

**City of Winnipeg**  
**Water and Waste Department**  
**South End Water Pollution Control Centre Monitoring Data**  
**November 2012**

Licence 2716RR	Raw Sewage	Final Effluent 24 Hour Composite									Final Effluent Grab Sample				
		Date	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-12	51.5	11	12	39	16	7	10	1,685	3.63	3.7	39	18	6.68	93	
2-Nov-12	49.0	6	12	37	17	7	10	1,525	3.62	3.7	38	16	6.65	230	
3-Nov-12	51.9	7	12	39	17	7	9	1,531	3.22	3.7	38	16	6.70	21	
4-Nov-12	53.1	10	12	37	18	7	9	1,709	3.58	3.8	39	18	6.59	29	
5-Nov-12	52.1	11	12	44	20	8	9	1,599	3.45	3.8	39	17	6.54	930	
6-Nov-12	58.6	7	12	nr	20	nr	9	1,611	2.99	3.8	39	17	6.62	93	
7-Nov-12	53.3	8	11	38	21	4	9	1,689	3.48	3.8	39	18	6.69	230	
8-Nov-12	52.7	6	11	39	22	5	9	1,703	3.87	3.8	39	18	6.69	75	
9-Nov-12	51.4	8	11	nr	22	nr	9	1,615	3.62	3.8	39	17	6.70	9	
10-Nov-12	51.7	7	11	nr	22	nr	9	1,886	3.78	3.8	39	16	6.69	11	
11-Nov-12	51.1	5	11	31	23	5	9	1,692	3.60	3.8	39	16	6.82	43	
12-Nov-12	50.9	10	11	24	24	7	9	1,665	4.14	3.8	39	16	6.60	23	
13-Nov-12	50.9	11	11	27	25	9	9	1,668	4.02	3.8	39	17	6.58	75	
14-Nov-12	50.1	11	11	23	25	9	9	1,687	3.86	3.8	39	16	6.63	230	
15-Nov-12	50.4	6	11	25	26	10	9	1,690	3.68	3.9	39	16	6.91	43	
16-Nov-12	49.8	8	10	23	25	7	8	1,568	3.23	3.8	39	16	6.61	210	
17-Nov-12	51.5	6	10	19	25	<3	7	1,560	3.23	3.8	39	16	6.64	93	
18-Nov-12	51.8	10	10	29	26	9	7	1,590	3.56	3.9	40	16	6.61	23	
19-Nov-12	48.0	10	10	32	27	8	7	1,512	3.71	3.9	39	16	6.56	43	
20-Nov-12	52.3	8	10	nr	27	nr	7	1,542	3.60	3.9	39	17	6.52	4	
21-Nov-12	51.6	5	9	31	28	5	7	1,599	3.96	3.9	39	17	6.70	23	
22-Nov-12	52.8	6	9	36	29	6	7	1,641	3.81	3.9	39	17	6.66	43	
23-Nov-12	51.1	12	9	33	30	4	7	1,693	4.15	4.0	39	16	6.60	93	
24-Nov-12	51.6	6	9	37	31	5	7	1,784	3.66	4.0	40	16	6.63	15	
25-Nov-12	52.3	9	9	46	33	7	7	1,699	3.78	4.0	40	16	6.63	9	
26-Nov-12	45.7	23	9	51	34	22	7	1,527	4.09	4.0	40	15	6.51	15	
27-Nov-12	57.7	25	10	41	34	13	7	1,891	4.31	4.0	40	15	6.63	43	
28-Nov-12	47.7	11	10	28	34	7	7	1,441	3.32	4.0	40	15	6.59	150	
29-Nov-12	48.9	12	10	37	34	10	8	1,589	3.61	4.0	40	15	6.65	7	
30-Nov-12	48.9	14	10	38	34	13	8	1,566	3.55	4.0	40	15	6.60	43	
<b>Max:</b>	58.6														
<b>Min:</b>	45.7														
<b>Average:</b>	51.3	10	34		8			1,639	3.67			16	6.64		
<b>Total Flow:</b>	1540.3													45	

**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