

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

**December, 2006**

Date	Raw Sewage	Final Effluent 24 Hour Composite										Final Effluent Grab Sample			
	Daily Flow	TSS	BOD5	cBOD5	Ammonia		Ortho Phosphorus	Total Phosphorus		Total Nitrogen		Temp.	pH	Fecal Coliform	E.Coli
	ML**	(mg/L)	(mg/L)	(mg/L)	(mg/L-N)	(kg NH3-N/day)	(mg/L-P)	(mg/L-P)	(mg/L-P)*	(mg/L-N)	(mg/L-N)*	(°C)	(units)	MPN/100 mL	
1-Dec-06	48.2	6	29	4	27	1,301	4.46	5.2	5.1	31	30	15	6.65	75	75
2-Dec-06	47.3	6	18	5	27	1,277	4.32	5.3	5.1	34	31	16	6.88	<3	<3
3-Dec-06	50.2	7	25	6	26	1,305	4.05	5.0	5.1	30	30	16	6.80	43	15
4-Dec-06	50.2	6	23	5	26	1,305	4.12	4.5	5.1	33	31	16	6.85	230	43
5-Dec-06	47.7	4	23	5	26	1,240	4.10	4.6	5.0	33	32	16	6.57	43	23
6-Dec-06	46.8	6	24	6	27	1,264	4.35	4.9	5.1	31	32	16	6.64	110	110
7-Dec-06	46.5	6	27	6	27	1,256	4.54	5.2	5.1	33	32	15	6.76	23	13
8-Dec-06	46.6	5	26	5	27	1,258	4.49	4.9	5.1	35	32	16	6.67	79	22
9-Dec-06	49.1	5	23	5	27	1,326	4.25	5.5	5.1	39	32	16	6.70	<3	<3
10-Dec-06	49.9	6	22	5	26	1,297	4.20	4.8	5.1	34	33	16	6.76	<3	<3
11-Dec-06	46.8	6	23	6	25	1,170	4.28	4.8	5.1	31	33	16	6.64	110	5
12-Dec-06	46.6	5	16	4	26	1,212	4.71	5.3	5.1	35	33	16	6.59	13	13
13-Dec-06	46.5	5	19	4	28	1,302	4.46	5.3	5.1	35	33	16	6.66	27	17
14-Dec-06	49.0	5	22	4	27	1,323	4.46	5.6	5.1	36	33	16	6.59	49	33
15-Dec-06	50.2	6	17	5	27	1,355	4.34	4.5	5.1	28	33	16	6.75	70	70
16-Dec-06	53.2	7	21	6	27	1,436	4.27	4.7	5.1	36	33	16	6.74	8	5
17-Dec-06	54.0	7	24	5	25	1,350	3.90	4.3	5.0	33	33	16	6.77	79	79
18-Dec-06	52.3	6	21	5	25	1,308	3.88	NR	5.0	2	32	15	7.05	33	23
19-Dec-06	51.9	7	17	5	26	1,349	4.20	5.3	5.0	40	33	15	6.76	23	23
20-Dec-06	51.9	5	15	6	26	1,349	3.90	4.9	5.0	36	33	15	6.63	46	46
21-Dec-06	51.6	5	18	6	26	1,342	3.98	4.8	5.0	38	33	15	6.82	130	79
22-Dec-06	50.1	7	11	5	27	1,353	4.07	3.8	5.0	36	34	15	6.84	13	13
23-Dec-06	48.6	8	15	7	26	1,264	3.80	3.6	4.9	36	34	15	6.70	8	8
24-Dec-06	48.9	12	16	9	25	1,223	3.56	3.5	4.8	33	34	15	6.94	350	350
25-Dec-06	41.2	7	13	6	26	1,071	3.49	3.6	4.8	37	34	15	6.87	79	79
26-Dec-06	44.2	9	21	7	30	1,326	4.32	4.6	4.8	40	34	15	6.78	23	23
27-Dec-06	44.8	8	22	7	31	1,389	4.61	4.2	4.7	34	34	15	6.90	49	22
28-Dec-06	47.4	14	23	8	29	1,375	4.31	4.2	4.7	33	34	15	6.90	23	23
29-Dec-06	46.4	11	22	8	28	1,299	4.04	4.3	4.7	35	34	15	6.85	49	49
30-Dec-06	46.1	ns	ns	ns	ns	ns	ns	ns	4.7	ns	33	15	6.76	5	5
31-Dec-06	45.7	5	21	5	27	1,234	3.98	4.4	4.7	34	33	15	ns	8	8
<b>Max:</b>	54														
<b>Min:</b>	41.2														
<b>Average:</b>	<b>48.4</b>	<b>7</b>	<b>21</b>	<b>6</b>	<b>27</b>	<b>1,295</b>	<b>4.18</b>	<b>4.67</b>		<b>33</b>		<b>15</b>	<b>6.76</b>		
<b>Geo.Mean:</b>														<b>28</b>	<b>20</b>

**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 26 of Licence 2716.
- (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