

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 27, 2010		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	8.7	8.7	8.7	NS	NS	9.4	9.5	9.2	9.3	9.7
Dissolved Oxygen	mg/L	10.8	10.8	10.8	NS	NS	10.6	10.5	10.6	10.6	10.3
Oxygen Saturation ²	%	93	93	93	NS	NS	93	92	92	92	91
pH	units	8.34	8.34	8.25	NS	NS	8.25	8.23	8.25	8.07	8.03
Total Solids	mg/L	1100	1010	1020	NS	NS	684	668	812	860	776
Total Suspended Solids	mg/L	330	304	260	NS	NS	188	132	204	274	198
Turbidity	n.t.u.	111	111	111	NS	NS	78	68	81	103	102
Total Organic Carbon	mg/L	16	14	16	NS	NS	11	13	13	12	12
Chlorophyll a	ug/L	14	<1	12	NS	NS	19	28	4	2	2
Ammonia Nitrogen	mg/L N	0.063	0.054	0.073	NS	NS	0.038	0.091	0.058	0.145	0.143
Nitrate Nitrogen	mg/L N	0.307	0.406	0.280	NS	NS	0.224	0.223	0.260	0.355	0.346
Total Kjeldahl Nitrogen	mg/L N	2.0	<2.0	3.0	NS	NS	2.0	2.0	<2.0	3.0	3.0
Total Nitrogen ²	mg/L N	2.3	<2.0	3.3	NS	NS	2.2	2.2	<2.0	3.4	3.3
Soluble Phosphorus	mg/L P	0.15	0.15	0.15	NS	NS	0.14	0.15	0.13	0.16	0.16
Total Phosphorus	mg/L P	0.60	0.50	0.50	NS	NS	0.40	0.40	0.50	0.60	0.50
Escherichia Coliform ³	colonies/100 mL	9300	1500	4300	NS	NS	4300	2300	2300	9300	24000
Fecal Coliform ³	colonies/100 mL	9300	1500	4300	NS	NS	4300	4300	4300	15000	24000

Weather Conditions during monitoring: Winds NNW at 57 km/hr with 100% cloud cover and 2 mm of precipitation. Average air temperature during survey at 3°C

- Notes:
- 1) LIMS Reference No: 27763
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 734.7 ft
 - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

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Approved in LIMS By: S. Fletcher
Supervisor of Analytical Services

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