

**City of Winnipeg  
Water and Waste Department  
South End Water Pollution Control Centre Monitoring Data  
September 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-Sep-13	43.4	13	10	64	30	11	8	1,223	3.67	3.8	32	19	6.54	7
2-Sep-13	46.4	17	10	36	30	13	8	1,378	3.85	3.8	33	19	6.58	<3
3-Sep-13	50.9	16	11	35	30	12	8	1,475	3.54	3.9	33	19	6.62	43
4-Sep-13	49.7	13	11	36	29	9	8	1,433	3.47	3.9	33	19	6.59	150
5-Sep-13	49.4	15	11	29	27	8	8	1,545	3.74	3.9	33	19	6.66	21
6-Sep-13	49.9	13	11	34	27	8	8	1,556	3.72	3.9	34	20	6.58	230
7-Sep-13	47.7	16	11	36	27	9	8	1,497	3.74	3.9	34	20	6.53	43
8-Sep-13	48.8	15	11	32	28	10	8	1,548	3.70	4.0	34	20	6.60	7
9-Sep-13	49.5	13	12	25	29	10	8	1,588	3.46	4.1	35	19	6.58	150
10-Sep-13	50.5	11	12	22	29	10	9	1,584	3.42	4.2	37	20	6.53	2,300
11-Sep-13	50.2	10	12	21	29	8	9	1,571	3.64	4.3	37	20	6.58	430
12-Sep-13	48.5	11	12	22	29	8	9	1,570	3.87	4.3	37	19	6.55	43
13-Sep-13	48.1	8	12	nr	29	nr	9	1,564	3.92	4.3	37	19	6.54	43
14-Sep-13	49.5	13	12	25	29	9	9	1,486	3.68	4.2	37	19	6.52	23
15-Sep-13	48.5	11	13	27	29	8	9	1,265	3.63	4.2	37	19	6.47	4
16-Sep-13	48.1	13	13	29	29	8	9	1,483	3.55	4.2	37	19	6.51	21
17-Sep-13	47.5	10	13	28	30	9	9	1,583	3.74	4.2	38	20	6.60	43
18-Sep-13	51.7	13	13	30	30	9	9	1,805	3.94	4.2	38	19	6.54	430
19-Sep-13	47.5	8	13	27	31	7	9	1,525	3.83	4.4	39	20	6.58	43
20-Sep-13	47.0	6	13	24	30	6	9	1,533	3.98	4.4	39	19	6.54	14
21-Sep-13	47.0	10	13	23	29	6	9	1,557	4.19	4.4	39	19	6.66	14
22-Sep-13	48.1	7	12	25	29	5	9	1,558	4.04	4.3	40	19	6.58	4
23-Sep-13	48.6	6	12	20	29	6	9	1,565	3.52	4.3	40	19	6.56	3
24-Sep-13	47.7	8	12	nr	29	nr	9	1,542	3.72	4.3	40	19	6.56	43
25-Sep-13	47.2	8	12	19	29	6	9	1,629	3.90	4.3	40	20	6.56	nr
26-Sep-13	50.1	9	12	nr	29	nr	9	1,664	3.89	4.3	40	19	6.53	15
27-Sep-13	47.1	12	12	23	29	7	8	1,586	3.96	4.3	41	19	7.48	>110,000
28-Sep-13	81.8	21	12	24	28	11	9	1,816	2.57	4.3	40	19	6.66	93
29-Sep-13	55.6	4	12	nr	28	nr	8	1,245	2.30	4.2	40	18	6.53	15
30-Sep-13	50.7	10	11	18	27	6	8	1,292	2.71	4.2	40	19	6.54	43
<b>Max:</b>	81.8													
<b>Min:</b>	43.4													
<b>Average:</b>	<b>49.9</b>	<b>11</b>		<b>28</b>		<b>8</b>		<b>1,522</b>	<b>3.63</b>			<b>19</b>	<b>6.60</b>	
<b>Total Flow:</b>	<b>1496.6</b>													
<b>Geo.Mean:</b>														<b>44</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 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