

CITY OF WINNIPEG
WATER & WASTE DEPARTMENT
LABORATORY SERVICES DIVISION

WEST-END WATER POLLUTION CONTROL CENTRE

7740 Wilkes Avenue

1998

STATISTICAL SUMMARY OF ANALYTICAL DATA (MONTHLY MEANS)

1998 MONTH	RAW SEWAGE FLOWS		TOTAL SUSPENDED SOLIDS			BIOCHEMICAL OXYGEN DEMAND					TOTAL ORGANIC CARBON			TOTAL KJELDAHL NITROGEN				TOTAL AMMONIA				NITRATE-NITRITE				TOTAL PHOSPHORUS			
	DAILY MEAN	MONTHLY TOTAL	Raw Sewage	Final Effluent	Conv. Lag. Eff.	Raw Sewage	Final Effluent		Conv. Lagoon Eff.		Raw Sewage	Final Effluent	Conv. Lag. Eff.	Raw Sewage	Final Effluent	Conv. Lag. Eff.	Primary Sludge	Raw Sewage	Final Effluent	Conv. Lag. Eff.	Primary Sludge	Raw Sewage	Final Effluent	Conv. Lag. Eff.	Raw Sewage	Final Effluent	Conv. Lag. Eff.	Primary Sludge	
	(ML/D)	(ML)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	CBOD		CBOD		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L N)	(mg/L N)	(mg/L N)	(mg/Kg N)	(mg/L N)	(mg/L N)	(mg/L N)	(mg/Kg N)	(mg/L N)	(mg/L N)	(mg/L N)	(mg/L P)	(mg/L P)	(mg/L P)	(mg/Kg P)
JANUARY	25.7	797	257	44	NS	225	58	25	NS	NS	95	31	NS	39.9	26.2	NS	1384	29.0	19.3	NS	485	0.06	10.85	NS	7.6	6.5	NS	386	
FEBRUARY	32.0	897	266	57	NS	225	54	28	NS	NS	92	46	NS	38.1	24.6	NS	NA	24.7	15.8	NS	NA	0.44	8.79	NS	7.2	5.3	NS	NA	
MARCH	31.9	988	223	22	15	184	29	16	24	14	101	35	33	34.7	19.2	24.9	1259	22.7	15.1	21.8	571	0.56	6.42	0.45	7.1	4.5	4.6	398	
APRIL	33.7	1,010	212	36	49	170	32	20	38	17	86	35	34	32.0	20.7	16.0	1328	21.0	18.2	6.9	458	0.59	1.96	2.09	6.4	4.0	3.5	406	
MAY	36.4	1,127	193	92	47	167	48	27	36	<10	78	40	30	NA	NA	NA	NA	21.7	21.3	1.8	303	0.64	2.38	2.57	NA	NA	NA	NA	
JUNE	34.2	1,025	188	20	NS	164	35	20	NS	NS	90	31	NS	23.1	16.3	NS	1596	20.3	18.9	NS	NA	<0.04	0.72	NS	4.8	2.8	NS	688	
JULY	30.5	946	178	27	31	149	53	20	39	13	94	32	37	29.6	17.0	12.2	NA	21.9	12.8	4.9	589	<0.04	4.58	1.27	6.1	3.9	4.1	437	
AUGUST	29.1	903	197	17	34	182	50	14	23	11	100	28	31	30.5	18.7	5.1	1443	22.3	16.5	<1.0	690	<0.04	3.42	1.28	6.1	4.1	4.6	405	
SEPTEMBER	26.6	799	207	24	21	206	80	12	20	5	115	26	25	34.6	18.5	5.2	1221	25.3	9.6	<1.0	528	<0.04	1.59	1.39	7.3	4.8	4.8	348	
OCTOBER	28.6	885	227	25	12	202	78	14	36	<5	96	29	21	31.4	19.1	10.8	1612	25.8	15.4	7.7	583	<0.04	3.65	2.77	5.5	4.3	3.6	429	
NOVEMBER	25.8	775	227	45	13	220	103	16	38	5	106	35	23	37.1	21.1	18.5	1537	28.2	16.0	16.6	671	<0.04	6.55	2.98	5.5	4.1	4.4	371	
DECEMBER	26.0	806	218	52	8	216	73	18	32	7	114	47	26	37.9	26.8	22.8	1159	26.6	19.8	17.9	532	<0.04	7.52	3.45	6.3	4.8	4.0	261	
MEAN	30.0	913	216	38	25	193	58	19	32	10	97	34	29	33.5	20.7	14.4	1393	24.1	16.5	11.1	541	-	4.87	2.03	6.4	4.5	4.2	413	
# of ANALYSES	234	-	234	212	163	222	195	187	150	151	204	193	152	187	150	151	30	178	199	152	135	123	104	86	135	104	69	31	

TOTAL 1998 FLOW (ML): 10,959

NS - NO SAMPLE NR - NO RESULT NA - NOT ANALYZED CBOD - Carbonaceous Biochemical Oxygen Demand

Remarks: No effluent samples from 'Conventional Lagoon' during January/February, 1998 due to faulty heaters and faulty air compressor.
 No effluent samples from 'Conventional Lagoon' during June, 1998 due to redirection of Final Effluent to the Assiniboine River during construction activity at the WEWPCC.
Effective January, 1999, the sample described as Conventional Lagoon Effluent will be renamed Final Cell Effluent on analytical data summaries.
 Total routine WEWPCC analyses for 1998 (excluding metals data): **8,428**