

**City of Winnipeg  
Water and Waste Department  
West End Water Pollution Control Centre Monitoring Data  
September 2009**

Date	Raw Sewage	Final Effluent 24 Hour Composite									Final Effluent Grab Sample			
	Daily Flow	TSS	cBOD5	Ammonia		Ortho Phosphorus	Total Phosphorus		Total Nitrogen		Temp.	pH	Fecal Coliform	E.Coli
	ML	(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-Sep-09	28.9	53	8	0.30	9	1.46	2.5	3.1	5	4	19	9.13	33	33
2-Sep-09	28.6	40	6	0.20	6	1.25	2.0	3.1	4	4	19	9.16	79	79
3-Sep-09	27.9	39	7	0.17	5	1.13	1.7	3.1	4	4	ns	ns	ns	ns
4-Sep-09	28.9	42	7	0.05	1	1.00	1.8	3.1	4	4	21	9.35	70	46
5-Sep-09	27.1	57	nr	<0.02	0	0.96	2.0	3.0	4	4	18	9.29	110	110
6-Sep-09	26.5	60	7	<0.02	0	0.84	1.9	3.0	4	4	21	9.30	170	110
7-Sep-09	28.5	88	10	<0.02	0	0.79	2.2	3.0	9	4	21	9.45	49	17
8-Sep-09	33.1	72	9	0.05	2	0.84	2.2	3.0	7	5	20	9.23	220	94
9-Sep-09	32.3	43	10	0.03	1	0.90	2.2	2.9	6	5	19	9.24	2,300	2,300
10-Sep-09	28.9	90	9	<0.02	0	1.18	2.2	2.9	5	5	19	9.25	330	330
11-Sep-09	39.2	86	10	<0.02	0	1.26	2.2	2.8	6	5	20	9.25	110	70
12-Sep-09	34.7	62	10	<0.02	0	1.00	2.0	2.8	3	5	20	9.20	220	170
13-Sep-09	32.9	48	7	<0.02	0	1.00	1.8	2.8	4	5	19	9.22	49	23
14-Sep-09	30.5	52	8	<0.02	0	0.99	1.9	2.7	5	5	20	9.29	33	33
15-Sep-09	29.6	71	7	<0.02	0	0.99	1.9	2.6	5	5	19	9.25	49	22
16-Sep-09	29.3	51	8	0.03	1	0.99	1.8	2.6	5	5	20	9.28	79	79
17-Sep-09	28.5	48	8	0.09	3	1.04	1.6	2.5	5	5	19	9.33	46	33
18-Sep-09	28.4	64	11	0.03	1	1.03	1.9	2.4	6	5	19	9.33	23	23
19-Sep-09	28.3	83	9	0.03	1	1.38	2.0	2.4	6	5	19	9.24	33	33
20-Sep-09	28.7	120	25	0.08	2	0.97	2.5	2.4	11	5	19	9.20	33	23
21-Sep-09	28.5	102	12	0.18	5	0.99	2.4	2.3	9	5	19	9.15	<2	<2
22-Sep-09	26.6	70	10	0.25	7	1.03	2.1	2.3	7	5	17	9.14	4	nr
23-Sep-09	27.1	66	9	0.13	4	1.06	1.9	2.2	6	5	17	9.21	33	33
24-Sep-09	27.1	36	8	0.09	2	1.04	1.7	2.2	5	5	17	9.14	23	23
25-Sep-09	27.1	39	9	0.04	1	0.99	1.6	2.1	4	5	18	9.29	79	49
26-Sep-09	27.4	33	9	0.04	1	1.04	1.5	2.1	4	5	18	9.28	140	46
27-Sep-09	28.3	64	nr	0.05	1	1.07	1.7	2.0	5	6	18	9.28	49	4
28-Sep-09	25.8	50	10	0.09	2	1.08	1.9	2.0	4	6	14	9.14	220	4
29-Sep-09	22.9	44	10	0.07	2	1.07	1.8	2.0	3	6	11	9.17	280	17
30-Sep-09	22.8	74	11	0.11	3	1.09	1.9	2.0	3	5	10	9.20	nr	49
<b>Max:</b>	39.2													
<b>Min:</b>	22.8													
<b>Average:</b>	<b>28.8</b>	<b>62</b>	<b>9</b>	<b>0.07</b>	<b>2</b>	<b>1.05</b>	<b>2.0</b>		<b>5</b>		<b>18</b>	<b>9.24</b>	<b>65</b>	<b>39</b>
<b>Geo.Mean:</b>														

**Notes:**

(1) \* = 30 day rolling average

(2) Effluent ammonia load based upon Raw Sewage flows and Final Cell NH3-N concentrations

(3) nr - not recorded or no result; na - not analyzed; ns - no sample

(4) Final Effluent flow data unavailable

(5) Where < values are reported 50% of the MDL is used for calculated results

(6) Licence No. 2669 E RR