

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

September 2021

Licence 2684 RRR	File # 1071.10	Final Effluent 24 Hour Composite							Final Effluent Grab Sample					
		Date	Raw Sewage Daily Flow ML	TSS	BOD5	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
				(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-21	153.0	20	21	10	4,161	3.91	4.4	38.1	20.2	6.75	220	180		
2-Sep-21	151.1	21	25	11	4,079	3.73	4.3	37.9	20.1	6.72	310	220		
3-Sep-21	149.0	18	25	12	4,261	4.55	4.3	37.6	19.7	6.76	90	80		
4-Sep-21	139.1	19	29	12	4,158	4.35	4.2	37.2	20.4	6.73	50	50		
5-Sep-21	134.0	19	26	10	3,913	4.05	4.2	37.0	20.1	6.71	50	100		
6-Sep-21	136.4	16	26	9	3,436	4.37	4.1	36.3	20.1	6.68	40	30		
7-Sep-21	147.3	13	25	10	3,740	4.14	4.1	35.8	19.6	6.90	200	150		
8-Sep-21	149.3	16	25	11	4,255	4.03	4.1	36.2	20.1	6.79	690	390		
9-Sep-21	147.3	19	32	11	4,684	3.88	4.3	36.9	20.2	6.67	>24,200	15,500		
10-Sep-21	148.8	20	35	11	4,880	4.87	4.4	37.3	20.0	6.72	730	640		
11-Sep-21	144.6	15	35	12	4,510	3.53	4.4	36.9	19.9	6.72	1580	1210		
12-Sep-21	134.8	15	27	11	4,503	3.65	4.5	36.7	20.1	6.74	19,900	13,000		
13-Sep-21	139.8	16	36	12	4,418	4.74	4.5	36.7	20.3	6.77	15,500	24,200		
14-Sep-21	139.6	25	nr	nr	5,361	4.29	4.5	36.9	19.8	6.80	3,650	4,350		
15-Sep-21	139.2	15	30	7	6,753	5.45	4.5	37.6	19.8	6.78	500	1,020		
16-Sep-21	273.4	58	67	32	8,638	3.32	4.5	37.4	18.9	6.70	>24,200	>24,200		
17-Sep-21	150.9	10	21	6	3,487	2.57	4.4	37.0	18.2	6.61	100	90		
18-Sep-21	135.3	12	28	4	4,775	4.20	4.4	37.2	18.5	6.83	30	60		
19-Sep-21	129.8	10	16	4	4,648	5.39	4.5	37.8	20.3	6.76	20	100		
20-Sep-21	170.8	6	29	6	5,483	3.70	4.6	38.8	20.1	6.83	20	10		
21-Sep-21	147.5	11	40	7	4,659	4.25	4.7	39.6	21.0	6.65	nr	60		
22-Sep-21	142.3	23	34	6	4,838	4.67	4.9	40.5	19.2	6.80	20	10		
23-Sep-21	144.8	9	34	7	5,631	5.23	4.9	41.4	20.0	6.79	20	20		
24-Sep-21	142.7	14	35	8	5,267	5.11	5.0	42.0	19.9	6.84	20	20		
25-Sep-21	134.8	13	33	7	4,972	5.35	5.1	42.5	19.8	6.81	100	40		
26-Sep-21	134.2	13	35	7	4,844	5.13	5.1	43.3	20.0	6.77	30	50		
27-Sep-21	129.2	14	33	7	4,640	6.85	5.3	44.3	20.0	6.69	10	20		
28-Sep-21	142.8	13	41	9	5,485	5.07	5.3	45.1	20.9	6.77	10	20		
29-Sep-21	140.4	11	37	6	5,125	5.09	5.4	45.8	20.4	6.74	<10	<10		
30-Sep-21	137.6	17	55	8	5,147	4.90	5.4	46.4	20.4	6.75	nr	10		
Max:	273.4													
Min:	129.2													
Average:	147.0	17	32	9	4,825	4.48			19.9	6.75				
Total Flow:	4,409.5													
Geo.Mean:											173	156		

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) Raw wastewater flows in excess of 400 ML/D will by-pass the secondary process and flows in excess of 675 ML/D will cause raw sewage to by-pass the plant