

**City of Winnipeg
Water and Waste Department**

2009 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 22, 2009		Assiniboine River Sampling Locations				Red River Sampling Locations					
Parameter	Unit	ASSINIBOINE PARK FOOT BRIDGE	HEADINGLY BRIDGE	MAIN STREET BRIDGE	WEST PERIMETER BRIDGE	SOUTH FLOODWAY CONTROL ⁴	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	21.8	21.7	22.4	21.7	21.5	21.4	22.0	22.2	22.3	21.9
Dissolved Oxygen	mg/L	8.0	8.2	7.2	8.2	7.0	7.0	7.0	7.0	7.2	8.0
Oxygen Saturation ²	%	92	94	84	94	80	80	81	81	84	92
pH	units	8.72	8.72	8.66	8.74	8.15	8.13	8.16	8.29	8.26	8.23
Total Solids	mg/L	748	748	680	796	868	804	708	656	604	632
Total Suspended Solids	mg/L	162	148	124	156	350	296	148	92	102	99
Turbidity	n.t.u.	91	85	79	86	238	264	111	79	76	75
Total Organic Carbon	mg/L	10	11	10	10	12	12	12	12	12	12
Chlorophyll a	ug/L	59	59	58	54	7	7	7	18	21	21
Ammonia Nitrogen	mg/L N	0.011	0.012	0.013	0.013	0.015	0.032	0.043	0.030	0.080	0.084
Nitrate Nitrogen	mg/L N	0.029	0.023	0.022	0.025	0.632	0.726	0.598	0.541	0.539	0.677
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.10	0.09	0.11	0.09	0.19	0.19	0.19	0.18	0.19	0.21
Total Phosphorus	mg/L P	0.40	0.40	0.30	0.30	0.60	0.60	0.40	0.30	0.40	0.30
Escherichia Coliform ³	colonies/100 mL	21	4	9200	23	46	350	130	490	330	49
Fecal Coliform ³	colonies/100 mL	70	14	9200	31	2200	350	130	490	490	49

Weather Conditions during monitoring: Winds SW at 15 km/hr with 23 % cloud cover. Average air temperature during survey at 22 C

- Notes:
- 1) LIMS Reference No: 23601
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 734 ft

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