

**City of Winnipeg  
Water and Waste Department  
South End Water Pollution Control Centre Monitoring Data  
July 2016**

Licence # 2716RR	File # 1069.10	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
Date	Raw Sewage Daily Flow ML**													
1-Jul-16	63.7	8	11	14	19	6	8	1,459	2.28	2.5	31.7	17.3	6.85	7
2-Jul-16	58.4	6	11	10	19	4	8	1,366	2.38	2.6	32.0	17.5	6.83	4
3-Jul-16	61.3	5	11	28	19	5	8	1,532	2.80	2.6	32.2	17.4	6.82	15
4-Jul-16	66.2	7	11	26	20	6	8	1,575	2.59	2.6	32.5	17.4	6.77	43
5-Jul-16	71.4	4	11	23	20	4	8	1,657	2.20	2.6	32.6	17.4	6.79	240
6-Jul-16	61.6	5	11	24	20	4	8	1,540	2.41	2.7	32.8	17.5	6.83	14
7-Jul-16	58.8	7	11	26	21	4	8	1,582	2.79	2.7	33.0	17.5	6.79	23
8-Jul-16	59.1	6	10	26	21	4	7	1,573	3.21	2.7	33.3	17.6	6.77	9
9-Jul-16	56.3	5	10	25	21	5	7	1,521	3.09	2.7	33.4	18.5	6.76	9
10-Jul-16	57.3	10	10	nr	21	8	8	1,529	2.95	2.7	33.5	18.3	6.83	9
11-Jul-16	58.4	18	11	31	21	9	8	1,529	2.90	2.7	33.7	18.3	6.78	23
12-Jul-16	87.0	36	12	36	21	15	8	1,793	2.61	2.7	33.7	17.9	6.92	(240)
13-Jul-16	91.4	14	12	20	21	12	8	1,691	1.36	2.7	33.6	17.7	7.06	93
14-Jul-16	72.0	4	11	11	21	4	8	1,605	1.93	2.6	33.3	17.7	6.91	43
15-Jul-16	65.6	6	11	7	21	3	7	1,561	2.50	2.6	32.7	17.9	6.94	9
16-Jul-16	61.6	4	11	14	20	<3	7	1,533	2.73	2.6	32.1	18.4	6.80	9
17-Jul-16	68.1	12	10	19	20	4	7	1,696	2.89	2.6	32.2	18.2	6.80	4
18-Jul-16	66.7	6	10	17	20	3	7	1,600	2.51	2.6	32.4	18.1	6.85	4
19-Jul-16	60.9	5	9	19	20	4	6	1,675	3.07	2.7	32.6	18.5	6.82	15
20-Jul-16	62.8	16	9	25	20	9	6	1,720	3.16	2.8	32.8	18.6	6.80	<3
21-Jul-16	77.2	9	9	18	20	6	6	1,697	2.08	2.8	32.7	18.9	6.86	21
22-Jul-16	61.5	3	9	14	20	5	6	1,445	2.29	2.8	32.8	19.0	6.82	15
23-Jul-16	72.6	10	10	22	20	8	7	1,619	2.58	2.8	32.8	18.8	6.73	43
24-Jul-16	66.6	5	9	18	20	7	6	1,438	2.19	2.8	32.8	18.6	6.78	7
25-Jul-16	61.8	4	9	21	20	4	6	1,514	2.70	2.8	33.2	18.5	6.73	9
26-Jul-16	58.9	6	8	28	20	5	6	1,502	3.00	2.9	33.6	18.9	6.83	23
27-Jul-16	56.2	3	8	26	21	6	6	1,606	3.12	3.0	34.0	19.0	6.77	7
28-Jul-16	39.0	6	8	28	21	7	6	1,117	3.49	3.0	34.4	18.5	6.75	<3
29-Jul-16	55.3	8	8	21	21	8	6	1,592	3.62	3.1	34.3	18.8	6.74	150
30-Jul-16	51.0	8	8	23	21	4	6	1,449	3.36	3.1	34.5	19.2	6.68	43
31-Jul-16	49.6	9	8	20	22	4	6	1,408	3.44	3.2	34.7	19.1	6.77	43
<b>Max:</b>	91.4													
<b>Min:</b>	39.0													
<b>Average:</b>	<b>63.2</b>	<b>8</b>		<b>21</b>		<b>6</b>		<b>1,552</b>	<b>2.72</b>			<b>18</b>	<b>6.81</b>	
<b>Total Flow:</b>	<b>1958.0</b>													
<b>Geo.Mean:</b>														<b>15</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