	4.1	42	18	6.59	43
7-Nov-13	46.9	9	9	20	15	10	6	1,758	3.74	4.1	42	18	6.58	23
8-Nov-13	47.2	9	9	18	14	8	6	1,684	3.89	4.1	42	18	6.58	9
9-Nov-13	47.5	14	9	22	14	10	6	1,636	3.27	4.1	42	17	6.51	<3
10-Nov-13	45.7	8	9	17	15	7	6	1,600	3.68	4.1	42	17	6.50	<3
11-Nov-13	48.1	15	9	nr	14	nr	6	1,723	4.13	4.2	42	17	6.48	<3
12-Nov-13	46.2	13	9	28	15	8	6	1,553	3.64	4.2	43	17	6.53	4
13-Nov-13	45.6	15	9	26	15	12	6	1,583	3.21	4.2	43	17	6.57	93
14-Nov-13	48.2	20	10	33	16	12	6	1,654	2.68	4.2	43	17	6.57	43
15-Nov-13	46.2	10	10	19	17	7	7	1,644	3.44	4.2	43	17	nr	9
16-Nov-13	46.9	17	10	22	17	8	7	1,572	3.34	4.2	43	17	6.67	<3
17-Nov-13	48.0	24	11	30	18	12	7	1,696	3.78	4.2	43	17	6.52	<3
18-Nov-13	47.3	29	11	34	18	12	7	1,574	3.26	4.2	43	16	6.50	9
19-Nov-13	47.1	15	11	23	19	11	8	1,655	2.94	4.2	43	17	6.58	23
20-Nov-13	54.1	13	12	19	19	9	7	1,806	4.30	4.3	44	16	6.60	>110,000
21-Nov-13	46.8	11	11	15	19	8	7	1,585	3.95	4.3	44	16	6.57	7
22-Nov-13	46.9	8	11	nr	18	nr	7	1,608	3.88	4.3	44	16	6.49	nr
23-Nov-13	47.4	69	13	64	20	26	8	1,663	3.34	4.4	44	16	6.40	43
24-Nov-13	48.6	336	24	>76	19	>36	8	1,749	3.93	4.7	45	16	6.50	4
25-Nov-13	46.9	11	25	18	19	9	8	1,570	4.21	4.7	45	16	6.63	38
26-Nov-13	42.6	8	25	13	19	7	8	1,521	3.98	4.7	45	16	6.71	43
27-Nov-13	47.8	6	25	12	20	6	8	1,606	3.71	4.7	45	16	6.70	9
28-Nov-13	43.6	6	25	15	20	5	8	1,559	3.42	4.7	45	15	6.58	93
29-Nov-13	49.5	33	26	nr	19	nr	8	1,781	4.52	4.8	45	16	6.76	1,100
30-Nov-13	45.8	9	26	16	19	6	8	1,634	3.91	4.7	45	16	6.64	23
Max:	54.1													
Min:	42.6													
Average:	47.2	26		24		10		1,651	3.75			17	6.57	
Total Flow:	1416.1													
Geo.Mean:														16

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