

CITY OF WINNIPEG
WATER & WASTE DEPARTMENT
LABORATORY SERVICES DIVISION

SOUTH-END WATER POLLUTION CONTROL CENTRE

100 Ed Spencer Drive

1999

STATISTICAL SUMMARY OF ANALYTICAL DATA (MONTHLY MEANS)

1999 MONTH	RAW SEWAGE FLOWS		TOTAL SUSPENDED SOLIDS		BIOCHEMICAL OXYGEN DEMAND			TOTAL ORGANIC CARBON				TOTAL KJELDAHL NITROGEN			TOTAL AMMONIA			NITRATE-NITRITE		TOTAL PHOSPHOROUS		
	DAILY MEAN	MONTHLY TOTAL	Raw Sewage	Final Effluent	Raw Sewage	Final Effluent <i>CBOD</i>		Raw Sewage	Second. Effluent Composite	Sec. Eff. Composite (filtrate)	Final Effluent	Raw Sewage	Final Effluent	Primary Sludge	Raw Sewage	Final Effluent	Primary Sludge	Raw Sewage	Final Effluent	Raw Sewage	Final Effluent	Primary Sludge
	(ML/D)	(ML)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L N)	(mg/Kg N)	(mg/L N)	(mg/L N)	(mg/Kg N)	(mg/L N)	(mg/L N)	(mg/L P)	(mg/L P)	(mg/Kg P)
JANUARY	48.1	1,490	357	36	375	70	7	165	44	38	44	43.6	32.8	1328	30.9	25.2	471	<0.04	3.62	8.1	5.6	350
FEBRUARY	45.7	1,280	277	37	286	59	8	137	45	37	46	41.6	31.7	1485	30.8	23.9	339	<0.04	2.00	8.6	5.3	442
MARCH	52.3	1,620	215	30	237	39	9	116	36	30	38	39.9	32.0	1456	27.7	18.3	509	<0.04	1.74	6.5	4.7	402
APRIL	63.8	1,913	240	18	206	22	10	102	25	21	25	29.5	22.2	2090	20.6	15.0	768	<0.04	2.81	4.8	2.9	457
MAY	65.8	2,038	291	14	255	20	18	126	31	27	32	33.0	21.9	1548	15.3	18.5	767	<0.04	2.09	5.2	3.2	367
JUNE	61.2	1,836	228	10	216	16	23	137	31	25	28	31.4	22.3	1678	20.8	16.7	724	<0.04	2.69	5.1	2.9	427
JULY	59.7	1,850	214	10	217	26	32	143	23	21	23	31.3	17.8	1469	18.5	15.0	630	<0.04	2.55	4.9	2.6	352
AUGUST	54.3	1,684	231	10	245	22	43	127	22	20	22	34.9	20.6	1426	22.1	17.3	645	<0.04	3.86	5.3	3.0	355
SEPTEMBER	57.4	1,721	284	10	270	23	<5	195	17	15	17	37.1	20.6	1641	23.7	18.8	635	<0.04	4.66	5.9	3.3	393
OCTOBER	53.8	1,669	272	11	299	19	<5	195	19	16	19	43.6	26.2	1381	27.3	22.2	584	<0.04	4.08	6.4	3.6	346
NOVEMBER	49.4	1,483	280	11	266	19	<5	204	NA	19	25	50.0	33.3	1575	29.8	32.5	579	<0.04	3.47	7.3	4.3	365
DECEMBER	49.1	1,523	288	19	294	25	<5	207	NA	23	25	47.7	31.4	1619	32.5	27.1	585	<0.04	1.27	7.0	4.0	348
1999 MEAN	55.0	-	265	18	264	30	8	155	29	24	29	38.6	26.1	1558	25.0	20.9	603	<0.04	2.90	6.3	3.8	384

TOTAL 1999 FLOW (ML): 20,109

NS - NO SAMPLE

NR - NO RESULT

NA - NOT ANALYZED

CBOD - Carbonaceous Biochemical Oxygen Demand

NOTE 1: MEDIAN value reported for 1999 MEAN of Final Effluent CBOD and Raw sewage NITRATE due to under-range values present.

NOTE 2: AMMONIA & NITRATE DATA ON FINAL EFFLUENT ARE SUSPECT; - (DUE TO POSSIBLE NITRIFICATION OCCURRING WITHIN SAMPLER).